SUSTAINABLE HOMESERVICES

Benchmarking Sustainable Services for the Housing Sector in the City of Tomorrow

Scientific Report to the European Union

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Foreword

Living with Sustainable Homeservices in the North

Harriet P. heard a wheeze through her apartment's door and looked through the peephole. She saw that Polly O., her neighbour from the fourth floor, was standing on the first landing with a bunch of shopping bags, gasping heavily. "Oh dear, at her age she should really use the Relocation Service to get an apartment on the ground floor," she thought. Harriet P. breathed a sigh of relief that she had accepted the offer from her landlord, the S.H.C. – Social Housing Company, to change to a smaller, elderly appropriate apartment on the ground floor.

Although she had been living in her former apartment for 38 years and did not really want to move out, she changed her mind when she broke her arm by stumbling over her threshold in the kitchen two years ago. Fortunately, Mr. Cooper, the S.H.C. serviceman, was coming along to change a name plate, heard her cries and ran into his office to fetch Harriet P.'s keys from the emergency board. She had to spend six weeks in hospital, but Mr. Cooper engaged a "home-sitter" of the S.H.C. Residents' Association who looked after her apartment, fed her cat, watered her plants and emptied her letterbox on a daily basis.

When she finally came home, he took her aside and gave her a brochure on the so-called "S.H.C. – Service Agency": "I strongly recommend you to look into the Elderly Relocation Service." Harriet P. looked at the brochure. "Huh, what an offer: no steps and no thresholds in the whole apartment, handrails, grab-bars and toileting aids in the bathroom, moreover removal management, emergency calls, shopping delivery and …what are 'health information transmission capabilities'?" "You know," Mr. Cooper explained, "there is a new thing called 'remote health monitoring' which basically means that you wear a bracelet that constantly supervises your pulse and blood pressure. In case of a problem, the local social service gets a warning and tries to contact you. But Mrs. P., as far as I can see, you're still far too young for that." Harriet P. smiled flattered, but at the same time she thought that she could not afford such a sophisticated service. "Sorry, but I'm afraid that this will be too expensive for me." "If you would agree to live in a smaller apartment, you won't have any additional costs compared to your present rent," Mr. Cooper told her, "Besides, the social welfare pays a good share of the costs". He twinkled at her. "You're right. As my son has moved to Cologne, one and a half rooms are enough for an old woman like me. As long as I can stay in my neighbourhood, I'd like to use your wonderful Relocation Service!"

Then everything went quickly: Mr. Cooper accompanied her to the social welfare office the following week to apply for subsidies for a senior-friendly housing design modification. Afterwards the S.H.C. prepared a ground floor apartment for her that was only one block away from her former home. Moreover, the Elderly Relocation Service included a Removal Help that was organised by volunteers of the residents' association. Some furniture that she did not need anymore in her smaller apartment was stored in the local "storage room" until her son came the next time to pick it up. As she was so grateful for the volunteers that helped her at the removal, she donated another wardrobe and a table for the residents' association that allocates them to needy families.

When she finally got the keys of her new apartment, Mr. Cooper gave her another brochure of the S.H.C.-Service Agency called 'Services for Seniors': "You'll find all services that are included in the Elderly Relocation Service on the green pages, the yellow pages are information about leisure activities in your neighbourhood. Some additional services are described on the blue pages - that can be interesting for you as well."

Harriet P. sat down in her armchair to read through the paper. She astonishingly recognized that she could use a shopping or organic food delivery service every two weeks for free as well as a counselling on energy saving household appliances. She also found five coupons for small technical problems and ten for using the laundry delivery service. When she opened up the yellow pages, she could not suppress her astonishment "My gosh, I didn't know that there is so much going on in my district!" Although she was often passing by the local neighbourhood centre, she always thought that there were only activities offered for children and young people as there were usually children playing in front of it or adolescents rushing in and out. But now she recognized that there were also regular Senior Coffee Parties on Mondays, a Senior Photo Club on Wednesdays and even a Senior Internet Club on Thursdays. Furthermore, she found the residents' association programme for seniors on the

blue pages that offered boat-trips and day-trips to interesting cities nearby. “Oh, I always wanted to go to Prague, maybe I can still sign up for the trip?” And it wasn’t expensive either!

Since then, Harriet P. has tried a lot of services and leisure activities provided by the S.H.C.-Service Agency, the neighbourhood centre or the residents’ association. Every two weeks, she orders cat litter, toilet paper and mineral water from the local supermarket as well as an organic food box from local farmers. She also used the “Energy- and Water-Reducing Package” which included the installation of water-saving installations and a new toilet tank as well as energy-saving lamps. She already saved so much water and electricity costs that this investment has nearly been paid off.

The last time, Harriet’s son came to visit her, she surprised him by buying tickets for a musical from the S.H.C.-Service Agency. She even hired a car at the local Car Sharing Agency to get there comfortably. Harriet was a little bit proud, when her son noticed respectfully that she had become a lot more active in the last two years.

Harriet P. even joined the residents’ association and founded an “Adopt a grandparent”-service with some new friends of the Senior Internet Club. Actually, it was more an “Adopt a child”-concept, as they offered to care for single-parent’s children for very little money. Harriet has “adopted” two children, 9-year-old Sarah and 7-year-old Sergej that come every afternoon for two hours to her apartment. Harriet P. helps Sarah to do their homework and supports Russian Sergej to improve his language skills. Sometimes they also meet other “adopted” grandparents with their “grandchildren” in the playground. When Sarah’s mother comes to pick-up her child, she often stays for a coffee in Harriet’s kitchen to have a chat.

“I haven’t even noticed how much my life has changed in the last two years,” she thinks, still listening to the sounds from the corridor. All of the sudden, Harriet grabs the brochure of the S.H.C.-Service Agency from her telephone cupboard, opens the door and hands it to Polly O.: “I really recommend you to have a look on the Elderly Relocation Service! By the way, would you like to come with me to the Seniors Coffee Party tonight?”

Living with Sustainable Homeservices in the South

Maria Silva arrived at her new home with the family, two children and their grandfather. This is a newly built neighbourhood with sustainability concerns. She liked very much the idea of living in a bioclimatic building, as it can provide a temperature of comfort without using too much energy for heating and cooling the flat. This flat is also adapted to elderly, and it may be of great help to her father in the near future – she thought.

Maria has a full time job, so children care while she is working is also a problem. Well, she says to her father, I was looking at the internet and in this neighbourhood there is a lot of services available for children, such as a “walking bus” for children, organized by the local authority. It is perfect, in this way I can go early to my job, without worrying with their transportation to school. And there are leisure time activities when they arrive! There is also a very interesting organisation where services can be swapped between neighbours. I checked it and maybe the kids are interested in walking the dog of Mrs. Rosa, the 1st floor neighbour who has mobility difficulties. In return, she is offering her help to cook some home-made pies with the kids. Excellent, isn’t it?

Regarding shopping facilities, one of the new neighbours told Maria about an organic food delivery service, organized by a farmers' cooperative, in town, and she decides to give it a try. Today is the first delivery, and the family is quite surprised seeing that their food order is being delivered on bicycle.

Anyway, says Maria, we have some small works to do in the apartment, so I asked the house administrator for repair services and got the phone number of an all-round 24 hour service provider. And what about my father. What kind of activities are available for him? At this moment, Mrs. Rosa’s husband rings the bell. He is inviting her father to be a member of the senior club, which organises card games in the “patio”, a common area outside the building, as well as other leisure time activities. At weekends, they organise small trips to the countryside, using the train.

I am very glad that we have chosen this neighbourhood! Says Maria, and she though how important these kind of services are for improving quality of life!

0 The Homeservice Project

0.1 Project Outline

0.1.1 Background

The basic idea behind the Sustainable Homeservices project is the notion that environmental and social burden can be reduced and the quality of life enhanced by offering services in and around the household. Previous studies indicate that consumers must be able to use such services as easily or conveniently as the products they own themselves. Therefore offering the services to consumers at their homes can be an advantage. Arising from this idea the Homeservice project was developed. The general definition of a Sustainable Homeservice is a service that is offered directly to residents at their home that contributes positively to sustainable development in its three dimensions: environment, social, and economic.

0.1.2 Goals

The main goal of the project is to stimulate the introduction of sustainable Homeservices in Europe. Competition in the housing market is increasing. For involved organisations there are various ways to meet this competitive challenge. One of them is providing Homeservices to residents. So the principal target groups of the project are the residents, housing organisations, and external service providers.
The potential range of Homeservices in Europe is very large. In the project, the most attractive sustainable Homeservices were investigated, which meet residents' demands and the organisational and economical incentives of the suppliers.
Opportunities for Homeservices were analysed by the project in six European countries: Austria, Finland, Germany, the Netherlands, Portugal and Spain. Per country, a major city and a town have been analysed and evaluated to enlarge the national survey.

0.1.3 Approach

In the project we searched for markets in which the right conditions for Homeservices exist. The search was conducted in the following service areas:

- Counselling & Information
- Care & Supervision
- Leisure Time Services/Activities
- Repairs
- Mobility & Delivery
- Safety & Security
- Supply & Disposal

The present situation with respect to services is described in the 12 municipalities in the six countries. These services were evaluated using 18 criteria for sustainability, which are included in the Sustainable Evaluation Tool. These questions were answered according to the three dimensions of sustainability:

- Environment - In what ways do services potentially contribute to a reduction of environmental impacts?
- Social - How do services potentially increase the wellbeing of residents and the liveability of neighbourhoods?
- Economic - How are these services organised so that they are economically feasible both for the providers and users, as well as for the society at large?

Further questions originated from the initial situation:

- Which services are provided to the residents either by housing organisations or by external services providers?
- Are these services sustainable?
- Which obstacles exist for the service to be provided?
- How should the basic framework for the supply be arranged?

- With which incentives can housing organisations be stimulated to provide services either by themselves or in co-operation with external service providers?

By answering these questions we fulfilled the following goals:
- Finding the status quo of sustainable Homeservices that can be provided by housing organisations or external service providers;
- Analysing the promoting and hindering factors in supplying a service from the view of architects and building organisations as well as analysing various pilot projects;
- Analysing the employment effects and the social impact of the proposed services;
- Comparing the differences between small towns and big cities;
- Comparing the six contributing countries;
- Finding the national good practice examples that can be applied in other countries;
- Creating policy recommendations and further promoting conditions on the European level;
- Creating a European Sustainable Homeservice Catalogue.

0.1.4 Results

The objective of the reporting period was to condense all the information and data collected into project results and various tools for dissemination.
The project resulted in:
- The European Sustainable Homeservice Catalogue;
- The Sustainability Evaluation tool;
- Evaluation of 215 services with the Sustainability Evaluation Tool;
- Workshops with residents, housing organisations and external service providers in the six countries;
- Contribution to international conferences in Milan (Italy), Cambridge (Great Britain), Aalborg (Denmark), Amsterdam, (The Netherlands), Brussels (Belgium), Vienna (Austria), and Bilbao (Spain);
- The sustainable Homeservice DVD in English, German and Spanish showing the good practice examples;
- Six national country reports;
- A European scientific report;
- Country-specific strategies for implementation of Homeservices;
- Design method for sustainable Homeservices;
- Policy recommendation for the European Union.

All public results are available on the project website: www.sustainable-homeservices.com.

0.2 Project Partners

Six European countries are involved in this study: Austria, Germany, Netherlands, Spain, Finland, Portugal. A survey was carried out in one city and one town of each country. See Annex 9.1 for the descriptions of these cities and towns.

The Leading Partner is:

- IÖW, Institute for Environmental Management and Economics, Vienna Austria, www.ioew.at

The Project Partners are:

- IZT Institute for Future Studies and Technology Assessment, Berlin Germany, www.izt.de
- IVAM, research and consultancy on sustainability University of Amsterdam, Amsterdam Netherlands, www.ivam.nl
- Prospektiker, European Institute for Future Studies and Strategic Planning, Zarautz Spain, www.prospektiker.es
- HSE, Helsinki School of Economics, Department of Management and Organisation, Helsinki Finland, www.hkkk.fi
- INETI/Cendes, Centre for Sustainable Business Development, Lisbon Portugal, www.ineti.pt

0.3 Executive summary

The SUSTAINABLE HOMESERVICE project studied services that are offered to consumers at their home and affect sustainable development positively in its ecological, social and economic dimensions. The starting point was that more eco-efficient lifestyles could be reached by substituting product-based consumption with services. Previous studies, however, indicate that in order for consumers to use services that at least partially replace product-based consumption, these services must be available as conveniently as possible, preferably directly at home or the premises. The project was funded by the European Union's DG (H) within the framework of the programme "City of Tomorrow and Cultural Heritage". It involved six countries: Austria, Finland, Germany, The Netherlands, Portugal and Spain. As to the targets of the European Union, the project is linked to Competitiveness and Employment. Competitiveness of European service industry depends to a great extent of creating innovative services that have demand among European consumers. In this regard our analysis shows in many case the question is about services as social innovations rather than technological solutions, which tend to be overemphasised in European policies. As to employment, this project focuses on fulfilling European consumers' needs increasingly with services instead of products, and thereby it puts emphasis on economic activity that keeps jobs in Europe (since manufacturing of products is increasingly shifted to other continents).

The project consisted of four main elements. Firstly, scanning household service supply in one city and town in each country, i.e. altogether in 12 locations. This was done in order to understand how sustainable services fit into the overall service provision context. Second, a number of good-practice services were selected, altogether ending up with over 200 innovative sustainable services. For that purpose we developed a Sustainability Evaluation Method that consists of 18 indicators of ecological, social and economic sustainability. These are operationalised with an ordinal rating scale with which the impact of the homeservice is compared to the situation where the service would not exist. The main strength of this method is that it is simple but yet incorporates social and economic sustainability – which have tended to be by-passed in systematic analyses – with an equal weight as the ecological aspect. The analysis of these services sheds light to missing links of sustainable household service *competitiveness*. One omitted competitive element appears to be social sustainability in the service design. Mere eco-efficiency is not a sufficient condition for acceptability of household services that seek to compensate material product-based consumption. The real-life services show that social sustainability, first and foremost the ability of services to improve the quality of life of their users is a crucial determinant for the competitiveness of services in the market place.

In order to explore competitiveness of sustainable services further, we also investigated supply options and demand for homeservices. The third element of the study was the analysis of providers for whom it would be economic feasible to offer homeservices. We focused particularly on housing organizations or other respective actors (e.g. housing management companies), which bear close proximity to the consumers (residents), and could therefore be in a position to offer or mediate the provision of services directly to the homes of consumers. It appears that innovative housing organizations do already provide homeservices, either by themselves or in co-operation with other service providers. They are potential partners for providers or promoters who want to design sustainable homeservices. This report also analyses other providers, that is, commercial, public or non-profit service providers, and identifies a variety of co-operation arrangements between these actors. It is noteworthy that large companies do not appear to play a dominant role in provision of sustainable homeservices. Small and medium-sized enterprises, public sector providers and non-profit organizations are more prominent ones.

The analysis of the fourth element, demand, is based on a personal interview –based questionnaire among 333 consumers. It implies that consumers appreciate easy availability of services, e.g. getting multiple services via one contact information. This means that there is room for service intermediaries through whom it is possible to get several homeservices. Households' willingness to pay seems to depend on the service. They appear to be prepared to pay for coordinated repair services, care services and supply and disposal, whereas consulting and information services are mainly wanted for free.

Regarding drivers, obstacles, and promotion of sustainable homeservices, we find that services use is a cultural phenomenon and that there also considerable national differences in the practices and structures of the housing industry. Therefore the strategies of promotion differ for different national contexts vary. Nevertheless there are some European level actions called for. Firstly, throughout the six countries, services were considered too expensive. To address this barrier of demand, *indirect labour costs of low-paid service jobs should be reduced*. Secondly, it would be advisable to *harmonise and increase the support of social enterprises*, because they could play a considerably larger role in homeservice provision. They are an excellent vehicle for offering novel services, that are considered too risky by commercial enterprises as long as they are unknown in the market. From the sustainability perspective, social enterprises can be expected to offer more environmentally conscious services. As to social sustainability, they offer employment to people who would not otherwise be able to enter the job market. This, on the other hand, is economically beneficial because society saves money by not having to support unemployment, but rather with lesser financial support it gets employment activity and its benefits.

Thirdly, as one of the major problems is potential customers' lack of information about homeservices and their providers, the EU could via its relevant structures actively *support actors* (intermediaries) *that mediate services* from several small providers. This would offer a marketing channel to small service providers who seldom have financial possibilities to advertise their services, and on the other hand make it easy for citizens to get information about homeservices. The resulting increase in service use would mean more jobs, i.e. *employment* in the service sector. These intermediary models could also involve features with which environmentally benign services are encouraged.

0.4 Redline through the following chapters

The Homeservice Project is based on wide spread surveys. It did not only focus on one particular group of involved actors, but it tried to give emphasis on all actor groups that are affected by the Homeservice provision. This framework is now used in this report. It first gives overviews of the different analysed building complexes, Homeservice providers, the residents' perspective and the housing situation. It finally leads to the description of the potential and promotion strategies of sustainable Homeservices in Europe.

Certain project partners have been responsible for particular parts of this report, so different styles of writing exist. However, emphasis has been put on creating common terminology and language understanding.

The first three chapters explain what is meant by sustainable Homeservices, give an overview of the status quo of provision of sustainable Homeservices in the twelve surveyed cities and towns and lead to the sustainability effects that can be detected from the services.

Chapter 1 deals with the deduction and explanation of sustainable Homeservices on a purely scientific level. It starts with the description of what a service is, respectively a sustainable service, leading finally to the sustainable Homeservices as well as the different service providers and the terms of service supply.

Chapter 2 continues with the description of the services areas and the good practice examples of services as well as of buildings. This chapter refers to the detailed service and building descriptions as they are given in the online catalogue, available via the project webpage www.sustainable-homeservices.com. All services examples are also attached in the annex (chapter 9).

Chapter 3 describes the sustainability effects of Homeservice. This chapter closely sticks to the three dimensions of sustainability: environmental, social and economic. Within each of these three dimensions the effects of each single indicator on the sustainability of the services are discussed in detail. This description ends in a quantitative as well as qualitative conclusion of the sustainability effects.

Chapter 4 to 6 go into more details. Chapter 4 deals with the comparison of the national housing situations and puts them into relation to the provision of Homeservices. This chapter refers to the national country reports that are also available via the project webpage. In these reports the basic data have been collected to describe the housing situation in each of the surveyed countries. As it turned out during the study, these national frameworks are closely related to the opportunity of Homeservices provision particularly by housing organisations.

Chapter 5 contains the results of the residents' perspective survey. The whole report of this survey is also included in the annex.

Chapter 6 focuses on the Homeservice provision by housing organisations as well as by external service providers. It tries to point out which services are mainly provided either by housing organisations or by external service providers, which kind of motivation drives them to supply Homeservices and how the framework for the service provision looks like.

Chapter 7 shows the potential development and promotion strategies for sustainable Homeservices in Europe. It describes obstacles and promoting factors, gives ideas for national implementation strategies and provides European policy recommendations.

Chapter 8 summarizes the main results, followed by the annex chapter 9, which contains the city descriptions, -where the surveys had taken place -, the description of the good practices examples - services as well as buildings - and the residents' survey.

1 What is a Sustainable Homeservice?

This project centres around the concept of ”sustainable Homeservices”. What do we mean by it? When hearing these two words together, many questions come to mind. What are Homeservices? Or sustainable services? Depending on one’s background, the first-hand interpretations of the term may vastly differ. Therefore the task in this chapter is to explain this core concept of the present project. However, we start by first justifying why it makes sense to speak about sustainability, services, and homes in the same connection. After the justification the chapter moves on to defining the term sustainable Homeservices, providing a general definition and a more pragmatic specific definition. The latter one stands as the fundament for the empirical research conducted in this project. We also make an opening to the discussion on the potential providers of and the institutional arrangements around sustainable Homeservices.

Services are increasingly offered as a solution to turning our production and consumption more sustainable. The ways in which services are expected to turn society more sustainable vary between the proponents of service thinking. Some of them see the ‘service solution’ from the information society perspective: as the structures of industrial production turn from manufacturing dominated to information-intensive service models, de-linking of economic growth and environmental burden occurs (Bell 1976, Jänicke et al. 1989). Some others take a “less automatic” stand point to the role of services. They do not foresee that an increasing share of services as a means of livelihood automatically reduce the environmental load. Instead they expect that in order to achieve eco-efficiency gains, service considerations must be crafted into models of production and consumption with the purposeful goal of reducing environmental impact of economic systems (Lovins, Lovins and Hawken 1999). Sustainability of services has mainly been discussed from an eco-efficiency perspective rather than from a more holistic sustainability point of view. In other words, in the sustainable service literature, the social aspect of sustainability tends to be neglected at the cost of environmental and economic argumentation.

The goal of this chapter is to put forward the idea of Sustainable Homeservices, i.e. services that enhance the sustainability of living at home[1]. It is based on the article „Sustainable Homeservices? Toward Household Services that Enhance Ecological, Social and Economic Sustainability“ (Halme, Jasch and Scharp 2004). Much of the unsustainable consumption of the affluent Western (and Japanese) consumers occurs in the context of households, i.e. living at home and moving to and from it. However, depending on the consumption cluster (e.g., nutrition, mobility, housing), households alone have only limited – greater or lesser, but still limited – possibilities to influence their patterns of consumption (Sanne 2002, Roy 2000). There are always other actors who are relevant in setting the frame for consumption choices. For instance with regard to housing and construction, property owners (housing providers), local authorities and service providers influence the housing framework. Or as regards mobility, local authorities and service providers have a lot to do with the transport infrastructure, and therefore they set the limits within which households are able to decide how to fulfil their mobility needs (Spangenberg and Lorek 2002). This is another reason why it makes sense to seek for solutions for household sustainability with the service perspective in mind. Not only does this perspective capture the aspiration to shift consumption from products toward services, but it also takes into account other actors’ possibilities to influence the households’ consumption decisions. Moreover, by proposing institutional arrangements related to housing organizations as service providers or mediators, we seek to put forth new ideas of how to organize economic activities so that resource users become responsible for managing the resources they depend on (cf. Ostrom et al. 1999).

To put it briefly, there are two major gaps in the sustainable service discussion: the lack of a holistic view of sustainability, and the omission of the limited opportunity of households to influence their consumption choices. In order to include these issues, this study will put forth the concept of Sustainable Homeservices, propose some institutional arrangements with which to make them easily available for users, and suggest some preliminary steps to operationalise the concept. The guiding questions can be formulated as follows:

- What kind of concept would capture (holistically) sustainable household services?

[1] Thus the term “Sustainable Homeservices” does not refer to long- or everlasting services. It refers to ability of certain services directed to households to potentially advance ecological, social and economic dimension of sustainable development.

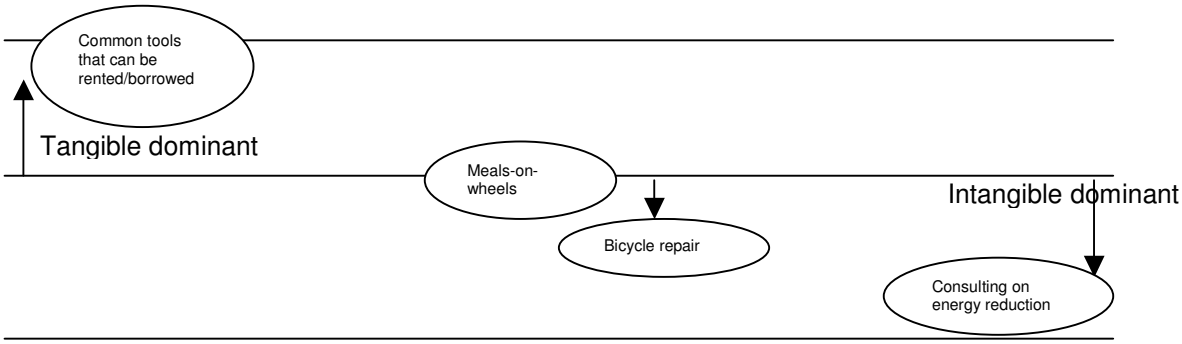
- What kind of institutional arrangements could enable the provision of such services?
- What kinds of indicators could be used to assess the sustainability of services directed to households, and in what way could these indicators be operationalised?

The underlying effort in this chapter is a progressively refined articulation of what could be Sustainable Homeservices. To that end, the chapter starts with a brief discussion about services in general, and examines different types of eco-efficient services, as well as the ways in which they can reduce the use of material and energy resources. Following from the above-argued need to extend the eco-service discussion to explicitly include social or socio-economic aspects, we will thereafter introduce the idea of a sustainable service, i.e., a concept that explicitly captures all sustainability dimensions. As we are interested particularly in consumer services that enhance sustainability, and argue that a considerable part of consumption relates to living at home, we will further narrow down our focal concept. "Sustainable Homeservices" is the concept on which we concentrate in the remainder of the paper. Having that focus, we need to investigate how the provision of Sustainable Homeservices could be organised, i.e., what kind of institutional arrangements would enable the provision of sustainable services directed to households. Finally, to suggest an idea of how to assess the sustainability of services directed to households, we will proceed by proposing a set of preliminary indicators relating to three sustainability dimensions. We will also exemplify how one could operationalise these indicator items on an ordinal rating scale.

1.1 What is a service?

What, then, are services? How do they differ from products? Traditionally it is considered that services differ from products in four main respects. First, (1) they are intangible, and (2) in many service operations, production and consumption cannot be separated. Customers are involved and participate in the production process (e.g. personal energy consultation to the resident). (3) Services are experienced differently by different customers (for instance, customers who cannot distinguish between physical goods, e.g. the TV set off the same production line, will normally be able to distinguish between services, e.g. the different maintenance persons of the maintenance firm). Finally (4), services are perishable, i.e. they cannot be stored (Baron and Harris 2003, Zeithaml and Bitner 1996, Payne 1993).

However, the difference between products and services become less pointed if we look at product and service offerings more closely. All products include some services (e.g. delivery), and all services require the use of some tangible elements, products (e.g. premises) (Heiskanen and Jalas 2000). This can be illustrated with Shostack's classical tangibility continuum[2]. It is presented beneath with some examples adapted to Homeservice context. The model classifies products and services based on the amount of tangible and intangible elements (Baron and Harris 2003, Payne 1993).



[2] Sometimes called 'goods-services spectrum'. Adapted from G.L. Shostack, 'Breaking Free from Product Marketing', *Journal of Marketing*, April 1977.

Figure 1. 1 Tangibility continuum adapted to the Homeservice context.

The definition of services suggested by Heiskanen and Jalas (2000, p. 23) may be suitable for the purposes of this study, because it avoids the pitfall of service versus product definition. According to them, service is an added value for the customer, i.e. economic activity which replaces the customer's own labour with activities conducted by the service provider, either personally, automatically or in advance through planning and design.

1.2 What is a sustainable service?

The term 'sustainable services' is often narrowly interpreted only as indicating to eco-efficiency of services. We argue that sustainability must be seen in a more comprehensive fashion the service discussion and research, as a concept that includes ecological, social and economic aspect with an equal weight. However, in this section we will first discuss the ways that various services can contribute to eco-efficiency. As there is fairly abundant research on eco-efficient services, the following discussion outlines the main streams of eco-efficiency of services research, and present a typology of eco-efficient services. Thereafter the need to comprehend sustainable services as a more extensive concept than merely eco-efficient services will be addressed, and the idea of adding social dimension to the sustainable service thinking is put forward.

What is an eco-efficient service?

The notion of immateriality and intangibility often connected to services does not automatically lead us toward more ecologically sustainable society (cf. Mont 2002). There are, however, two main routes with which services can lead to a decreased environmental burden in society. The first one is the potential related to the general shift to services with a lower than average material intensity, such as medical or personal care, legal services, banking, etc. From a macroeconomic perspective, the shift to services and thus the increased service intensity of the economy contributes to ecology through the decline of traditional smokestack and extractive industries in relation to less materials-intensive and more knowledge- and labour-intensive service industries. These services, however, are not necessarily eco-efficient. Their eco-efficiency must be assessed per each individual service and its context (cf. Salzman 2000).

Another route for approaching the ecological sustainability potential of services is the eco-efficient service thinking. According that stream of research there are so-called eco-efficiency instances in which particular services or product-service combinations have the potential to reduce resource consumption while still fulfilling the same need of the consumer as the traditional alternative of owning the product. The ideas for eco-efficient service thinking come from many sources. One of its roots is in the so-called factor discussion that urges to decrease the intake of materials into the economy radically: by a factor of four (von Weizsäcker, Lovins and Lovins 1997) or by a factor of ten (Schmidt-Bleek 1998). This dematerialization and/or reduction in energy usage is expected to be achieved by fulfilling the needs of customers with the help of services instead of products (e.g., a car-sharing service instead of a private car). Services that replace products to a greater or lesser degree, and thus reduce the material and energy needed to perform an economic activity (e.g. moving and cooking), are often called eco-efficient services[3]. The above, however, is not to argue that all services replacing products are always necessarily more environmentally sound than a product fulfilling the same need.

It is possible to identify different types of eco-efficient services. They extend from conventional forms of renting, leasing and sharing to selling 'solutions' (e.g., integrated pest management) (Hockerts 1999). A number of typologies have been developed in order to classify the broad range of services that can be seen to involve an eco-efficiency component. The classifications vary slightly depending on the author's line of reasoning. To draw an integrative classification based on the writings of

[3] We also acknowledge the limitations of the eco-efficiency concept, e.g. rebound effect (cf. Jalas 2002) but that as well as other critique (e.g. Hukkinen 2003) fall beyond the scope of this study.

Hockerts (1999), Heiskanen (2001), and Roy (2000), product-based services are services that are related to the use of a product. The product may be sold to the customer or not. In the former alternative the service component relates to repair, maintenance, upgrading or take-back of the product. The model can be seen as an example of extended responsibility of the producer even after the point of sale. The concept is relatively close to conventional manufacturing business - for instance the common practice of giving a guarantee extends the responsibility of the seller or producer of the product. Renting or leasing a product to the user goes a step further: the ownership remains with the producer. These kinds of services are sometimes also called use-oriented services, because only the use of product is being sold (e.g., in a car sharing concept, the use of the car is the offering). Use-oriented services can be divided in individual use and joint use. Leasing, renting and hire purchase are forms of individual use, whereas sharing and pooling are forms of joint use. These services produce potentially environmental benefits because they lead to a more intensive use of fewer products by several consumers (Behrendt et al. 2003).

Result-oriented services are services within which the focus is on fulfilling customers' needs, and which are or seek to be independent of a specific product (therefore sometimes called need-oriented services). This type of services can be seen as including various forms of contracting, for instance least-cost planning in the energy sector, facility management, or waste minimization services. Result-oriented service may be offered by the manufacturer, e.g., an energy provider. It may be profitable for the provider to promote energy-saving equipment. A decrease in demand through gains in efficiency allows the energy company to increase its market share without having to build new power plants. However, these kinds of services are frequently provided by another company, e.g., an energy saving company (Hockerts 1999, Heiskanen et al. 2001, Roy 2000). In the case of result-oriented services, the responsibility for supplying the goods required for the service lies with the service supplier. Initially, a craftsman's service such as the installation of a heating system can be classified as a result-oriented service. In the traffic sector, cab services, public transport and air traffic are included in the term. Transport services are generally defined by external factors and managed by professionals (such as taxi driver, pilot). Other examples include energy services, which are aimed at a reduction of energy consumption. Instead of selling units of electricity, heat, light and cold are sold. This way, the supplier is no longer tied to the production of one product. His main task is to put the best system components together to satisfy customer specifications and ecological aspects and to find the best overall system solution. Contracting, although not very common in households, can be considered a typical result-oriented service: the contractor is committed to the energy management of a property and the contract holder is paying for these services (Behrendt et al 2003).

Why would the services outlined above contribute to eco-efficiency, i.e., to a reduction in materials and energy consumption? There are a number of reasons why efficiency benefits may accrue. Firstly, if the ownership of the product remains with the manufacturer, there is an incentive to produce more durable goods. This is because the income is created by selling the use of the product, not the one-time sale of the product itself. Secondly, a lower stock of products is needed if consumers use the same product in sequence. The lower the stock of products, the less material is needed to produce them. In other words, more intensive use increases the probability of higher service yield before the product becomes obsolete due to outdated technological characteristics or, e.g., fashion. For instance cars or personal computers are often exchanged for newer ones not due to breaking apart, but for reasons that lie somewhere in the midway between outdated technology and fashion. Thirdly, in result-based services where the operator takes responsibility for product use, the service may facilitate more professional product use. To mention one more instance of the potential of services, the service model may contribute to the choice of a product more relevant to the task. For example, in a car-sharing system, the user may choose a car that fits the transportation task at hand: a small car for one person and a family car for multiple persons. This reduces instances of overkill, i.e., choosing products that are too big or with too many accessories, just in order to be prepared for all possible contingencies (Heiskanen 2001), such as „we need a bigger car because we sometimes take grandparents with us".

What is a sustainable service – adding the social dimension

The first association with the term "social services" are services provided by the public sector or by the third sector charity organizations. Here, however, we take somewhat different point of departure, arguing that the role of social sustainability should be more pronounced in the sustainable services

discussion. This argument raises from the observation that eco-efficient services are too narrow a concept.

The observation that a large share of private consumption occurs in the context of households was one of the starting points for our interest in promoting the concept of Sustainable Homeservices. Eco-efficient service literature offers us some ideas to start with, but it is a new field of study and consequently there are still a number of 'blind spots' calling for attention. One of them is an absence of social aspects in sustainable service thinking (Gatersleben 2001) and a limited understanding of economic considerations. The other one is inadequate attention to the question of how and by whom should sustainable services be provided in order to be used by consumers (Behrendt et al. 2003). These issues will be explored in this and the following section.

The present eco-efficiency discussion still typically uses the terminology of sustainability even though concentrating primarily on the eco-efficiency aspect of services (see, e.g., various writings available at SusProNet, http://www.suspronet.org/). At best it is mentioned in passing that eco-efficient services may also have social and economic impacts (e.g. Heiskanen and Jalas 2003). Hence the concept of "sustainable (home)service" is yet to be discovered and defined. We will try to take one of the first – rather pragmatic – steps here. The notion of WCED (1987) offers one possible starting point for outlining the concept:

In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both the current and future potential to meet human needs and aspirations.

The notion stresses that all components – ecology, economy and societal considerations – should be in harmony for the development to qualify as sustainable. Consequently, for a service to be classified "sustainable", it should have a positive impact on each of the areas of sustainability. However, a harmonious optimum is not always reachable. A service may have contradictory impacts vis-à-vis different dimensions of sustainable development, as we will see later in this report.

1.3 What is a Homeservice?

Services include those offered to organizational customers (i.e. business enterprises or other types of organizations) or to consumers. In this study we are interested in services offered to consumers, or to households consisting of one or more consumers. But we do not address all possible services offered to households. In the following we will elaborate what kind of services qualify for this study. They are called Sustainable Homeservices. Let us begin by explaining the term Homeservice as it is used here.

Very broadly speaking it could be said that Homeservices are services offered to a consumer in connection to living in a home and that can be expected to improve the quality of life of the consumer. However, this definition is far too general and would easily encompass nearly all services that at least remotely relate to the consumer's daily life. Many services offered (mandatory or voluntarily) by the municipality can be seen to improve quality of life and relating to living in a home. Services such as public transport could be considered Homeservices. Counselling for housing loans by banks could be considered Homeservice unless no distinctions were made. Yet it would not make sense for the present research task to study all such services – attempts to find the good practices from among such a crowd would turn out a futile effort. The scope of the study must be further narrowed down. Taking this standpoint it could be broadly speaking argued that:

Homeservices are services offered to a consumer at the premises, i.e. directly to the dwelling or in the external parts of premises surrounding the dwelling itself.

1.4 What is a Sustainable Homeservice?

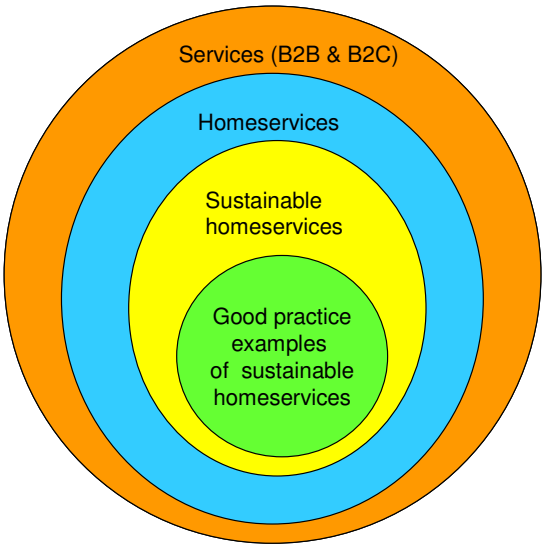
The above approach to Homeservices is supported also while in a recent study it was noticed that in order for the ecological benefits to accrue, services with eco-efficiency potential should be offered to

consumers at their home, or near to home (Behrendt et al. 2003). For instance, if the consumer uses a laundry instead of owning a washing machine, this will have positive effects in terms of less water and energy needed per load in large-scale operations, and in terms of a reduction in materials use due to the need of fewer washing machines (Goedkoop et al. 1999, Heiskanen et al. 2001). However, if the consumer has to drive three kilometers back and forth to do her laundry, gasoline use and exhausts released can outweigh the benefits gained. In addition, behaviour changes occur e.g. when using a washing salon, you need to dry your laundry in order to carry it home, as opposed to doing it at home, where you can just hang it up. Second, the consumers' willingness to use services with eco-efficiency potential decreases with the difficulty of reaching the service, e.g. distance or other conditions like difficulty of finding information.

Combined with the above reasoning about the concept of "sustainable service", for the purpose of the present study homeservices are those household services that have a certain positive contribution to sustainable development in its environmental, social and economic dimension. The criteria for these dimensions will be elaborated Chapter 3. Consequently, we propose the following:

The general definition of Sustainable Homeservice:

A service that is offered to the consumer at the premises and contributes positively to sustainable development in its environmental, social and economic dimension.



B2B = Business to Business
B2C = Business to customer

Figure 1. 2 Sustainable Homeservices as a subset of services

In our progressively defined articulation of the concept of a Sustainable Homeservice, we have now proceeded to the second-most inner circle of Figure 1.2. However, there is indication that a decision rule for judging a service sustainable only when it has a positive impact on all three areas of sustainability, might be too strict (Hrauda et al. 2002). A service that causes a clear environmental improvement and increases comfort for the residents, but does not have a positive economic effect would be excluded from the list of Sustainable Homeservices. As a pragmatic solution, one could suggest that if a service fulfils at least two of the three sustainability conditions, it could be considered sustainable. Based on this notion and the previous discussion that services should be offered directly to the home of the consumer, we propose the following definitions of Sustainable Homeservice:

Pragmatic definition of a Sustainable Homeservice:

(1) a service that is offered to a consumer at the premises,

(2) contributes positively to sustainable development in two of its three dimensions.

The empirical good-practice service examples of this study have been chosen on the basis of the above pragmatic definition.

1.5 Who supplies Homeservices? Institutional arrangements of service provision

We should not settle only with developing concepts for sustainable development in general or Sustainable Homeservices in particular. The next task is to ask who should provide Sustainable Homeservices and how should they be provided in order to be used by households? In other words, what kind of institutional arrangements or terms of supply[4] would be suitable for providing services directly to the residents at home?

In the scope of this study, Homeservices can be provided either by external service providers (exSP), namely public providers, non-profit organisations or commercial providers, or by housing organisations (HO) themselves. It appears that the need to make services easily accessible to households means that often some type of input from the housing organization is required because as providers of dwelling, and the management of the buildings they bear a close proximity to their clients (Hohm et al. 2002). A housing organisation is a company or another type of organisation that owns or manages a residential building. As a starting point, we distinguished four different types within the housing organisations:

- Profit-oriented housing organisations
- Social / non-profit housing organisations
- Local government housing organisations
- Condominium associations

However, the further analysis revealed that this classification does not include important actors on the property market such as housing managers or building promoters. Therefore, we continued the analysis by regarding their specific functions on the Homeservice market. The functions, aims, and legal framework of these different kind of housing organisation are described in chapter 4.

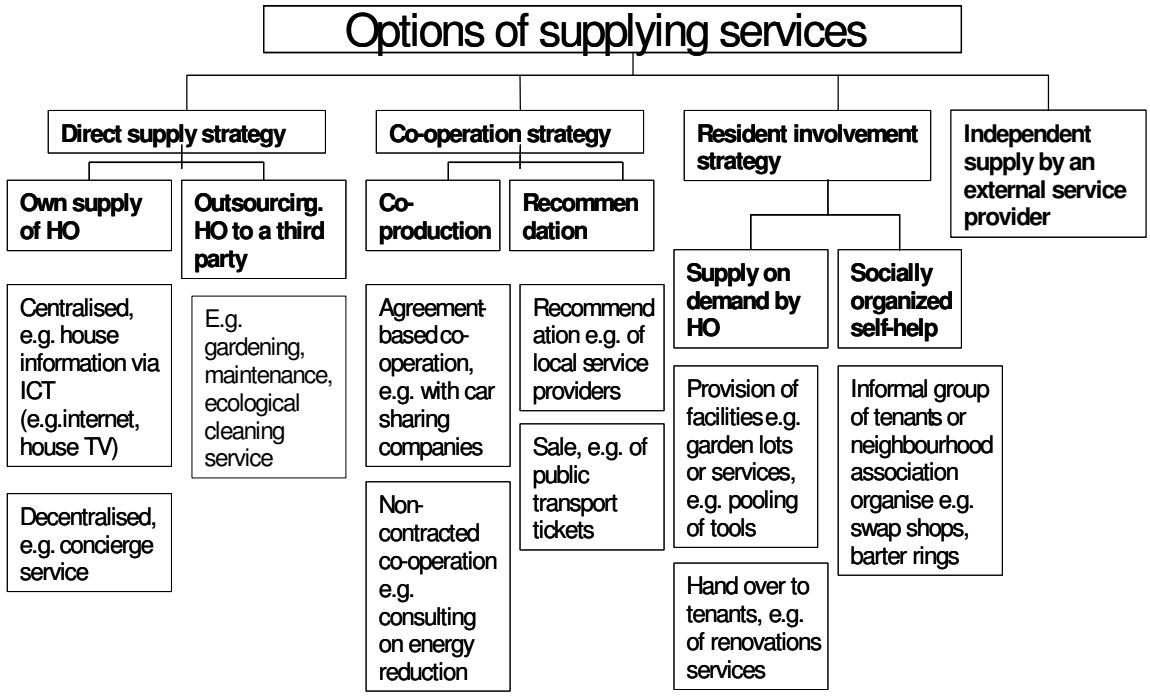
We use terms of supply or institutional arrangements of service supply as interchangeable concepts in this study. Institutional arrangements around eco-service provision are discussed for instance by Hockerts (1999) and by Heiskanen and Jalas (2003). However, they discuss such arrangements in relation to product-based services. This limits the applicability of the previous discussion for sustainable Homeservices. In order to make use of the discussion in connection of sustainable Homeservices, we could consider that 'housing' is the point of reference. Adopting this perspective, a number of ways of service provision may be identified that differ from general service provision in showing a clear reference to households or housing conditions. In other words, the resident may get the services through a number of different kinds of arrangements that draw the connection to his or her immediate housing environment. Subsequently, we will discuss these options of supply.

Firstly, the Homeservice provider either the housing organisation (e.g. a condominium association, social or profit-oriented housing provider) or the external service provider (non-profit organisation, public or commercial provider) can exclusively provide a service offer. In this alternative, the institutional arrangements can vary. On the one hand, the housing organisation may buy the service from an external service provider (e.g. outsource gardening, cleaning etc.). From the resident's perspective, the service experienced is basically similar to the option that it was created by the housing provider's own personnel. However, from the housing organisation's perspective, we are speaking about external procurement of a service, i.e. outsourcing. On the other hand, the external Homeservice provider may supply a service independently directly to the resident.

Secondly, a service may be offered to the resident by a cooperation of a housing organisation and an external service provider (public or private organisation). Hereby, co-production is one alternative. For instance, residents of the housing organisation may get a discounted price for the membership of a

[4] These terms are used interchangeably throughout this report.

car-sharing, housing organisations provide parking space for shared cars, and assist in the reservation and key exchange. This arrangement is usually contract-based. A lighter institutional arrangement is needed if the housing organisation acts as an intermediary between the residents and the service provider, for instance by recommending a certain service provider (e.g. plumber) or by taking over a transaction on behalf of the service provider (e.g. a janitor selling tickets to public transport). In all of



HO = Housing organisation

Non-contracted co-operation e.g. with energy suppliers : Declaration of two companies to aim at a common goal, e.g. to reduce energy consumption (usually not legally binding).

Agreement-based cooperation, e.g. with car-sharing-companies: any kind contract; usually to secure a smooth (service) provision flow.

the above alternatives, the resident can use the service, but assumes a typical customer role in the sense that s/he does not participate in the production of the service.

Figure 1. 3 Options of supply of Homeservices

Thirdly there is, however, yet another service model: the resident participates in the actual creation of the service. In this case the service can be organised so that the housing organisation provides the necessary material component of a service and the residents do the work themselves. The material component can be durable and shared successively by the residents (e.g. pooling tools), or it can be one-time good (provide paint or other renovation materials). This can be called “supply on demand” option[5]. Finally, there is an option where the residents themselves create the service informally, as socially organised self-help (e.g., barter rings, in-house flea-markets, informal residents’ meetings, and neighbourhood associations). In this case, the housing organisation may have a role as a space provider. The initiator may be either the housing organisation or active residents.

Of course it is also possible that Homeservices are provided without any involvement of the housing organization, i.e. by external suppliers (In Figure 1.3 this is “Independent supply by an external service provider”). In this study we analyse the external service providers according to the following structure:

- public external service provider (e.g. municipalities)

[5] The term "supply-on-demand" fits for renovation materials, because the resident has to request them. However, the term is less suitable for tools that are kept in a certain space in the building and can be borrowed by the residents on a continuous basis.

- non-profit external service provider (private of public organisations that are partly subsidized, partly work with sponsoring or membership fees, but are not profit oriented), and
- commercial external service provider.

Apart from that it was also necessary to clearly distinguish between a pure service and a construction measure. The construction measure is a medium to facilitate the actual service, e.g. providing common areas for residents to organise get-togethers, or providing parking areas for carsharing vehicles.

We have now reached the final step in the development of the concept of Sustainable Homeservice, and its application in this study. It is the following:

Specific pragmatic definition of Sustainable Homeservice in this study:

(1) a service that is offered to a consumer at the premises,

(2) contributes positively to sustainable development in two of its three dimensions, and

(3) is offered either by the housing organisation, with some assistance from the housing organisation, or by an external service provider directly to the residents.

1.6 Summary

The discussion about 'sustainable services' or 'sustainable product-service systems' has tended to emphasise the eco-efficiency perspective rather than explicitly capture all sustainability aspects. Particularly social or socio-economic considerations have received very little attention. We argue that this may be one of the underlying reasons why eco-efficient service concepts, especially those directed to consumers have not been as successful in the market as their proponents hoped. The added value of eco-efficient services to consumers may actually often relate to considerations lying in the sphere of social sustainability. This observation together with the fact that much of the unsustainable consumption occurs in the household context, encouraged us to outline the concept of Sustainable Homeservice and suggest ways to assess the sustainability of household services.

We proposed two definitions for the concept of Sustainable Homeservice, a general and a pragmatic one. In general, a sustainable service for households can be considered a service that is offered to a consumer at the premises and contributes positively to sustainable development in all dimensions. However, we contended that all sustainability conditions – environmental, social and economic – are difficult to fulfil simultaneously and therefore it may be useful, for pragmatic reasons, to accept that a sustainable service is one that satisfies two of the three. Furthermore, we discussed alternative institutional arrangements through which services contributing to sustainability can be supplied to households, and contended that housing organizations can play a central role. Altogether, we proposed seven options for supplying Homeservices. Five of them require greater or lesser involvement from the housing organization, whereas two options of supply are independent of it. In the independent option the service is created via socially organized self-help or by offered directly to residents by an external service provider.

2 Overview on Sustainable Homeservices

Where can we start looking for "services that are offered to consumers at the premises and contribute positively to at the least two dimensions of sustainable development" - i.e. sustainable Homeservices? We decided to approach household sustainability through a set of seven service areas, which will be briefly described in this chapter.

2.1 Short overview of the service areas and good practice examples

If we look at sustainable services in connection to households, it is possible to identify a number of pressure points that connect different levels of analysis. For instance, the rapid growth in the number of households taking place in many European countries imposes a major burden on infrastructure support (space, basic utilities provision, transport links etc.) on the socio-economic system, and the environment (Turner 1998). Moreover, responding on the trend of the ageing population of the European countries will either require building more and more old people's homes or provision of more sophisticated set of services in order to make it possible for the elderly to live at home by themselves. The former is often considered an economically unsustainable alternative, and is also less preferred by the elderly residents themselves.

Yet another pressure trend that can be highlighted in this connection is the household use of energy - for heating, domestic appliances and the car. Regarding all of these, despite the fact that resource efficiency gains derived from technological improvements[6] have accumulated, these gains have been offset by the steep rise in the total number of households (which is due falling average size of households) (Turner 1998). At the sectoral level (housing sector), aggregate trends in resource use are continuing to rise. This implies that problems in the housing sector cannot be solved by technological solutions only but that social innovations are also needed. Sustainable service thinking is likely to offer one source of innovation[7].

Services may offer one solution to alleviate the above and other pressures relating to environmental and socio-economic problems in the housing sector. Previous studies on sustainable households have focused upon household functions or needs. These would involve e.g. shopping, cooking, eating, clothing care, shelter[8], personal hygiene, food storage and preparation, leisure activities within the home, and transportation (Vergragt 2000, Gatersleben and Vlek 1998). Within these functions, the researchers have tried to prepare scenarios of "alternatives for more sustainable household" and study their feasibility (Vergragt 2000). In this study, we can draw on household functions. However, since we are not focused on functions but on the potential of services to make "housing" more sustainable, we will approach household sustainability through a variety of housing/household service areas:

- Counselling & Information (on environment and energy, social aspects, financial aspects)
- Care & Supervision (of building, dwelling, person, and pets)
- Leisure Time Activities (sport, social aspects, culture and communication, food services and catering)
- Repairs
- Mobility & Delivery (vehicle rental and sharing, parking areas for other than private cars, delivery, other logistics)
- Safety & Security (of building, dwelling, persons)
- Supply & Disposal (energy and water supply, and waste disposal).

[6] Such as more efficient domestic heating systems, smaller or less energy consuming electrical appliances, and the installation of building insulation.

[7] This is not to say that in the HOMESERVICE project we would not be interested in technological developments. On the contrary, many of the good or good practice service examples identified so far are made possible by a technological innovation component (especially ICT). However, our starting point for identifying and assessing services is the user perspective, not the technological innovation as such.

[8] I.e. heating or cooling and lighting at home.

In Austria and Germany we concentrated mainly on assessing services provided by housing organisations. For the other countries, the focus was more on the good practice examples available on the market in general. In Spain and Portugal the focus was placed on external service providers, as the housing organisations do not provide services, which go beyond their legal obligations.

The following descriptions of these service areas will give an overview on potential Homeservices per area.

2.1.1 Counselling & Information

Consulting & Information services are relevant for changing the residents' consumption behaviour towards a more sustainable lifestyle. The following good practice examples should cover different sustainability dimensions: Whereas counselling on environmental issues reduces ecological impacts, information on social and financial matters aims to improve the resident's social and economic situation.

This area addresses the following themes:

- Environment and energy: refers to advising, counselling and information on environmentally friendly products and activities used/performed at home as well as to energy efficiency issues of homes and buildings. Examples are counselling on waste prevention and separation or counselling on energy use of household appliances. Advice on subjects related to a wider understanding of well being at home, such as decoration, is also included.
- Social aspects: this category includes all types of information/advice services that are related to promoting social equity, avoiding exclusion, etc., at home or in the neighbourhood. An example is counselling on living conditions for the elderly.
- Financial aspects: the financial consultation and information services here included are those that can be relevant for living at home, e.g. information on financing and subsidies for residents or counselling on energy subsidies.

Good practices in the Counselling & Information service area entail services related with environment, as waste prevention and separation, water, energy and toxics use reduction practices, energy efficient facilities and ecological construction, change of consumer practices and environment in general. Some of the good practices found also related with social aspects, as employment, health, empowerment and information about leisure activities. The economic aspect of these good practices is mainly related with the reduction of utility costs and debts reduction. There is a strong representation of environmentally related services, mainly in the area of energy reduction.

2.1.2 Care & Supervision

Care & Supervision services have predominantly indirect social, economical and environmental impacts on sustainable development. They generally aim to improve the residents' quality of life fulfilling superior sustainable development goals such as integration or revaluation of neighbourhoods. Consequently, Care & Supervision services relate to all dimensions of sustainability.

This service area concerns maintenance, cleaning, supervision, assistance and housekeeping of the building, the apartment, of persons and of pets. Examples of services here included are:

- Building: condominium management, technical assistance of the building, etc.
- Apartment: home-sitting, apartment cleaning, etc.
- Persons: medical care at home, child sitting, tutoring at home, etc.
- Pets and plants: pet transport, vet at home, etc.

Good practices in Care & Supervision service area are mostly services related with social aspects. The good practices found comprise child, elderly and handicapped care, medical care, apartment and building care and gardening. Another category of good practice services is related with neighbourhood management and housing renovation, mainly for handicapped or needy people. Most of the good practices found are services related with child, elderly or handicapped care, apartment care or medical care. Environmental related services concern only ecological construction.

2.1.3 Leisure Time Activities

Similar to Care & Supervision services, Leisure Time Activities aim to improve the quality of life in certain districts. However, they predominantly relate to the social dimension of sustainability by enhancing integration and community building.

The services here included are related to leisure activities, not necessarily practiced at home but provided at home or in the neighbourhood. It is organized in the following categories:

- Sports: includes not only the facilities to the sportive practicing, like football court, gym-fitness studio, but also supportive services such as sports equipment rental service.
- Social issues: these services support all kinds of socializing activities, ranging from field trips to non-profit organizations of residents, youth centres, etc.
- Culture and communication: here are included for instance the provision of a website for residents, resident's newspapers, etc.
- Food services and catering: all sorts of services related to food, which are provided at home or nearby. Range from markets to cook on demand or catering.

Good practice examples in Leisure Time Activities service area are essentially social services which comprises activities for children, teenagers and elderly, activity centres (computer, internet access, cultural activities), trips and networks for residents participation. The services provided in the activity centres and network and participation processes are the most represented good practice services collected in this service area. There are no good practice services related with economic aspects and the only one related with environmental aspects is the organisation of field trips in natural areas for environmental awareness. Some of the good practices found are self-organised by the residents.

2.1.4 Repairs

This field includes all services concerned with repairs in the apartment or in the building, related to the infrastructures, constructions and equipments. It includes supporting services such as the provision of a workshop room for repairs or tool rental.

Only six good practice examples were collected in the Repair service area. These services entail small repairs at home, points bonus systems organised by housing organisations, internet market places and collection, and repair and reuse of used products. These last services are especially interesting, as they have a positive impact on the environment and simultaneously have social effects, as the money earned is used to support socially disadvantaged people.

2.1.5 Mobility & Delivery

As traffic is a prime factor for environmental pollution and energy consumption, this field of action is crucial for ecological aspects of sustainability. Although Mobility & Delivery services are comparatively unpopular for home service providers and have ambivalent ecological effects, they offer important potentials to enhance sustainable development.

These services concern the mobility of persons and goods, which are of relevance to the residents, and are organized in the following categories:

- Vehicle rental and sharing: for cars and bicycles.
- Parking areas: both inside and outside the building, includes parking areas for bicycles, cars, taxis and other vehicles.
- Delivery of shopping, meals, medication, etc. Includes also personal running errands and messenger services.
- Other logistics, such as public transportation, etc.

Good practice services in Mobility & Delivery service area belong to social aspects and especially to disabled, elderly and needy people, as transport of disabled people, running errands, meals on wheals and shopping service. There are also good practice services provided to residents in general, like delivery of organic food and carsharing, which are the most represented services in this service area.

2.1.6 Safety & Security

Safety & Security services mainly aim to enhance the residents well being. Although sustainability effects are indistinct in this service field, the demand for Safety & Security services strongly increased during the last years.

The services related to Safety & Security such as surveillance, alarm systems and emergency related services are listed in this field. It is organized into three categories:

- Safety & Security of the building
- Safety & Security of the apartment
- Personal Safety & Security

Only four good practice examples were collected in the service area of Safety & Security, which comprise security services at building and apartment level (surveillance, domotics), emergency telephone for elderly and needy people and information provided by housing organisation about security issues.

2.1.7 Supply & Disposal

Services relating to energy or resource Supply & Disposal, generally combine environmental and economical benefits, as they quall reduce resource consumption and operating costs.

Here the services concern the following areas:

- Energy supply: besides the energy (electricity, gas) supply per se, related services like management and accounting, for instance, are included.
- Water supply: again, supplying related services such as billing and recording are in this category.
- Waste disposal: services here range from waste collection to billing systems, waste separation, etc.

Good practice examples under the Supply & Disposal category relate to waste, as reuse of products (household appliances, office equipment, and other products), collection and disposal of solid waste and to energy, as energy contracting, reduction of utility costs, energy saving equipment, renovation for energy-efficient houses, domotics. The services related with energy have a positive impact on environment and on economic aspects.

2.2 Good practice buildings

In order to explore best potentials of Homeservice provision to reduce negative side effects of housing, good practice buildings with integrated sustainability concepts were studied in the six participating countries (section 9.3). The service offer provided in these good practice buildings can be clustered according to **personal service concepts**, which refer to residents' demands, **ecological building concepts**, as energy-based or ecological building concepts and **neighbourhood-based concepts** that aim to affect the living conditions in the whole neighbourhood. Table 2.1 shows how the collected good practice buildings are classified in these three clusters.

Personal services provided in these good practice buildings can be divided into common areas and facilities, and Homeservices. Common areas and facilities are comprised of gardens and green areas, green roofs, common rooms, playgrounds, and fitness studios. In addition, there is a range of Homeservices that can be provided, like cleaning, maintenance and security services or the sale of event tickets. Further options are renewing of drivers licence, organic food delivery, rental of communal gardens or car rental. Some of these services can be provided via a service centre, a building care taker, or a concierge.

Ecological building concepts include measures on energy and water efficiency and waste recycling. It comprises for example, wastewater recycling for energy use, energy contracting, energy efficient buildings, reuse of heat from the air and efficient use of water, rain water collection and use, central hot water, and central waste disposal system.

COUNTRY	PERSONAL SERVICES	ECOLOGICAL BUILDING CONCEPTS	NEIGHBOURHOOD-BASED CONCEPTS
Austria	Herrenhauspark Döbling Hanging Gardens Wienzeile Harlacherweg Attemgasse Autofreie Mustersiedlung	Attemgasse Friedrich Engels Hof Autofreie Mustersiedlung	Autofreie Mustersiedlung Wienzeile Hanging Gardens
Germany	Augustinum	Bremer Höhe	Bremer Höhe Greifswalder Straße Augustinum
Netherlands	GWL-Terrein	GWL-Terrein	
Spain	Ondratz-gain		
Finland		Auringonkukka	Arabianranta
Portugal	Parque dos Príncipes	Torre Verde	Parque das Nações

Figure 2. 1 Clustering of good practice buildings.

Neighbourhood-based concepts are often based on residents' involvement such as barter shops for household devices or resident-to-resident services. Moreover, they aim to integrate certain resident groups by creating infrastructure for special needs (local day-care centre, senior and handicapped adapted apartments, residents consulting and participation office, ICT connection of residential buildings) or by starting integrative initiatives (employment measures for local unemployed residents, special service offers for deprived and senior residents and conflict mediation. The long-term goal of neighbourhood-based concepts is to upgrade the neighbourhood environment by simultaneously promoting the social cohesion among the residents.

Construction measures, i.e. the physical infrastructures needed for the provision of the services under these three clusters, are also of importance: for instance, personal services related with common areas and facilities have a direct link with construction measures. This is also true for some of the personal Homeservices, but with less extent. There are services, like selling opera tickets, that don't need special construction measures to be delivered. For ecological building concepts, construction measures can also have an important role, especially those related with energy efficient buildings. However, services like energy contracting don't need any construction measure to be provided. On the other hand, neighbourhood-based concepts are also related with construction measures, as some of the activities need a common space to be developed. However, there is also the case that some activities can be performed with the use of ICT and don't need intensive construction measures.

One can conclude that in general construction measures are needed for the development of good practice buildings, but their intensity varies according to the nature of the service to be provided.

2.3 Summary

Good practice services were found in all the seven service areas: Counselling & Information, Care & Supervision, Leisure Time Activities, Repairs, Mobility & Delivery, Safety & Security and Supply & Disposal. Most of the good practices described consist not only one of service, but of a combination of services and for this reason serve several service areas. Counselling & information and Care & Supervision are, by far, the two most represented areas, both with 26% of services; the less represented service areas are Repairs with 5% and Safety & Security with 4%.

It is interesting to notice that 38% of the good practice services studied are provided by commercial providers, followed by non-profit organisations with 28% and 8% by public providers. Homeservices provided by housing organisations account only for 26% of the studied services as housing

organisations are only slowly developing into service providers and in some southern countries the concept is completely new.

Many of these service areas lie within the consumption clusters of households that are the most environmentally relevant as identified by Spangenberg and Lorek (2002). They found that the total resource requirement of only three clusters, construction and housing, food and nutrition, and transport and mobility makes up for nearly 70 % of material extraction and energy consumption and than 90% of land use (Spangenberg and Lorek 2002).

The identified good practice buildings were categorized into three groups: personal services, ecological building concepts and neighbourhood-based concepts. The given examples are incidentally chosen, because no comparable screening of potential good practice buildings was carried out and, however, it is interesting to note that there is a relationship between the clusters and the amount of good practice buildings found: as the complexity of the cluster increases (personal services are simpler than ecological building concepts and these ones are simpler than neighbourhood-based concept, which entails environment, economic and social aspects of the neighbourhood) the number of good practice buildings found reduces.

A useful approach for the analysis of supply arrangements across countries is defining the different functions in the housing market, i.e. construction, transactions and the arrangement of living conditions. Where these three functions are covered by one single actor, as is the case with the German and Austrian housing organisations, the need for co-operation is less. Where these three functions are separated (e.g. in Spain and Portugal), the need for the collaboration of actors in the provision of services is greater.

3 Sustainability Effects of Homeservices

The first two chapters explained the concept of sustainable Homeservices and depicted the seven service areas from which we searched for potentially sustainable services. What did we find from those service areas when searching for empirical examples? Before we could actually start the search of good examples, we needed to operationalise the concept of sustainable Homeservice. For that end, we developed a relatively simply methodology for the assessment of sustainability of services offered to households, called Sustainability Evaluation Tool. It is explained in this chapter. Over 200 good-practice household services from 12 towns of six European countries were selected and evaluated with this method. These services are provided by 19 housing organizations and 48 other providers (Tables 3.1. and 3.2.)[9]. Other providers include commercial enterprises, public providers and non-profit organizations. The results of the evaluation, i.e. the effects of household services on sustainable development are addressed in the remainder of the present chapter.

Number of service providers	Housing organisations	External service providers	Sum
Austria	3	12	15
Germany	5	1	6
Netherlands	8	18	26
Spain	0	4	4
Finland	2	9	11
Portugal	1	4	5
Sum	19	48	67

Figure 3. 1 Number of service providers per country in the sample

We should emphasize that the sample of Homeservices is a varied set of services. The analysed services do not comprise all possible sustainable Homeservices in the respective 12 towns. We have made the analysis on the basis of those relevant services that we could find by the mid-way of the project, that is late 2003. Therefore the figures in the following tables do not imply that this is the total amount of relevant services in all countries. However, the selected Homeservices are based upon an extensive search, and they are representative for the assessment of sustainability effects.

In terms of the type of service providers and the amount of analysed services, the sample varies from one country to another. The main reason for this variation is that the housing situation and the related services depend on the institutional and cultural setting around housing of each country. As appears from table 3.1, in Spain none of the analysed Homeservices is provided by a housing organization. This is because there are hardly any large (social) housing organizations in Spain. In Spain (and Portugal) the main form of housing is the condominium association. These are only legal entities that do not seem to offer Homeservices with sustainability contribution. In the German sample, on the other hand, multiple services provided by five large housing organizations and only one provided by an NPO have been included in the analysis. This is due to the fact that rental housing has a big share in the German housing market and many housing organisations are engaged in Homeservice provision as initiating or cooperating institution. Consequently, the German sample concentrated particularly on housing organization's role and possibilities as Homeservice providers in order to illustrate this market

[9] In the website of this project, there are also other service examples than those are under analysis here. The reason is that the website has been constantly updated whereas the analysis had to be closed at certain date.

[10] In the website of this project, there are also other service examples than those are under analysis here. The reason is that the website has been constantly updated whereas the analysis had to be closed at certain date.

segment, since there are much more large housing organizations providing Homeservices compared to the other countries.

Despite that some of the differences in the national samples can be explained by the lack of housing organizations that provide Homeservices, or by matters of choice, it is also evident that one reason for the lower number of Homeservices in the Portuguese and Spanish samples is that good-practice sustainability services do not yet exist in abundance in these countries.

Services offered by different providers	By housing organisations (HO)	By external service providers (ExSP)	Co-produced services of HO & ExSP	Sum
Austria	17	56	1	74
Germany	19	4	3	26
The Netherlands	3	34	22	59
Spain	0	10	0	10
Finland	7	31	1	39
Portugal	1	5	1	7
Sum	47	140	28	215

Figure 3. 2 Number of analysed Homeservices by type or provider

3.1 How to assess sustainability of Homeservices? The Sustainability Evaluation Tool

The concept of Sustainable Homeservices was elaborated in Chapter 1. How to apply this concept in practice? During recent years, indicators of sustainability have been drafted by different constituencies, e.g., the Commission on Sustainable Development (CSD) (UNDSD 2002), the Human Development Index (HDI) by UNDP (UNDP 2001), Sustainable Consumption Indicators by UNEP (Bentley and de Leeuw 2003), OECD (OECD 1999, OECD 2001) and the Daly-Cobb Index of Sustainable Economic Welfare (ISEW) (Mannis 1998). However, so far no coherent indicators either for household consumption or for related services have been developed (Lorek 2002). The first problem that one runs into when attempting to apply the above-mentioned sustainability indicators to the level of individual services or sectors is that they are mainly suited for national-level analyses. Another concern from the perspective of this study is that many of them are at such a basic needs level that they do not make much sense in developed country contexts, but are better suited for assessing the urgencies of less developed countries. For example, the CSD indicator for housing is floor area per person. A CSD-indicator for urbanization of population is 'population of urban formal and informal settlements'.

However, these indicators can serve as one source for pointing out areas within which sustainability indicators for micro-level services related to household or housing could be developed. Furthermore, they not only point out issues, but some of them offer an aggregate indicator from which to work downwards to develop more micro-level determinants for assessing whether the focal service has a positive sustainability effect. Developing micro-level indicators for environmental sustainability is slightly easier than for social and economic ones, since some work has already been done both for indicators of the environmental impacts of household consumption (Lorek and Spangenberg 2001, cf. also Bentley and de Leeuw 2003) and for assessing the eco-efficiency potential of services (e.g., Heiskanen 2001, Hockerts 1999)[11]. From among the 14 environmental indicators of household

[11] Hockerts' (1999) proposes a test of eco-efficiency of a service according the following indicators: longer-life option, lesser material and energy consumption during use, revalorisation potential and efficiency of use. Heiskanen and Jalas (2000), on the other hand, adopt a more general perspective and suggest that benefits resulting from the shift from products to services can

consumption developed by Spangenberg and Lorek (2002) and Lorek and Spangenberg (2001), at least nine can be drawn upon - not used as such – for developing criteria for assessing the environmental potential of services directed to households. These are indicators for: heating energy consumption, resource intensity, living space, organic products, food transportation, shopping and recreation transport distances, modes of transport for vocational, shopping and recreation purposes, and number of passenger cars.

In terms of social sustainability indicators explicitly for the household level we can refer to quality-of-life indicators developed by Gatersleben and Vlek (1998) and Gatersleben (2001). The ones we can draw upon are comfort, health, safety, freedom/control, social justice, social relations, and education and development. Two indicators, work and income, considered social ones by Gatersleben (2001), we treat as indicators for economic sustainability.[12]

Our proposal for a preliminary set of indicators for assessing the ecological, social and economic sustainability of a Homeservice is in Table 3.3. These indicators are meant for a simple assessment of a service, not for a comprehensive life-cycle analysis or for, e.g., calculating the ecological footprint of a household. We find that for the first steps of starting to integrate all sustainability elements into service evaluation, a simple assessment device is sufficient. Furthermore, we wanted to propose a set of indicators and criteria that are feasible also for practitioners. Using the above-mentioned indicator studies as the background, we ended up with 18 indicators, six for environmental aspects, seven for social items, and five for economic sustainability. The indicators in Table 3.3 are most probably easiest to understand when considered in combination with the method suggested for their operationalisation in Table 3.4.

Environmental aspects	**Social Aspects**	**Economic Aspects**
1 Material Use	7 Equity	14 Employment
2 Energy Use	8 Health	15 Financial Situation of the Residents
3 Water Use	9 Safety and security	16 Regional Products and Service Use
4 Waste	10 Comfort	17 Profitability of the Company
5 Space Use	11 Social Contacts	18 Profitability of the Region / Community
6 Emissions	12 Empowerment	
	13 Information and Awareness	

Figure 3. 3 A set of indicators for Sustainable Homeservices.

The social and economic indicators perhaps warrant more discussion here because they have not been previously studied to the same extent as the environmental ones. The proposed social and economic indicators for assessing Homeservice sustainability have mainly been developed on the basis of the macro-level indicators discussed above, quality-of-life indicators suggested by Gatersleben (2001) and the findings of living and housing studies by Scharp et al. (2000) and Hohm et al. (2002). It should be emphasised that the suggested contents for the indicators are not exclusive, but should rather be treated as indicative of what issues to consider when assessing the service according to the particular indicator. To start with the social indicators, Equity refers to the questions whether the service improves equality between people, whether it helps to combat social exclusion, and whether it promotes fair trade. The Health indicator evaluates whether the service contributes to

be: lower manufacturing volume, less impact during the use phase of the product, lower stock of products, and higher rate and quality of utilization of end-of-life products.

[12] Some of these indicators, such as health, education, safety/security and employment can be also found in writings of Sen (1999) as items of freedom, which according to Sen should be the measure of development, instead of, e.g., GNP growth.

preventing mental or physical illness. The Safety and Security indicator relates to crime and vandalism prevention in the neighbourhood, and/or to the potential of the service to reduce risk of injuries. 'Comfort' refers to the effect of the service on reducing annoyance such as noise, odour, and/or pollution, on helping residents to save time, or on increasing convenience for the residents[13]. Under the indicator Social Contacts, we would look at whether the service promotes social self-help like barter shops and swap Internet sites, promotes communication in the neighbourhood or improves the neighbourhood atmosphere in general. 'Empowerment', on the other hand, refers to opportunities to exercise one's own volition and interact with as well as influence the world in which one lives (cf. Sen 1999). In a Homeservice context, this refers to issues like improved opportunities for participation, or the provision of new channels for residents toward decision-makers (e.g., electronic ones). Lastly, under 'Information and Awareness' we would assess whether the service increases training, awareness and skills of the residents.

As to the economic set of indicators, the most self-evident item on the list is perhaps Employment. It refers to whether the service creates new jobs or helps to secure existing ones, and/or whether it helps to tackle long-term unemployment. In this connection one should consider what kind of employment is in question, e.g., full-time permanent vs. temporary or part-time work. The 'Financial Situation of the Residents' indicator comprises issues like residents' ability to save money or create more income as a result of the service. The following indicator 'Regional products and service use' seeks to record whether the service increases the use of regional products or services. The indicator 'Profitability of the company' attempts to answer questions like: is the service profitable in the long-term (for its provider, e.g., the housing organization, or some other service provider); and/or does the economic efficiency of the whole service system improve? It does not refer only to profitability of a business enterprise. Finally, the indicator 'Profitability of the region/community' seeks to assess the effect of the service on the regional economy in more general sense than the preceding indicator, 'Regional products and service use'.

As to assessing the sustainability of Homeservices, there is a particular problem. It stems from the fact that we are looking at open systems. It is not only difficult, but in many cases impossible to draw a meaningful boundary around the 'system where the service has its influence'. In an open system, the problem arises that we do not have a fixed point against which the potential impact of the service should be measured. Even in a simple case, if we look at a particular building and a service offered to its residents, it may be possible to see, e.g., that a common room reduces the need for individual space, but it cannot be measured exactly how much space is being saved – the result would always remain to some extent hypothetical.

The task is further complicated by the fact that the analysed services have also other than only direct effects. Occasionally the indirect effects of a service can be considerable. Consequently it would not be justified to omit them. Let us take an example of the effects of an organic food delivery service. The direct effects result from reduced the amount of vehicle emissions, since one trip can be made from the farmer to the consumers, instead of several by the individual consumers to the farmer. As to the indirect effects, the service promotes organic farming and food, and the indirect effects are e.g. environmentally less harmful soil treatment, and healthy nutrition. We have scored this kind of indirect effects of the Homeservices rated in this project.

Subsequently, our criteria for assessing the sustainability of Homeservices are bound to be 'relative' or qualitative criteria, indicating a move in a positive direction[14], e.g., "increasing employment" or "promoting environmentally friendly transport", "reducing waste". No absolute value is involved. The question immediately arises: what amount of improvement counts for a criterion to be fulfilled? This is occasionally problematic, especially with regard to some social and economic criteria. How to judge if a service increases equity? Or empowerment? Or promotes the regional economy (almost any service gives some kind of an input to the regional economy)? Here we are, in the worst case, left with only the gut feeling of a mixed group of experts as a basis for assessment.

[13] When comfort relates to reduced pollution it is connected to ecological aspect of sustainable development. When an increase in comfort results from time saving, it may not only have comfort value (social) for the resident, but also economic significance, at least for those residents whose time has exchange value in the labour market. These instances are, however, to be recorded separately in ecological and economic indicator section; pollution under "waste and emissions" (environmental indicator) and time saving under "financial situation of the resident (economic indicator).

[14] Or negative, unsustainable direction.

How to assess a service on the basis of the above indicators, i.e., how to operationalise them? We propose a five-point ordinal scale for each indicator. The Homeservices identified as potentially sustainable can be rated along this scale. Table 3.4 depicts the rating scale with one example indicator from each sustainability dimension. As mentioned above, the proposed indicators are relative, i.e., they indicate a move in a positive (or negative) direction, e.g., a reduction in waste or an increase in employment. For a relative method, the point of reference is an important element. For our method the point of reference is the 'status quo' alternative in which the service does not exist (i.e., the 'current situation' or the 'do nothing/base line scenario'). If no change results from the service introduction or the impact is impossible to assess, this would score 0 in the scale. Together these two tables form out Sustainability Evaluation Tool developed and applied in this project.

Material use (environmental)	
The effect of the service on material use compared to status quo (status quo = situation without the service)	
-2 -1 0 1 2	
Increases material use	Decreases material use
Empowerment (social)	
The effect of the service on residents' ability to influence decision-making that affects them	
-2 -1 0 1 2	
Decreases the ability to influence	Increases the ability to influence
Employment (economic)	
The effect of the service on the employment	
-2 -1 0 1 2	
Less jobs/job opportunities lost	More jobs are created

2: a major positive change
1: a substantial positive change
0: the service does not make a change to status quo
-1: a substantial negative change
-2: a major negative change

Figure 3. 4 Operationalisation of sustainability indicators. Example of one indicator in each sustainability dimension.

When applied in service development or assessment, the results of these indicators are not always unambiguous. If they are applied in practice for Homeservice development, it is important to pay attention to the functional linkages between the indicators. Developing a service with regard to one dimension may lead to adverse effects in another. For instance, a substantial loss in household energy use may mean a loss in experienced quality of people's daily life when they, for instance, use certain goods less often or less intensively (Gatersleben 2001). Furthermore, when assessing the sustainability effects of a service, they may occur at different levels: micro-level (household, apartment building) or more macro-level (region, country) or something in between (neighbourhood). Most of the time, however, the sustainability effects of an individual Homeservice remain at the household or apartment building level. Occasionally they reach neighbourhood level outcomes, and perhaps sometimes the effects might occur at regional niveau, e.g., strengthening of the regional economy via increased use of the services of locally-owned companies. The key point is, however, to pay attention to the fact that despite the potential positive micro-level effects, negative impacts may result in the larger system, and vice versa (Dovers 1995, cf. also Wolf and Allen 1995).

The results in the figures 3.5 – 3.8 in chapters 3.2 - 3.5. have been calculated as follows: The scores of all analysed services per sustainability indicator category have been summed up and then divided by the number of services in each country. As the effect of the services can only range between –2 and +2, the scaled sum can only be between these values. Formula:

Scaled score of indicator = Sum of total score of all services per indicator divided by the number of services in every/each country.

3.2 Environmental effects according to the sustainability criteria

The environmental indicators are based on commonly used international indicators in environmental assessment methods and tools, Nieuwenhuis (1992), Spangenberg and Lorek (2002), Lorek and Spangenberg (2001.) and Joanneum (2003). The six selected indicators (material use, energy use, water use, waste, emissions and space use) are so called 'pressure' indicators: they are derived from inputs (materials, energy, water, space) and outputs (emissions and waste) from production and consumption processes and the effects of these processes on the environment. These indicators can be distinguished from the so-called environmental effects indicators that are for instance used in Life Cycle Analysis (LCA).

Most good practice Homeservices have an environmental impact and as a consequence have one or more ratings on the environmental indicators in the Sustainability Evaluation Tool. The national scores of the good practice Homeservices are presented in figure 3.5.

	Material use	Energy use	Water use	Waste	Emissions	Space use
Austria	0,63	0,97	0,21	0,79	1,00	0,68
Germany	0,64	0,66	0,39	0,68	0,64	0,53
Netherlan	-0,17	0,63	0,10	0,14	0,49	-0,02
Spain	1,50	1,00	0,50	1,00	1,00	0,67
Finland	0,31	0,33	0,28	0,56	0,44	0,00
Portugal	0,43	0,14	0,14	0,57	0,71	1,29
Average	0,56	0,62	0,27	0,62	0,71	0,52

two highest scoring indicators within sustainability area
third and fourth highest scoring indicators within sustainability area
some effect (rest of the indicators scoring positive values)
no significant impact or negative impact

Figure 3. 5 Scaled environmental sustainability indicators per country.

As explained in the chapter 3.1, an analysed service was given a score between -2 and 2 per each of the 18 indicators, depending on its contribution to the particular indicator item. The numbers in the above table are the averages of service scores in each country.

3.2.1 Effect on material use

Material use refers to the quantity and the hazardousness of materials used and the effect of the service in shifting from non-renewable to renewable materials. The European average score on this indicator (0.56) is relatively low compared to some other environmental indicators. The mix of positive and negative effects causes this. Some services have a positive effect on material use because they reduce the need for products. Examples are Denzeldrive-Carsharing in Austria and CityCarClub in Finland: the sharing of cars reduces the number of cars and related materials needed. Other positive effects are a more efficient use of materials through recycling. The cooperative WBG in Berlin for example scores positively on the indicator of material use, as they introduced an individual waste billing system that encourages residents to reduce their waste amount. Other services stimulate the use of environmental friendly materials for renovation: Surbisa in Spain.

Some services have negative effects: especially in The Netherlands we found services that bring about extra use of materials. Examples of these services are: EPA tailor made energy reduction Aadvise and Info Caravan (The Netherlands). If for example an energy consultant advises the use of a climate installation or extra insulation, this means that extra materials will be used. This negative impact on the indicator of material use is often compensated by the positive effect on the indicator energy use. Two good practice Homeservices are Die Umweltberatung (Austria), T&T (Finland) and Emaus from Spain (see Annex 9.2).

3.2.2 Effect on energy use

The indicator energy use refers to the reduction in the quantity of energy that is used. It also indicates whether a service has an effect in shifting from non-renewable energy sources to renewable energy sources. Energy use is an important environmental indicator with a high total score (0,62), meaning that many good practice Homeservices contribute to a reduction in energy use. Especially services in the area of Counselling & Information in Austria, Germany and The Netherlands have a major positive impact. It is noteworthy that services in the area of energy Supply & Disposal (service area 7.1) do not score high except for the case of The Netherlands. Good practice examples for energy reduction that are mentioned in more than one country are services in the areas of counselling on reduction of energy consumption in houses for heating, warm water, and electricity, but also in the field of mobility: a shift from the use of cars to the use of public transport or bikes (examples are The Walking Bus and the Wielertaxi). Oekostrom AG that offers environmentally friendly electricity produced in Austria, is a good example of a service in which renewable energy is used. Green energy providers exist also in Finland, Germany, and the Netherlands, but except for Austria they have not been selected for a detailed analysis in the national samples, and are therefore not mentioned here. Other good practice Homeservices are Energy Expert (Fin), Motiva (Finland), Abil Spain and Bremer Höhe (G) (see Annex 9.2).

3.2.3 Effect on water use

The indicator water use refers to the quantity of water used. It also assesses whether the service has an effect on the use of grey (reused)/rain water. The European average score on this indicator (0.27) is relatively low compared to the other environmental indicators. The explanation for this outcome is that only small number of services was found that reduce water use. This is especially the case in Portugal, Spain, Germany and Austria where other indicators have higher scores. A good practice example with a positive effect on the indicator of water use was found in Finland: Motiva Oy where residents are trained to help other residents to reduce the water consumption. Two other good practice Homeservices with a positive score on the indicator of water use are Oekostrom (Austria) as the electricity comes from hydroelectric power plants, the Green League (Germany), and the Healthy Environment House in The Netherlands.

3.2.4 Effect on waste

The indicator waste determines the effect on the quantity of waste generated and the hazardousness. The European score on this indicator is relatively high (0.62). Austrian and Spanish Homeservices score high on this indicator, especially with services in service area 1: Counselling & Information. Advise to consumers on waste reduction helps to reduce waste. This was shown in the Spanish and Austrian examples, such as Emaus and the Viennese magistrate MA 48. The Energy contracting at the Bremer Höhe in Berlin has two effects on the indicator “waste”: On one hand, the energy contracting resulted in less waste due to a change to ecological heating and on the other hand the according energy counselling aims to reduce household waste. In the service area of supply and disposal, where one expects services with a good score on waste, we have found a positive effect in all countries. Two good practice Homeservices with a positive score on the indicator of waste are T&T in Finland and R.U.S.Z. in Austria. These are service providers offering recycling, repair and reuse services of electronic and electrical appliances, thereby reducing waste.

3.2.5 Effect on emissions

This indicator refers to the quantity and the characteristics of air emissions, including those from passengers and freight transport (e.g. CFCs, GEG, acid rain, smog, VOCs, etc). The level and characteristics of water emissions are also assessed in this indicator. Positive effects are for instance related to the use of green energy and reductions in energy use and mobility, but also to the use of eco-food etc. The European average score on this indicator is relatively high (0.71). Services in these service areas that have a major positive effect include Energy Box (reduction of energy consumption), Teleflora in Portugal (less emission to water because of the use of environmentally friendly products) and Denzeldrive (less emissions to air) by carshring. Two good practice Homeservices with a positive score on the indicator of emissions are Green League and Oekostrom, a supplier of green energy.

3.2.6 Effect on space use

This last environmental indicator determines the effect on space use. Space use is defined as the amount of space that is used as well as the amount of constructed space used. It also assesses the effect on the quality of green spaces and natural habitats. The European average score on this indicator is relatively low (0,52), especially in The Netherlands and Finland. Two good practice Homeservices with a positive score on the indicator of space use are Txillarre from Spain and Denzeldrive. Txillarre has a positive score because of the positive effect of organic farming on green spaces and natural habitats, while Denzeldrive reduces the need for parking space.

3.2.7 Summary of environmental sustainability effect

As will be shown in the upcoming chapters, the results show that the overall scores for the environmental indicators are lower than those for social and economic indicators. The reason seems to be that in order to survive in the market place social aspects like quality of life effects and economic aspect like profitability of the service for the provider, must be in a good shape. Nevertheless, the rough analysis indicates that most of the services have a positive effect on the environment. Especially in the field of energy, emissions, and waste the potential contribution to a better environment is relatively high. This outcome can be explained by the emphasis on the effect of climate change and waste in politics all over the world. More average are the effects on space and materials use. We did not find many water and space related services.

3.3 Social effects according to the sustainability criteria

The proposed social and economic indicators for assessing Homeservice sustainability have mainly been developed on the basis of the macro-level indicators discussed in chapter 1, quality-of-life indicators suggested by Gatersleben (2001), Gatersleben and Vlek (1998) and the findings of living and housing studies by Scharp et al. (2000) and Hohm et al. (2002). It should be emphasised that the suggested contents for the indicators are not exclusive, but should rather be treated as indicative of what issues to consider when assessing the service according to the particular indicator. Next we will discuss how the analysed Homeservices appeared to contribute to the seven social sustainability areas (Table 3.6).

	SOCIAL						
	Equity	Health	Safety and security	Comfort	Social contacts	Empowerment	Information and awareness
Austria	1,32	1,11	0,48	1,51	0,89	0,38	0,56
Germany	0,96	1,16	0,36	1,29	1,34	1,16	1,49
Netherlands	0,37	0,59	0,42	1,27	0,30	0,28	0,65
Spain	0,83	1,00	0,67	1,83	0,50	0,00	1,33
Finland	0,90	0,49	0,62	1,00	0,41	0,72	1,18
Portugal	0,57	0,71	0,14	0,86	0,57	0,29	1,43
Average	0,82	0,84	0,45	1,29	0,67	0,47	1,11

two highest scoring indicators within sustainability area
third and fourth highest scoring indicators within sustainability area
some effect (rest of the indicators scoring positive values)
no significant impact

Figure 3. 6 Scaled social sustainability indicators per country.

3.3.1 Effect on equity

Equity refers to the questions whether the service improves equality between people and whether it helps to combat social exclusion. Not surprisingly, Care & Supervision as well as Counselling & Information services score well in terms of equity contribution. These are mainly services that somehow assist people who are financially, socially, mentally or physically disadvantaged. There are roughly speaking two kinds of effects in the service group Counselling & Information. On one hand there are services explicitly intended to assist people in their financial, social or health-related problems, for instance counselling on debt to aid with financial problems. On the other hand there are services that are originally designed for other purposes, but also entail benefits on equity. For example, some Homeservices are primarily oriented toward energy and water savings but they also actually help financially strained people save money. Examples of the latter are energy saving services directed to households in Finland and the Netherlands. It is, however, noteworthy that services in the Repairs category had a high contribution to equity. This is to a great extent because among the good-practice services there were some social enterprises recycling and repairing household appliances that employed people from disadvantaged groups such as disabled people, immigrants or long-term unemployed. As these enterprises trained and gave new skills to their employees, they also made them more equal in terms of access to normal working market. To mention a few other relevant aspects, in Germany, many Homeservices offered by social housing organizations aim to reduce social exclusion by initiating common activities, like providing Leisure Time Activities or employment opportunities for socially problematic youth groups. In Finland and Portugal, there are third-sector service providers that offer employment possibilities for disadvantaged people (e.g. disabled people, immigrants, long-term unemployed or ex-prisoners), thereby contributing to equity.

Service providers that score high in this indicator are the Austrian Sozial Global and Hilfswerk, German Augustinum Housing Foundation, both of them supplying personal Care & Supervision services. Social enterprise T&T from Finland providing recycling and repair services of electrical

appliances is another good example while it employs workforce like immigrants and disabled people, and seeks to give them skills and contacts to enter also the wider work market.

3.3.2 Effect on health

The health indicator evaluates whether the service contributes to preventing mental or physical illness. Not surprisingly, services under the category Care & Supervision have most contribution to the health aspect. Also Mobility & Delivery services contribute to health aspect, which is quite understandable since services like meals on wheals, medication delivery, and transportation of disabled or ill persons support mental and physical well-being of the residents.

Surprisingly the health indicator is often stimulated by housing organisations that provide a lot of common space for sports or Leisure Time Activities. These facilities and their use by the residents finally contribute positively to the residents' health. Good practice examples are GSW neighbourhood Renewal Management from Germany or Mischek from Austria.

3.3.3 Effects on safety and security

The safety and security indicator relates to crime and vandalism prevention in the neighbourhood, and/or to the potential of the service to reduce risk of injuries. The analysed Homeservices did not have a major contribution to safety or security. This indicator scores relatively low. Care services and Safety & Security services are the only ones to have an effect. These are services like emergency service, buildings adapted for disabled people, home-sitting, supervision of common areas like playgrounds or corridors, and reminder service for medication. One potential conclusion to be drawn is that even though there are several safety and security services around, only a few have such characteristics that make them good-practice services from a sustainability point of view.

Good practice examples are InfoTV by City of Helsinki housing organisation and VIVAGO wrist health monitoring appliance by IST, a Finnish service provider who also operates internationally.

3.3.4 Effects on comfort

'Comfort' refers to the effect of the service on reducing annoyance such as noise, odour, and/or pollution, on helping residents to save time, or on increasing convenience for the residents. Except for the German sample, comfort ranks between the two highest social effects, i.e. the analysed the set of services in five countries have most notable effect on residents' comfort. Care & Supervision, Counselling & Information, and Leisure Time Activities are the ones to contribute most to this social sustainability indicator. Comfort often seems to results from services that save time or trouble of the resident, not from services that would actually directly increase "luxury of life". Examples of time and trouble saving services are for example a bicycle repairer coming the building or ICT-based information services (e.g. free-of-charge electronic market place for Homeservices, Info-via-TV about building and neighbourhood events). A variety of energy services that – as a by-product of energy savings – adjust the interior climate to a convenient level add to comfort.

Services that increase comfort of the residents are provided both by housing organizations and external service providers. For the latter ones the service is usually core business, and the motivation for the offer is the direct income generated. For rental housing organizations, however, the main benefit of the residents' increased comfort is on the one hand the residents' loyalty to remain living in the building. On the other hand, the increased loyalty of the residents should cause them to treat the apartment and common parts of the building better.

Examples can be derived from all good practice housing organisations throughout all countries, because as said above, comfort is one of the most driving arguments for housing organisations to provide Homeservices. But also the service offer by external service providers for example in the service area Mobility & Delivery (Sozial Global, Hilfswerk, Fahrtendienst Müller, HELY shopping bag for elderly or Apetito) are good practices on that indicator.

3.3.5 Effect on social contacts

Under the indicator social contacts, we investigate whether the service promotes social self-help like barter shops and swap Internet sites, promote communication in the neighbourhood or improves the neighbourhood atmosphere in general. Care & Supervision services, and Leisure Time Activities (e.g. sports facilities, common indoor and outdoor space, cultural activities and communication facilities like house website or housing organization newspaper), contributed most to the social contacts indicator.

Some services may have a negative effect on social contacts. Presumably for instance home delivery can reduce social contacts. Also some ICT-services without an interaction element can lead to more isolation. A counter argument is, however, that such services are used by busy people that would neither have time nor need for extra interaction.

Again, housing organisations score high that provide construction measures such as diverse common rooms that facilitate social interaction. Organisations also score high that provide activities where residents can participate like going on field trips, support for social groups, special Leisure Time Activities for elderly or younger people are good practices.

3.3.6 Effects on empowerment

'Empowerment' refers to opportunities to exercise one's own volition and interact with as well as influence the world in which one lives (cf. Sen 1999). In a Homeservice context, this refers to issues like improved opportunities for participation, or the provision of new channels for residents toward decision-makers (e.g., electronic ones). This indicator scores fairly low. Counselling & Information and Leisure Time Homeservices contribute most to empowerment. In Germany, particularly NGOs play a relevant role in assisting citizens to act for their own interests. In Finland and the Netherlands, some housing organizations have bonus point programmes for residents who actively participate in building activities. Via this activity they try to empower residents to get involved in their immediate living conditions. Various ICT-based services like residents' websites in Finland and the Netherlands seek to increase channels for resident participation. Similarly, eDemocracy system in Arabia strand neighbourhood in Helsinki provides an electronic channel for the residents to communicate with local politicians about the neighbourhood development.

3.3.7 Effect on Information and Awareness

Lastly, under 'Information and Awareness' we assess whether the service increases training, awareness and skills of the residents. Evidently Counselling & Information services contribute most to this aspect. On average none of the other service areas even comes close. In comparison with the other social sustainability indicators, it seems that Homeservices are a well-suited method for raising awareness. In five of the six countries this indicator receives the most or the second-most points. Presumably one of the reasons is that many of the new services in the field of household sustainability are counselling and/or information services, either in the field of energy, water and waste questions, or in social or financial living issues. The most typical service type of this area - available in Austria, Finland, Germany and the Netherlands - was energy counselling in different forms. With regard to awareness, this service helps to save energy but also raises the level of residents' awareness about environmental issues in general. Taken together, it seems that Counselling & Information types of services tend to be preferred by housing organizations as they are on average easier to provide than for instance care services or Repairs.

3.3.8 Summary of social sustainability effect

To summarize the social sustainability effects, altogether the analysed services had the biggest contribution to comfort, and the second most notable contribution to information and awareness (Table 3.6). On average, health ranked on the third place. To mention a few exceptions, contrary to the other countries, the Austrian good-practice services had low information and awareness benefits. In Germany, social contacts was the highest social sustainability effect resulting from the analysed Homeservices whereas in other countries the selected Homeservices seemed to accrue only little social contact benefits. Safety and security, as well as empowerment appeared to be areas with the least contribution from the analysed Homeservices. With regards to the service areas, neither Repair services nor Safety & Security services appeared to lead to any notable social sustainability benefits.

In sum it appears that most good practice household services contribute positively to social sustainability, in other words, they have a positive impact on the quality of life of the residents, especially in terms of increasing the level of comfort – even those originally were not designed with social sustainability in mind. Actually, as will be shown in chapter 3.5, in total, social impacts outweigh the environmental and economic impacts.

3.4 Economic effects according to the sustainability criteria

The economic indicators refer as well to the macroeconomic (employment, regional economy, profitability for society) as well as microeconomic effects (monetary impact on resident and supplier.) The highest scoring indicator in the economic section is profitability of the company. It refers to whether service providers can earn enough money to be profitable. The second highest scoring is the indicator on employment that evaluates whether the service creates new jobs or helps to secure existing ones, and/or whether it helps to tackle long-term unemployment. It does not score the general observation that services are often provided by people, but scores additional positive effects on employment.

Often Homeservices are provided in co-operation with employment agencies, e.g. Equal Project in Austria and Finland, Neuraum GmbH in Germany, Energybox in the Netherlands and also initiatives in Spain like Emaus and Abil. In Austria and Finland, social enterprises like R.U.S.Z. and T&T that employ disabled people and immigrants, helping them to acquire skills that are applicable outside of supported enterprises, are good examples of service providers that impact positively on employment.

Figure 3. 7 Scaled economic sustainability indicators per country.

	ECONOMIC				
	Employment	Financial situation of the residents	Regional products and services	Profitability of the company	Profitability of the economy/region/community
Austria	1,15	0,93	0,60	0,95	1,22
Germany	0,84	0,27	0,81	1,20	1,28
Netherlan	0,43	0,43	0,19	0,38	0,35
Spain	1,33	0,67	0,67	1,50	1,50
Finland	1,10	0,67	0,49	0,97	0,05
Portugal	0,29	0,29	0,00	0,86	0,71
Average	0,86	0,54	0,46	0,98	0,85

two highest scoring indicators within sustainability area
third and fourth highest scoring indicators within sustainability area
some effect (rest of the indicators scoring positive values)
no significant impact

The 'Financial Situation of the Residents' indicator comprises issues like residents' ability to save money or create more income as a result of the service. Bonus point systems of some Finnish and Dutch housing organisations are good examples of services that allow residents the possibility to participate in building activities and in return offer them reduction in some service prices or financial aid in e.g. organizing house parties.

The following indicator seeks to assess the effect of the service on the regional economy. Finally, the indicator profitability assesses whether the service is profitable for the provider, e.g., the housing organization, or some other service provider; and/or for the society as a whole as e.g. positive external effects reduce problems such as vandalism, loneliness or unemployment.

3.4.1 Effect on employment

Sustainable Homeservices have strong positive effects on employment. However, a positive scoring within this criterion must be explained precisely. Of course a new service supply, either by the housing organisation or by an external service provider, creates new jobs or at least secures existing jobs. However, this criterion is aiming at new concepts that help revitalise the job market. There has been an increase in socio-economic businesses that are run economically but also help long-time unemployed people to reintegrate into the workforce. These businesses are often in the service areas Care & Supervision and Repairs. More recently, there have also been co-operations between these kind of businesses and housing organisations that require workers to care for their buildings, for example in the Austrian and Finish project "Equal". This seems to be a positive European trend, as nearly all other countries report similar initiatives as employment is - apart from Germany and Portugal - one of the two highest scoring indicators. Even if in some countries only few good practice examples were detected, these services scored significantly positive.

There is some correlation between the indicators "Employment" and "Profitability for the region". This is because while Homeservices often create jobs or help maintain existing ones, they frequently also contribute positively to the economy of the community or region. Only if this effect was significant, double scoring was applied.

The most promising services to create new jobs are offered by external service providers in the areas Care & Supervision, Repairs, and Mobility & Delivery combined with activities by labour market initiatives to reduce unemployment. Examples are concierge or building care taker concepts, delivery services or special repair services.

3.4.2 Effect on financial situation of the residents

One important finding of this study was that the assumption that residents can save money through Homeservices, is only realised in a few cases. These are restricted to Counselling, for example debt counselling, information on utility costs, etc. Fact is that Homeservices are linked to costs for the resident and this is the reason why for example in Vienna, public housing organisations hardly supply them, as their residents cannot afford to pay for them (Payr, 2003), unless provided in cooperation with employment agencies.

It turned out that within the participating countries there are significant differences. In Austria there are hardly any services that do not cost anything besides some socially organised self-help services, which are nonetheless also usually linked to costs. In Germany a lot of Homeservices are provided by housing organisation to their residents for free as a special offer to improve the clients' relationship. Behind those are two ways of service provision with different economic targets, which depend on the housing organisations business policy.

For several social services, especially in the medical area, there are income dependant prices for the residents. These services are most often provided by non-profit organisations that are supported by public organisations or the public health care system. As soon as the service is provided by a commercial provider, the resident has to pay the service in full. This effect results from the fact that the service is usually the core activity and can only be charged in this way.

Throughout Finland, Germany, the Netherlands and Austria a substantial, though indirect effect on the residents finance has been found. Information on how to reduce resource consumption (like is

provided by the Umweltberatung in Austria) helps residents to save money. Although these counselling services are offered in different ways in participating countries, the long term effect on helping to save money is the same.

3.4.3 Effect on regional products and services

For a positive effect on regional products and services, there needs to be a regional provider. This regional provider is supposed to be an external service provider supplying directly to the resident or working together with a housing organisation. Housing organisations themselves normally act on a broader level, which means they do not only supply housing in one or two municipalities but most often within one or two federal states. So they mainly affect the regional situation during the construction of a building in employing regional craftsmen and other companies and later on by outsourcing services and maintenance work. It must be noted, however, that there are severe differences in structure and market of housing organisations in Europe.

From the view of the external service providers, there are very similar results. Most of the external service providers are small- or medium-sized companies and therefore act only regionally and not throughout the whole country. Particularly services related to food and eating such as delivery of environmentally friendly products in Austria and Spain or the cook on demand in the Netherlands score positive for this indicator. The services in Counselling & Information have positive indirect effects through raising awareness about the regional products and services.

However, in comparison to the other indicators it turned out, that this is the lowest scoring in three countries, having only some effect or even no significant impact.

3.4.4 Effect on profitability of the company

When reflecting on sustainable development one focuses on long term strategies which often are contradictory to the short term profitability of an organisation. Therefore it is surprising to see that when summarising the scoring in all economic indicators, it turned out that this is the one with the highest sum and also average scoring. We can thus state that providing Sustainable Homeservices is directly or indirectly profitable for the supplier.

The effect on profitability of the company of course depends on the service provider. As soon as the service is provided by a commercial organisation, whether housing organisation or external service provider, it has to cover costs. Housing organisations do not believe that there are high profits in providing services. However, housing organisations are more regularly implementing long-term service projects, and giving it some time to become successful. This business practice is important, since the Homeservice concept is new and slowly must be integrated into European life style. Also, housing organisations have indicated that not the single service itself, but the availability of a service package and the indirect positive effects on reducing vacancies and vandalism etc., have a positive effect on the total profit of the organisation. In other words, not the single service, but the service orientation as such creates a profit.

In the case of public or non- profit providers there is the possibility and often also the necessity to subsidise either the service or the customer. For example, if employees are hired with the attempt to decrease unemployment, then the Austrian employment assumes up a part of the labour or indirect labour costs. Several service providers also have reduced fees for needy customers.

3.4.5 Effect on profitability of the economy / region / community

This indicator scores nearly as high as employment. We can thus state that Sustainable Homeservices have a positive effect on society. All educational services, as well as the social and care services are beneficial to the society. Herein are included all counselling activities on environmental issues and also care for the elderly or children like day moms or child-sitting. Good practice examples can be generated from all participating countries.

Homeservices that allow the employment of disadvantaged or long-time unemployed people also have positive ratings. This highlights the importance of Homeservices for the economy. As well a Homeservice provision contributes to an improved customers' relationship and also influences the neighbourhood climate in the urban district.

There is some correlation between the indicators “Employment” and “Profitability for the region”. This is because while Homeservices often create jobs or help maintain existing ones, they frequently also contribute positively to the economy of the community or region. Only if this effect was significant, double scoring was applied.

3.4.6 Summary of economic effect

The highest scoring economic indicators are profitability of the company followed by employment and effect on society (economy, region, community), which score nearly the same. These three indicators are closely linked. A profitable service provider secures and creates jobs, as well as contributes to the macroeconomic level. The survey showed that it is not necessarily the single service that is profitable, but the effect of the availability of a service package which increases the profit of the housing organisation as residents are willing to pay a higher price and the services reduce problems like vacancies and vandalism. Also for external service providers, services often complement their product range and are thus seen as a package with improved customer orientation.

Homeservices can maintain existing workplaces as well as create new jobs. However, particularly for the latter, subsidies from the national employment agencies are often necessary. These job market stimulating initiatives can be a good way to motivating co-operations between housing organisations and external service providers, particularly private non-profit organisations.

Service supply raises the value and the attractiveness of the building and can be a good marketing argument. In case the number of dwellings is big enough, the extra costs for technical surveillance or for certain construction measures are not relevant anymore. Indirectly, Homeservices contribute to the companies’ profile by increasing customers’ satisfaction. A whole bundle of services allows a higher rent or purchase price.

For the scores of the economic effects there are no significant patterns when relating to the service area. They rather depend on the organisation providing the service, if it is a housing organisation, external service provider, non-profit, or commercial. This is different from the social and environmental effects.

In the sustainability profiles it turned out that educative, as well as social and care services not only score high in the social and environmental dimension, but they also have a significant macroeconomic benefit. Homeservices can help to avoid that parts of districts develop into urban ghettos or problematic areas. So they include a high optimising potential. As they can contribute to the improvement of the living situation and climate in a city or town, it should be aimed at promoting them also by public policy measures.

3.5 Conclusion of sustainability effects

There are no absolute criteria for measuring the sustainability of services directed to households. There is some previous literature on criteria for the eco-efficiency of services, i.e., on environmental sustainability. However, as regards social and economic sustainability, we are so far left with only macro-level indicators to draw on. Consequently, we put forth a set of sustainability indicators that can be evaluated along an ordinal scale, where the point of reference is the status quo, i.e., the current situation without the existence of the service. In this fashion it is possible, at least at a crude level, to assess whether a service improves sustainability compared to the “no-service” alternative. In other words, we proposed indicators and relative criteria for assessing Homeservice sustainability. Future research may develop absolute and more sophisticated indicators, but we argue that for the time being even a simple and relative fashion of evaluating ser vice sustainability offers an opportunity for taking the research in the field a bit further.

Next are the results of the sustainability effect analysis based on the evaluated Homeservices. In table 3.8. all the indicators are drawn together.

With regard to the environmental dimension, it appears that the analysed Homeservices had the most positive effect on emissions, followed by energy and waste use. Contrary to the assumption that service would reduce material consumption, our results did not imply major decrease in material use. In fact, some services analysed in the Netherlands had a negative impact on material use, i.e. they

increased the amount of material in the economy, compared to the situation where the services would not be used. This was for due to multiple services that require additional material use to be provided. For instance, services which aim at saving energy or improve security (e.g. home automation), result usually in installation of additional equipment or insulation. Another example is the bonus points system of one of Dutch housing organisations that scores well on the social and economic indicators but that allows to get discounts of products at shops, thereby encouraging them to consume more. These results do not support the common assumption that increased use of services would reduce the amount of material in the economy. Rather, it leads toward the notion that Homeservices should be specifically designed with the environmental aims in mind in order to reduce the material consumption of households (see chapter 7.2.3.).

Next it was interesting to find which services seemed to have the most noteworthy impact on the environmental dimension. The service area Counselling & Information outweighed all the other areas, which is presumably due to the fact that many novel good practice environmentally oriented Homeservices are based on the Counselling & Information – type of concepts. Supply & Disposal was the second-most important service area. This is quite natural because services aiming at the reduction in energy and water usage and improved waste management are quite common and in many cases mandatory in many European countries. One of the most interesting examples was bicycle repair in the premises. However, in total there were only a few repair services and therefore this set of services had a low effect on environmental sustainability. As repairs could have a considerable impact on durability of goods, e.g. technical household appliances, furniture, etc. we found that the good service concepts in this area are still to be found. For the time being they do not appear interesting for the providers.

Comfort together with Information and Awareness were the two main social sustainability effects resulting from the services. As to the economic effects, profitability of the provider, employment, and profitability of the economy/region/community were almost equally important sustainability indicators. Service areas that contributed the most to both social and economic sustainability were Counselling & Information, Care & Supervision, and Leisure Time Activities. Repairs as well as Safety & Security services had little impact on these sustainability dimensions.

	Material use	Energy use	Water use	Waste	Emissions	Space use	Equity	Health	Safety and security	Comfort	Social contacts	Empowerment	Information and awareness	Employment	Financial situation of the residents	Regional products and services	Profitability of the company	Profitability of the economy/region/community	Average environment	Average social	Average economic	Average all dimensions
Austria	0,63	0,97	0,21	0,79	1	0,68	1,32	1,11	0,48	1,51	0,89	0,38	0,56	1,15	0,93	0,6	0,95	1,22	0,71	0,89	0,97	0,855
Germany	0,64	0,66	0,39	0,68	0,64	0,53	0,96	1,16	0,36	1,29	1,34	1,16	1,49	0,84	0,27	0,81	1,2	1,28	0,59	1,11	0,88	0,872
Netherlands	-0,17	0,63	0,10	0,14	0,49	-0,02	0,28	0,49	0,40	0,81	0,14	0,14	0,66	0,43	0,43	0,19	0,38	0,35	0,19	0,42	0,36	0,326
Spain	1,50	1,00	0,50	1,00	1,00	0,67	0,83	1,00	0,67	1,83	0,50	0,00	1,33	1,33	0,67	0,67	1,50	1,50	0,94	0,88	1,13	0,972
Finland	0,31	0,33	0,28	0,56	0,44	0,00	0,9	0,49	0,62	1	0,41	0,72	1,18	1,1	0,67	0,49	0,97	0,05	0,32	0,76	0,66	0,584
Portugal	0,43	0,14	0,14	0,57	0,71	1,29	0,57	0,71	0,14	0,86	0,57	0,29	1,43	0,29	0,29	0,00	0,86	0,71	0,55	0,65	0,43	0,556
Average	0,56	0,62	0,27	0,62	0,71	0,52	0,81	0,83	0,44	1,22	0,64	0,45	1,11	0,86	0,54	0,46	0,98	0,85				

two highest scoring indicators within sustainability area
third and fourth highest scoring indicators within sustainability area
some effect (rest of the indicators scoring positive values)
no significant impact or negative impact

Figure 3. 8 Scaled sustainability indicator scores per country

As figure 3.9 indicates, in total the analysed services contributed most to social sustainability. What does this finding indicate? Firstly it implies that services offered to homes and relating to living at home improve the quality of life of the residents in general. Secondly this result warrants a special emphasis, because many of the selected services were originally environmentally oriented rather than designed with quality of life benefits in mind. As even in this case the social effects overweigh the environmental ones, an inference can be made that in order to survive in the market place, i.e. be used by consumers, the social aspect of sustainability should be paid taken into careful consideration in the design phase. This means first and foremost paying attention to the quality of life effects that the service has for the consumers' daily lives.

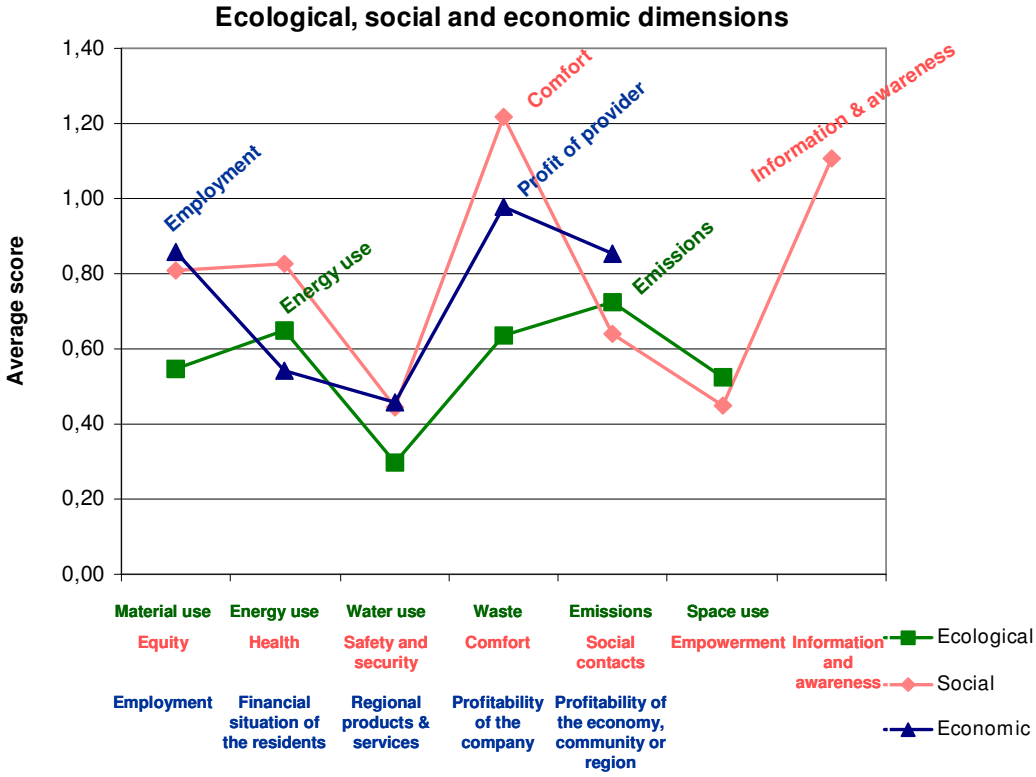


Figure 3. 9 Relation of environmental, social and economic sustainability indicators, scaled average of the indicators.

The indicators that score the highest are emissions, energy use and waste for environmental sustainability, comfort and information and awareness for social sustainability, and finally employment and profitability of the provider for economic dimension. Please note that there are different numbers of indicators in each category and hence the lines are not as long.

Some words of caution are called for when interpreting the above results. When applied in service development or assessment, the results of these indicators are not always unambiguous. If they are applied in practice for Homeservice development, it is important to pay attention to the functional linkages between the indicators. Developing a service with regard to one dimension may lead to adverse effects in another (Gatersleben 2001). For instance, a swimming pool in the building may increase the comfort and health of residents, but it is likely to increase energy and water use compared for instance to a common swimming pool which can be used by multiple people.

Furthermore, when assessing the sustainability effects of a service, they may occur at different levels: micro-level (household, apartment building) or more macro-level (region, country) or something in between (neighbourhood). Most of the time, however, the sustainability effects of an individual Homeservice remain at the household or apartment building level. Occasionally they reach neighbourhood level outcomes, and perhaps sometimes the effects might occur at regional level, e.g. strengthening of the regional economy via increased use of the services of locally-owned companies.

The key point is, however, to pay attention to the fact that despite the potential positive micro-level effects, negative impacts may result in the larger system, and vice versa (Dovers 1995, cf. also Wolf and Allen 1995).

4 The Housing Situation and its Relation to the Provision of Homeservices

Sustainable Homeservices are not provided in a vacuum – multiple factors set the frame for the provision of such services and shape the conditions of their supply. Housing situation is one of those factors. In this chapter we examine the housing situation in the six countries of the sample. By housing situation we refer to issues such as structure of dwelling ownership, costs of living and housing with regard to the income level and socio-cultural features of the cities and towns. We also look at the potential differences between small towns and cities with regard to Homeservice provision.

The supply of services to households, as well as the demand for the provision of such services, is determined by a combination of factors, which have been analysed separately for each country, each national housing market and the different service areas. The main conclusion that can be drawn from the country reports is that, although there are few common features in the housing markets, which have been studied in the context of this research project, it is possible to distinguish some characteristics of the housing situation, which may eventually influence the provision of services in each locality.

Figure 4.1 lists some of the factors that determine the situation in the housing market directly or indirectly, such as the demographic pressure or population growth in Kleinmachnow, Zarautz and Torres Vedras, population density (% of multi-dwelling buildings) or the property structure (also referred to as tenure status). The importance of these factors for the provision of services to households in discussed in the following subchapters.

	Population *(2001)*	Population growth in %	Property structure *(2000)*		Building structure*(2000)*		Rate of vacancy in %
			% of owner-occupied dwelllings	% of rented dwelllings	% of multi dwelling buildings	% of buildings with 1 or 2 dwellings	
Vienna	1,550,123	+ 0,7	17.3	79.2	94	6	6
Litschau	2,524	- 15.8	90	10	10	90	NA
Berlin	3,388,434	-2.1	23	77	87.7	9.3	8.5
Kleinmachnow	17,309	+ 47	>60	<40	31	69	
Amsterdam	735,328	+ 3.1	12.7	87.3	85	15	Almost 0
Heemstede	26,000	- 2.63	63.0	37.0	22	78	Almost 0
Bilbao	349,972	- 6	86.9	9.7	98	2	8.2
Zarautz	21,078	+16	87.5	7.5	95.7	4.3	0.2
Helsinki	559,718	+ 11.0	49,2	47,3			6.0
Kouvola	31,425	- 1.2	61.2	35.3			1.4
Lisboa	564557	- 14.7	48	52	45.7	54.7	13.9
Torres Vedras	16461	+ 14.5	69	31	64.9	35.1	12.7

Figure 4. 1 Some Determinants of the Housing Situation in Cities and Towns

Source: Country Reports

The research carried out in the context of the Homeservices project shows that the tenure status[15], and the characteristics of the housing stock, including vacancy rates, play an important role for the supply of services, but that market arrangements, such as the influence of social housing organisations or the size of housing companies in general, are also very decisive. On the demand side, we perceive that the cost of housing may, for the one hand, limit the households' purchasing power, but also create demand for services, which reduce the overall costs of living for the resident, for example innovative energy services in countries, where utility costs are a major item in the households' monthly expenses.

Social tendencies in the cities and towns, such as cultural diversification, ageing, or the degradation of certain urban neighbourhoods also exercise an important influence on the demand for services and

[15] The relationship between rented and owned dwellings

self-help. Due to the absence of large housing organisations in Portugal and Spain, social services are mainly provided by the public administration or non-profit organizations in these countries, while in the North, a growing number of housing organizations have started to get engaged in the provision of social services to their tenants or the owners of the dwellings. Mobility, in turn, is rarely considered to be an important area of action for housing companies, although they may collaborate in promoting more sustainable mobility patterns by facilitating infrastructure such as parking spaces or delivery zones. External suppliers, either public or private, will most probably cover the existing demand in this service field.

4.1 The housing situation and its influence on service provision

4.1.1 Rent and owner-dominated markets

The percentage of dwellings available for rent varies from a scarce 10% of the total housing stock in Spain to almost 90% in the capital of the Netherlands, Amsterdam. The tenure status determines to a large degree the way the housing market is organized: in Finland, Spain and Portugal, with a high share of owner-occupied flats, condominium associations play a major role in the management of the buildings, while in the rent-dominated markets in Vienna, Amsterdam and Berlin, the most influential players are larger-sized profit or non-profit housing organisations. The size of the company, as well as their mission, can predispose them towards the provision of a number of services to their clients, as can be seen from examples in Vienna and Berlin, where some social housing organisations take on the provision of services, which are mainly provided by public institutions in Southern Europe and in Finland. Apart from balancing prices in the housing market, social housing organisations play a key role in the provision of many social Homeservices, as explained in the corresponding chapter below.

Large housing companies are predominant players in the Netherlands, Germany and Austria, while Finland, with a rather balanced mix of ownership and rent even within each apartment building, takes up an intermediate position. In Spain and Portugal, the construction / promotion of private dwellings is largely separated from the management of the buildings, which is either realized by the residents themselves or entrusted to a professional housing manager or condominium management company. Also in Finland the condominium associations have mainly outsourced the housing management to specialised companies and the daily maintenance to maintenance companies.

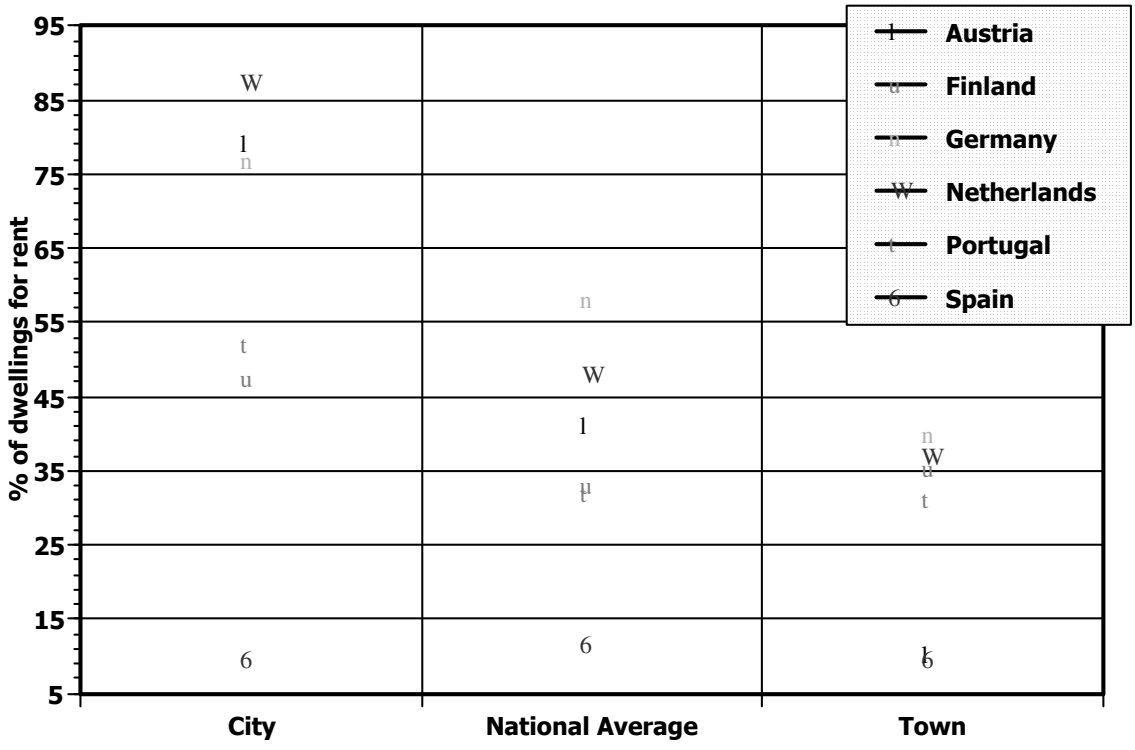


Figure 4. 2 Percentage of Dwellings for Rent in the Cities, Countries, and Towns

The tenure status in the local housing markets also influences the equipment of the buildings: common spaces tend to be more limited in privately owned apartment buildings. Yet, this is not sufficient enough argument on its own, because the age of the dwelling stock also effects on the differences in space use. In addition the research carried out in Germany has identified a correlation between the type of housing organisation and the common spaces offered to residents, showing that housing cooperatives tend to pay more attention to these facilities.

Density of population and multi-dwelling buildings

A second characteristic of the housing stock, which influences service supply and demand, is the percentage of multi-dwelling buildings, which is considerably higher in the cities than in the towns, with the exception of the two Basque locations.

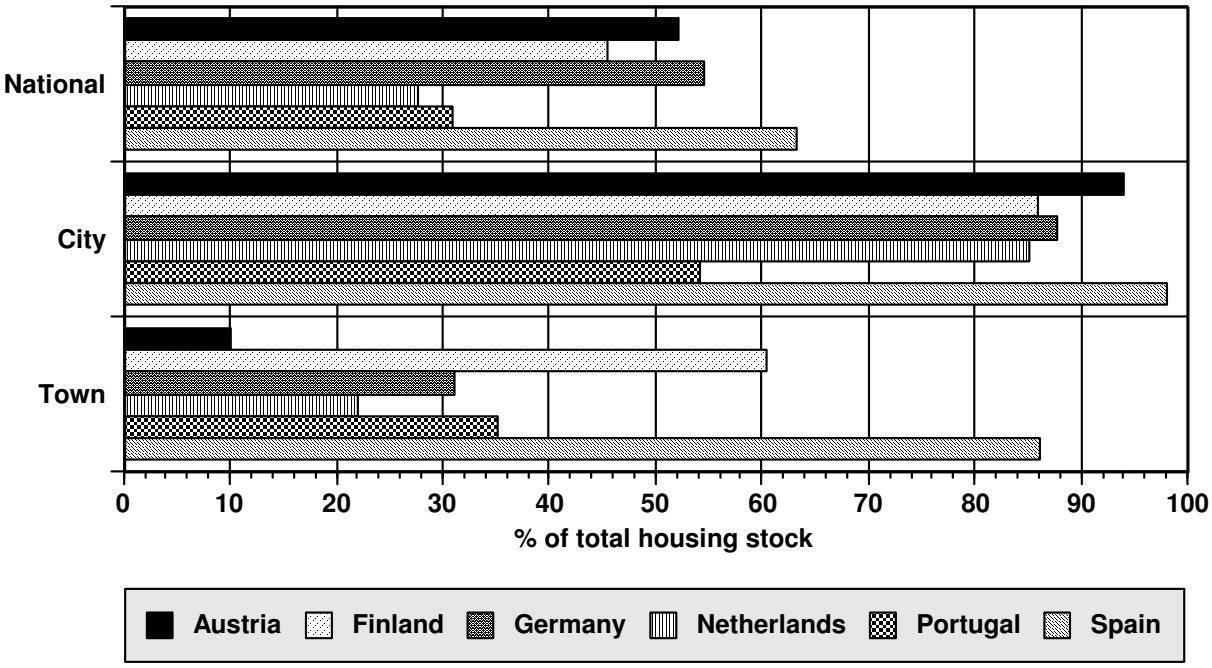


Figure 4. 3 Percentage of multi-dwelling buildings in the countries, cities and towns

The apartment building, as opposed to semi-detached or single-family houses, offers the possibility of directing a service towards a larger group of clients and of using common facilities for certain resources, such as heating, etc. The number of dwellings in apartment buildings is closely related to population density – a third factor that is influencing the supply and demand of services. The effect can be contradictory. On one hand, we find a greater number of suppliers and a greater opportunity for niche markets in the cities, but, on the other, we also find a certain undersupply of services in newer neighbourhoods in the outskirts. Both tendencies are closely related to urban planning and existing infrastructure, especially as related to transport, which will be discussed below.

Vacancy rates

One fundamental variable for the provision of services by housing organisation is the level of saturation of the market or certain market segments. This pressure is partly represented by the level of vacancies: the higher the vacancy rate, the greater the service mentality of housing providers, which try to retain residents or attract new residents. In turn, markets that are characterized by an undersupply of housing provide little incentives for diversifying the business portfolio.

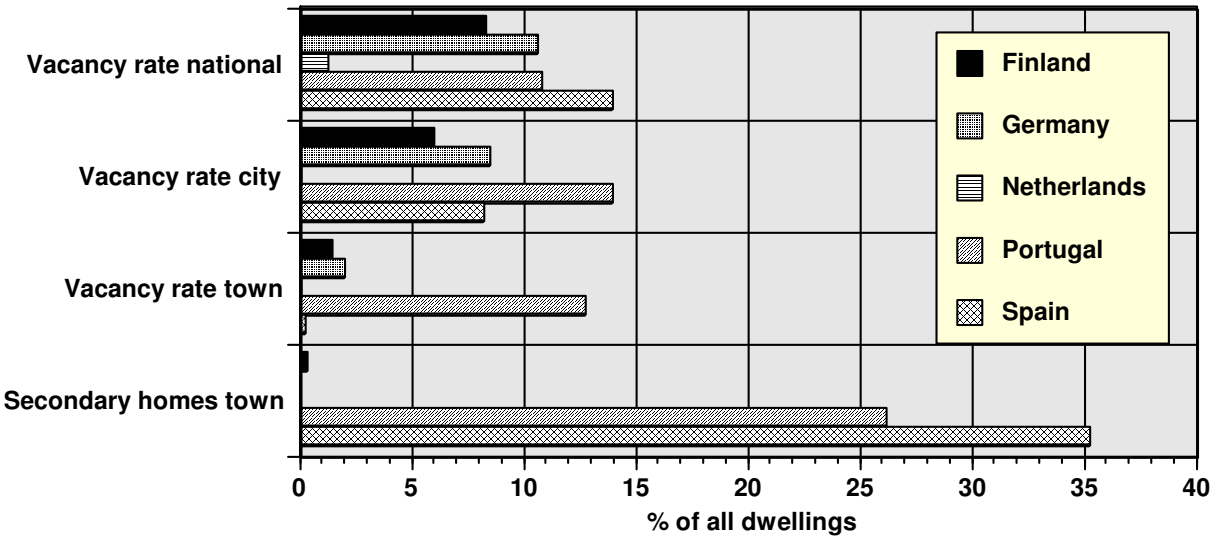


Figure 4. 4 Vacancy rates and percentages of second homes for countries, cities and towns

As shown in the graph above, vacancy rates tend to be higher in the cities than in the towns, although some observations regarding national particularities must be included here: in the case of Spain and Portugal, vacancy rates do not necessarily represent the number of dwellings, which are available for rent and purchase, since a large part of the housing stock is dedicated to second residences or retained for speculation. In turn, the research on the housing situation in Berlin has shown that the surplus of dwellings in the city is one of the drivers for increased service mentality in housing organisations. The situation in Amsterdam and Helsinki is marked by a surplus of larger dwellings, but a scarcity of smaller (and less expensive) ones.

4.1.2 The cost of housing and its influence on service provision

Cost of housing and service provision is another fundamental question that has to be addressed, since it determines to a large extent the residents willingness and possibilities of purchasing this type of services. The major difference between the Southern and three Northern housing markets covered in this research project is related to the regulating function that social rental housing plays in Amsterdam, Berlin and Vienna – a function, that is virtually non-existing in Torres Vedras, Portugal and in both Spanish cities. Naturally, the cost of housing has a heavy influence on the households' purchasing power and the extent to which they can make use of the services that are not provided for free. This negative effect can most clearly be seen in the Spanish market. On the other hand, financial pressures on households or an increasing percentage of families, who have difficulties making ends meet, may induce housing organisations to offer financial counselling services in order to guarantee that the rents are paid, as seen in the Netherlands. Financial strains on households may also favour intermediaries, which bundle certain types of services, in order to offer it to the residents at a lower cost. Examples for this kind of response have been found in Finland (ADC, Art & Design City), among the Spanish housing managers and in the Netherlands (Info Caravan).

The comparison of rents and prices for the purchase of dwellings between countries is a difficult task, since the actual cost for the proprietary or resident depends on a long list of variables, such as medium income, subsidies, tax refunds, and mortgage rates (in the case of owner-occupied dwellings), while rent markets are influenced by regulatory elements, such as frozen or historic rents in Portugal, Spain and Austria. The data obtained for the cities, which participate in this research project, indicates that buying a flat is most expensive in Amsterdam (3,140 Euro per square meter), although some dwellings in Lisbon may sell for as much as 3,300 Euro / m^2. Prices in Helsinki, Bilbao and Vienna oscillate between 2,000 and 2,500 Euro per square meter, with the particularity that, in Bilbao, used dwellings achieve currently a higher price than new ones. Prices in Berlin vary from 1,300 to 2,600 Euro and it is possible to purchase a dwelling at a lower price in the capital than in the neighbouring town of Kleinmachnow. It is experiencing a high growth rate, just as the Basque town of Zarautz. For towns, which are not the destination of strong migration tendencies, prices of dwellings

tend to be considerably lower than in the capital cities and stay generally below 1,100 Euro per square meter.

Mortgage debt can turn into a major strain for family income in owner-dominated housing markets and may affect family assets in the long run. The European Central Bank facilitates the corresponding data: "Over the past two decades, most EU countries have experienced significant changes in the household mortgage debt-to-GDP ratio (or, equivalently, the mortgage debt-to disposable income ratio). …. In the Netherlands and Portugal, the debt-to-GDP ratio rose by about 35 percentage points in less than seven years. Germany and Spain also experienced a rapid accumulation of debt in the 1990s." (ECB 2003).

	1990	**1996**	**2001**
Austria	**4.4**	**5.1**	**4**
Finland	**31.7**	**31.1**	**29**
Germany	**42.5**	**48.5**	**54**
Netherlands	**40.2**	**54.2**	**66**
Portugal	**11.2**	**22.2**	**47**
Spain	**14.2**	**18.5**	**32**

Figure 4. 5 Outstanding residential mortgage debt as percentage of GDP

Source: CIEREC

Yet, as indicated above, sale prices alone do not explain the influence that housing costs may have on the purchase power of families. It must also be taken into account if rented dwellings are available at reasonable cost for those families, who do not want to buy an own apartment or who cannot afford to do so. In its recent analysis of the European housing market, the European Central Bank (2003) concludes that in most European countries, part of the rental market is still heavily regulated, but that the general tendency towards liberalizing new contracts is placing a heavy burden on "mobile" residents (as opposed to "sitting" residents), thus limiting labour mobility. There is no common European definition of "social housing", and due to the great variety in the numbers of dwellings available for renting, statistics have to be interpreted carefully. Still, the following table reflects some particularities of the national housing markets, which have also been confirmed by the research carried out on local level in the context of the Homeservices project, such as the steep increase of rents in the Spanish market (measured by one single indicator for social and private rent) or the moderate increase of rents in Berlin, due to the control of both private and social rent contracts.

	1990	**1995**	**1999**	**2000**	**2001**
Austria[4]	117	151	168	na	-
Finland	126	175	202	206	214
Germany[2.3]	113	143	na	na	na
Netherlands[6]	119	156	180	185	190
Portugal	na	na	na	na	na
Spain[4.5]	143	205	254	263	274

1 Estimate
2 Excluding Ex-DDR
3 Definition based on National Accounts. Net rent plus service charges, but excluding heating costs
4 The same index applies to social (semi-public, non-profit in the case of S) and private rental dwellings
5 Derived from consumer price index (housing for rent)
6 NL: excluding costs of heating and other service charges; S: including fuel and electricity
7 Based on local authority rents and housing association rents for England only

Figure 4. 6 Rent Index of Social Rental Dwellings (1985 = 100)

Source: CIEREC

Costs for rented apartments have also increased considerably in Finland, probably due to the fact that rent regulation for free-market dwellings was abolished in 1995. The strange effects of the change of priorities in national housing policy, which have led to the dual configuration of some rental markets, can be best observed in Portugal: the average figure for rents in Lisbon is 113 Euro per month, whereas in Torres Vedras it is 145 Euro. The surprisingly low figure in the capital is due to the fact that in Lisbon there are a significant number of dwellings rented by the Municipality at reduced cost, targeted to the low-income population – in Torres Vedras such social housing does not exist. In addition, legal constraints have led to the situation where old residents still have extremely low rents. These two factors explain why in Lisbon 55% (or 59,639) of the rented dwellings cost less then 60 Euro per month, whereas in Torres Vedras this figure is 44% (1,367 dwellings). But on the other hand, when considering the free market, the higher rents are observed in the capital: nearly 990 Euro per month in Lisbon, in average, against 390 Euro in Torres Vedras

This dual situation is nevertheless disappearing in most countries, due to liberalization policies, so that future generations –and especially the elderly – will most likely have to cope with highly increased rents.

	1990	1995	1999	2000	2001
Austria[6.7]	117	151	168	na	-
Finland	142	197	240	251	261
Germany[3.4]	112	141	na	na	na
Netherlands[7]	118	156	178	183	188
Portugal[4.8]	226	395	451	468	486
Spain[5.6]	143	205	254	263	276

1 Private rents used in the retail price index
2 Estimate
3 Excluding Ex-DDR
4 D: multi-family dwellings; P: controlled private rental dwellings
5 Derived from consumer price index (housing for rent) see table 4.3
6 Same index as table 4.3
7 F, NL: excluding costs of heating and other service charges; S: including fuel and electricity
8 Mainland, including actual rents paid by residents and regular maintenance and repair of dwelling

Figure 4. 7 Rent Index of Private Rental Dwellings (1985 = 100)

Source: CIEREC

Secondly, housing prices must be related to the overall income level, in order to estimate its importance for the family budget. The comparison of the latter figure confirms the regulatory function that social rent plays in Vienna, where housing and utility costs represent less than 18% of household expenditure, similar to the Portuguese national average. Costs of housing are even lower in the town of Kouvola, Finland, but slightly higher in Helsinki (20%). Berlin is the next expensive place to live in, followed by Amsterdam (although in this case, only an average national value of 23.7% is available). Households in Bilbao have to dedicate almost 25% of their income to housing, a figure, which is quite eloquent, as utility costs, which are included in these calculations, tend to be considerably lower in the Southern countries.

The European statistics, which best capture the importance of housing costs, are presented below. They reveal that the percentage of households for which housing costs represent a burden or even a heavy financial burden does not reach 25% in the Netherlands, but is close to 75% in Portugal and Spain. About 60% of all households in Austria and Germany also consider housing a financial burden, while the problem is less severe in Finland, where approx. 55% of all households do not suffer financial burdens due to housing costs.

	1994	1997	2001
Households with heavy financial burden due to the housing costs (%)			
EU (15 countries)	20.1	19.3	17.4
Austria	:	11.8	10.2
Finland	:	15.8	11.3
Germany	14.2	15.1	14.2
Netherlands	4.9	5	3.1
Portugal	25.9	25.6	23.3
Spain	37.9	31.5	26.2
Households with financial burden due to the housing costs (%)			
EU (15 countries)	33.9	35.1	35.8
Austria	:	46.9	49.2
Finland	:	35.1	33
Germany	43.3	44.7	44.7
Netherlands	26.5	24.2	20.7
Portugal	45.4	46.1	51.5
Spain	48.5	53.4	57.4
Households without financial burden due to the housing costs (%)			
EU (15 countries)	45.9	45.6	46.8
Austria	:	41.4	40.7
Finland	:	49.2	55.7
Germany	42.5	40.2	41
Netherlands	68.6	70.9	76.2
Portugal	28.8	28.3	25.2
Spain	13.6	15.1	16.5

(:) Not available
Source: Eurostat (http://europa.eu.int/comm/eurostat/newcronos/)

Figure 4. 8 Households with and without Financial Burden due to Housing Costs

4.2 Factors that influence demand in certain service areas

Economics are of course a crucial element for service demand and provision, but available data on household expenses in Europe cannot be obtained for all service areas. A second problem is the comparability of available data and the lack of local level statistics on household expenses, so that the figures contained in the following table only indicate certain national trends.

	Rent of residents	Imputed rent of owner occupiers	Repairs and maintenance	Water charges	Fuel and power	Total
Austria[1]	4.5	11.2	1.2	0.0	3.6	20.5
Finland[1]	5.5	14.3	0	1.1	3.7	24.5
Germany	na	na	na	na	na	na
Netherlands[3]	8.1	12.2	1.6	0.8	4.0	26.8
Portugal	1.6	13.0	2.1	0.8	3.6	21.2
Spain[1]	1.6	17.9	2.2	2.1	3.0	26.8

1 B, A, SF: 1999; E, F: 1998; IRL: 1994; L: 1992; UK: 1995
2 Combined: imputed rent of owner occupiers, repairs and maintenance, water charges, fuel and power
3 Weighing factors as they are used for the calculation of the consumer price index (1995 = 100)
4 Water charges included in other items
Sewerage and water

Figure 4. 9 Average Housing Expenditure (% of Total Household Expenditure), 2000

Source: Housing Statistics in the European Union 2001. C.P. Dol; M.E.A. Haffner, OTB Research Institute for Housing, Urban and Mobility Study, Delft University of Technology, 2001.

Energy costs, including water, fuel and electricity, represent between 3 and 6% of total household expenditure, and are of course lowest in the Southern countries with their more moderate climate. Still, climate conditions vary within the regions and so do equipment levels of households, especially those related to heating.

The statistical data on the service field of repair indicates that expenses on repairs and maintenance represent between 1.2% and 2.2% of household expenses in the different countries. The figures may highlight some of the national particularities, which have been detected during the project such as the Finnish preference for "do-it-yourself". Expenses are relatively higher in the Southern countries, which might be also related to the average age of the housing stock.

4.2.1 Resource consumption

The analysis of resource consumption in households has centred on energy use, waste, and water consumption. From the point of view of the provision of services, it could be assumed that consumption figures may be closely related to the variety and number of services offered by utilities or energy service companies in the form of demand-side management techniques, if the savings potential can be exploited in a win-win situation both for companies and clients. The following table indicates the importance of utility costs for households in the six sample countries of this project. The expenditure consisting of electricity, gas and other fuels consumption are highest in Austria, the Netherlands and Germany, representing a little less than 4% total household expenditure. In Austria and the Netherlands they form around 20 % of the expenditure, whereas in Portugal and Spain these are only 10 % and 14 % of the household spending.

	2000	2001	2002
EU (15 countries)	:	21,04 (s)	:
Austria	19,06	19,52	19,13
Finland	25,24	25,30	25,53
Germany	24,20	24,60	24,87
Netherlands	20,65	20,76	20,71
Portugal	10,47	10,50	:
Spain	14,19	14,20	14,39

: not available
(s) = Eurostat estimate
Source:Eurostat (http://europa.eu.int/comm/eurostat/newcronos/)

Figure 4.10 Housing, water, electricity, gas and other fuels consumption as % of total household expenditure

On the other hand, the relative share of electricity, gas and other fuels consumption of household consumption is the smallest in Finland, Spain and Portugal, in the respective order [17].

These figures seem to correlate well with the greater popularity of Homeservices directed toward energy and water savings in the countries where their share of household expenditures is high. Nevertheless, in Finland, where utility costs represent a smaller share of household expenditure, there are also some services directed toward energy and water savings by housing organizations (directly or as intermediaries). One reason for this might be that comfort of every day living and health related issues such as quality of the indoor climate are an essential part of these services. Both Finland and the Netherlands have presented several good practice examples for energy counselling or tariff rebates, such as the reduced tariffs from the housing organisation VVO, the "energy expert" programme for residents organized by Motiva Oy (Centre for Energy Efficiency) in Finland, or the project "Amsterdam Reduces CO2 (ARC)", which helps debtors to reduce their energy costs by establishing so-called coaching groups for residents. These kinds of services are less developed in

[17] In Spain and Portugal the relatively low electricity and fuels consumption in housing sector could be explained by climate conditions, whereas in Finland the price of household electricity is considerably lower.

Spain and Portugal, where expenditures related to energy use are lower. Two of the energy related best-practice examples from these countries are linked to ecological construction and renovations, which increases the energy efficiency of the building stock.

	Utility costs (electricity, gas and other fuels) as % of housing expenditure	
	2001	2002
EU (15 countries)	3.40 (s)	
Austria	3.60	3.39
Finland	1.95	1.96
Germany	4.09	3.89
Netherlands	3.82	3.77
Portugal	2.59	:
Spain	2.15	:

(s) = Eurostat estimate
: Not available
Source: Eurostat (http://europa.eu.int/comm/eurostat/newcronos/)

Table 4.11 Cost of electricity, gas and other fuels as as % of total household expenditure.

Consumption of energy resources in households depends on several factors, such as climate conditions, equipment levels and access to energy services. Households account for approximately 30% of total energy consumption in the EU and, although the overall energy efficiency per household has improved over the last two decades, this has not led to more sustainable consumption levels, due to the growing number of households and the introduction of new, mainly electricity-consuming, appliances. Research carried out by the Spanish Energy Agency IDAE indicates that equipment levels of electrical appliances are now comparable in most European households and that improvements in the future will derive from the substitution of older appliances by energy-efficient ones. The EU Barometer on Energy (EUROPEAN COMMISSION 2002), as well as further analysis on the use of environmentally improved products by the European Environmental Agency (EEA 2001B) show that households in Europe are interested in obtaining information on saving energy and that they do purchase energy-efficient appliances, when they have been given information on these issues. These results are in line with the findings of the Homeservices project, which indicate that costs are not the only motivation for reducing energy consumption and that environmental considerations and access to information are also important factors that influence on household consumption behaviour.

Given the differences in heating demand and equipment, per capita electricity consumption is a more comparable indicator for energy consumption in households. The value oscillates between a little more than 1,000 kWh per inhabitant and year in Torres Vedras and close to 2,000 kWh in Finland. Savings potentials can theoretically be estimated by comparing local consumption level to overall consumption rates in comparable climate zones. Estimates for Germany indicate that with energy-efficient equipment, about 50% of present electricity consumption could be eliminated. Applying this value to the present consumption levels in the different cities, savings potential varies from about 500 kWh per inhabitant and year in Lisbon to almost 1,000 kWh/inhab/year in Helsinki. Yet, much more detailed analysis is necessary to estimate the potential, which can be realised economically in each given context.

Water consumption is less dependent on climate and more defined by the size of the household, but the supply situation varies greatly between the countries. So, water as a resource is not expensive in Finland because of the good water supply (amount and quality of ground and surface water reservoirs), while the Southern parts of Spain suffer periodical draughts (but this is not the case in the Basque cities, which have been analysed). Likewise, abundance of water supply and low prices

influence consumption levels in the Basque Country negatively, although a large part of the high water consumption per capita in Zarautz can be related to tourism (seasonal consumption, swimming pools and gardening).

Country	Water Consumption City (l/inhabitant/day)	Water Consumption Town (l/inhabitant/day)
Austria	130-150	140
Finland	170	207
Germany	124	114
Netherlands	150	160
Portugal	146	155
Spain	116	178

Figure 4.12 Water Consumption in Cities and Towns

German figures demonstrate that the efficiency of the water usage can be improved considerably by pricing: The average German household consumed 128 l water daily per person in year 2001, which is 6 litres less than in 1993 and the same as 25 years ago (Bundesverband Gas und Wasser 2003, Trinkwasser). However, there were big differences between the Old States (136 l) and the New States (93 l), in 2000. Consumption figures for Berlin indicated that these efficiency improvements could partly be induced through pricing: whereas in other European countries, water prices are subsidized (e.g. up to 70% in Italy) German households have to pay an extra charge, the so-called water withdrawal charge. This charge is extremely high in Berlin (17% of the total costs in comparison to e.g. a proportion of 0.7 % in Saxony).

Saving-oriented tariffs depend, nevertheless, on the individual measurement and billing of water consumption in each household, which is not yet the case in all buildings. Lump sum payment in older buildings can still be found in several cities (Helsinki, Vienna), as well as use of advanced, remote metering, which will eventually allow the residents to obtain clearer information on the different uses of water.

Measures to reduce resource consumption can be divided into technical improvements in the dwellings and changing daily practices of the households. Apart from environmental reasons, pricing the resources by the use is one the most effective means to reduce the consumption. Whereas some charges are fixed by the municipalities (for example chimney-sweeping, street cleaning, ground tax in Germany) or the housing organisation (house cleaning, gardening, house lighting, insurances, maintenance of elevators, administration) there are possibilities for pricing individual resources consumption by technical measures. New technical measures such as water meters in dwellings, chip-card for waste disposal give possibilities for pricing of each resource at household level and thus change the behaviour regarding water and electricity consumption or waste reduction.

The second central question acting upon resource consumption is the scope for action for different types of residents. Single home proprietors have the largest scope of action in reducing resource consumption, but often lack information on state or federal subsidies and therefore can have a certain demand for energy counselling services.

In owners' communities, residents have also an influence on decisions regarding costs through the condominium association. However, tenants can only save costs by a resource friendly behaviour, which can be supported by an individual pricing of consumption. The dilemma in housing markets with a high percentage of rented buildings is that investments, which are needed to improve efficiency of resource use, must be financed by the owner, while the residents benefit from reduced consumption costs, since utility costs are generally paid by the family, which is living in the dwelling. So there is little incentive to modernize rental dwellings, especially for private landlords in housing markets with a tight supply situation. The Finnish and Dutch examples show that service providers can actively intervene in this situation, by introducing the equipment necessary to control resource consumption.

The best solution for the owner-resident dilemma may be contracting agreements, which put the management of the energy system and the billing in the hand of one provider, so that the economic savings created through increased efficiency can be directed to financing the necessary technical modernization. Some pilot projects for this strategy can be found in the city of Vienna, but in general, the only real choice the residents have at the moment in most countries is that of subscribing to a green tariff - at extra cost. In order to further promote energy saving in households, it is nevertheless necessary to set the legal framework properly. This could be done for example by making subsidies for modernizing the dwellings available and that designing tariffs in such a way that consumers benefit when their consumption is lower compared to the average.

In the case of waste treatment, individual ecological behaviour depends largely on the possibility (or obligation) to separate waste, which can be recycled. This is nowadays a common practice in all analysed cities, except for plastic waste, which is still mixed with other household waste in some cities. Services such as collection, recycling, repairing and reuse of household appliances (R.U.S.Z.) in Austria or onsite composting (Maunula Help) in Finland might both increase the resource use efficiency and offer employment and business possibilities for small companies.

As a conclusion, the services that give not only practical information but also affordable solutions to heating and other energy practices to the households can have substantial effects on their energy consumption. These services can also create win-win situations for housing organisations and energy service providers alike by creating monetary savings for housing organisations and in rental markets more satisfied tenants. Service providers can find new business opportunities in changing markets. By combining experiences and different forms of service provisions, such as resident participation in Finland or outsourced energy performance advice from the Netherlands, new incentives to increase energy efficiency can be created. As the good practice examples show, also services increasing materials use efficiency such as recycling and re-use service are already feasible and operational in small scale and are worth to look and develop in more detail.

4.2.2 Moving to and from home: Mobility in the studied cities

In Mobility & Delivery, we find unsatisfied demand, mainly regarding public transport, and, consequently, a clear tendency towards using the private car daily, at least in the more rural areas, but also in some of the larger cities. Customer satisfaction with public transport is presently being analysed for some of the cities, which participate in the Homeservices project (http://www.hel.fi/HKL/english.html). Data from this project indicates that the percentage of satisfied customers was 84 % in Helsinki, at second place after Barcelona (87 %), city of Vienna was third (80 %), but the overall mobility indicators show that there is reason for the mostly public service providers to promote alternatives in form of car-sharing or improved public transport infrastructure, combined with mobility services.

Delivery services are mainly in the hand of commercial providers and some non-profit organisations, and the (limited) data available indicates that the demand for such services is generally increasing. Yet, the role of housing companies is mainly limited to providing parking space for cars and bicycles –a service that is mandatory in some countries- so that changes in this field will probably be promoted by a combination of public initiative and specialized private service suppliers.

All cities, except for Berlin, report serious problems related to traffic congestions, but mobility patterns vary considerably. Private car use is still dominant in Lisbon, Vienna, Helsinki, Berlin and Bilbao, although in the latter location, the extension of public transport services is beginning to show a positive influence on mobility behaviour inside the city. An important means for promoting the use of public transport is that of controlling parking areas inside the city either by price (Bilbao) or by time-limits or reserving parking space to the residents or by a combination of these initiatives (Vienna, Amsterdam).

Amsterdam is most clearly orienting mobility towards public transport and bicycles. A quarter of all the movements in this city take place by bicycle – the percentage even rises to 40% in the centre of Amsterdam. Mobility patterns in Amsterdam have been thoroughly analysed regarding their relationship with gender, age urban structuring and cultural preferences. In Amsterdam the number of cars per 1000 inhabitants is relatively low: 311. This is caused by a lower average income and the shortage of parking places, especially in the old centre of Amsterdam. The higher the income of the household, the more they use car. Men use the car more often than women and people above 30

years prefer to take the car more often than people under 30. Another significant difference is that between Dutch natives and immigrants. 46 % of the Dutch natives use the bicycle as means of transport against 20% of the immigrants. Partly you can explain this by looking at the distance between the home of the resident and the place of work. In the West and Southeast live relatively more immigrants. In going to their work they travel a larger distance, in which they prefer public transport.

Socio-cultural features in the studied cities and towns

When comparing social trends in Europe, we find that basically all countries share common socio-demographic features, such as an increasing number of single person households, made up in large part by elderly people. What differs between countries is the rhythm of change, since the Southern societies are generally lagging behind, but catching up quickly, as presented graphically below.

Social change is one of the driving forces for the provision of innovative services, but also for the way these services are being organized. this happens not only in the larger cities, but also in the smaller towns, as demonstrated by the Finnish example of Kouvola. Maintaining and enhancing the ability of people to live independently at home is the key priority in the future, therefore housing and housing services are at the focus in developing social services in Kouvola. Integrating social and health care services regionally and within the city under the same umbrella organisation is another priority.

The fact that an increasing number of persons live alone at home brings about the danger of social isolation, especially when combined with other factors, such as physical handicaps, lacking public transport infrastructure or recent social trends such as the substitution of social activities by ICT use, which can already be observed among the younger generation.

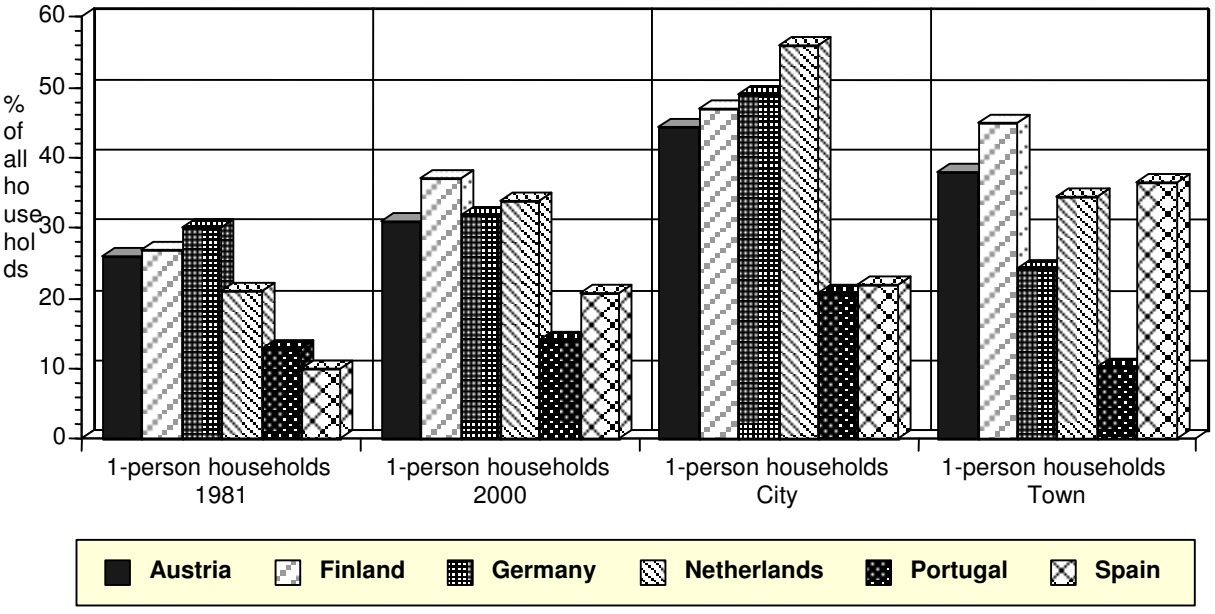


Figure 4.13 Evolution of 1-Person Households 1981 – 2000

Within the Homeservices project, demographic change, and especially the trend towards single-person households, has been identified as one key driver for service demand, especially in the fields of personal care & social services. In other categories, such as delivery or safety, the demand derived from demographic changes is also perceived, but the commercial service infrastructure seems to be more developed. The change in the family structures and the growing number of elderly who wish to stay in their own dwelling increases the need for services, which may be provided on a commercial basis to higher-income groups and possibly by non-profit organisations or self-help to lower -income groups. The best-practice examples from the Northern countries have shown that service centres and similar innovations, which help to reduce safety concerns and to increase the quality of life, are well received by the residents.

Social polarisation

The tendency towards social polarisation and degraded neighbourhoods has been observed in most of the cities, which have participated in the research project on Homeservices. In Germany, the tendency of social polarization is one of the core problems of urban development. Polarizing tendencies on the labour market are characterized by a growing gap between employed and unemployed, between high salaried jobs and underpaid jobs as well as between people with safe jobs and those who work under precarious conditions. Consequently, consumption patterns and life styles polarize as well (Schmidt 1996). These tendencies are reflected by an according polarization of housing conditions in social housing districts and those in middle or upper-class settlements as the increasingly differentiated housing market enabled solvent residents to abandon stigmatised neighbourhoods. A very similar tendency towards the deterioration of living conditions can be observed in Amsterdam and other Dutch cities. Some districts, which were originally working class areas, are labelled as disadvantaged or deprived and facing multiple social problems: higher unemployment rates, a low education level, poor housing, as well as frequent instances of petty crime. In the case of Amsterdam, a large percentage of those residents exposed to poor liveability, high unemployment rates, potential social isolation, less social cohesion within the districts and qualitatively less service provisions are of foreign origin.

The analysis for the Basque Country has shown that in spite of the large number of different types of suppliers in the field of Counselling & Information, major social problems such as poverty or the cost of housing have not been solved. On the positive side, we find that social isolation is still a minor problem in this part of Spain, even in the urban environment. In the Northern country, social housing has an important function for mitigating conflicts in the neighbourhoods. Housing organisations with a defined social mission often provide services in spite of legal restrictions, which originally limited their activities to their core business. In Germany, social housing organisations are the most important providers of Homeservices. The organisations offer, for example, social services as a means of reducing vandalism and improving neighbourhood relations in buildings with important social tensions. These services help to counterbalance the tendency towards the creation of socially deprived “ghettos” and form part of urban renewal strategies for neighbourhoods. The public company Surbisa in Bilbao has a similar function, although it is not directly providing dwellings, but financial assistance to homeowners in the degraded parts of downtown Bilbao. Examples for specific service offers for low-income residents, provided by social housing organisations, can also be found in Vienna and both Finnish locations. The two outstanding Finnish examples, Sato and VVO, show that this type of housing organisations may be interested in providing services in order to uplift their image and attract new customers with higher income levels. The fact that financing problems and legal changes have been obliging the social housing organisations to sell a large parts of their flats in recent years in Germany and in the Netherlands, where social housing companies supply about 60% of the services analysed in this research project, may therefore have a negative effect on service provision by these organisations in the longer term.

4.2.3 Cultural diversity and preferences

Another factor, which may influence service demand in cities and towns, is cultural diversity and preferences derived thereof. Amsterdam, Vienna and Berlin are composed of residents with highly diverse cultural background and this fact is already influencing service supply and demand. In contrast, Finland is still a rather homogenous country by the cultural and ethnic of origin of people: only two per cent are of foreign origin. In Helsinki the figure is slightly higher, 5.1%, but even in Helsinki there is no neighbourhood with a dominating presence of immigrants. In a few neighbourhoods the influence of immigrants can be perceived in the service structure, e.g. ethnic shops.

442,554 Berlin residents are foreigners from 184 countries all over the world. About three quarter of them come from other European countries. Nearly a third of all foreign nationalities are Turkish. In some districts such as Neukölln or Wedding to the Turkish portion on the total population amounts to

more than 30 %. The cultural diversity has a significant influence of the Berlin economy, as about 13 % of all self-employed are foreigners (IHK Berlin 2002).

Amsterdam is a city with a rather mixed population. People from more than a hundred different countries are living in Amsterdam although most non-western immigrants come from Surinam, Turkey, Morocco and the Netherlands Antilles. The number of districts in Amsterdam, in which more than 30 percent of the population belong to an ethnic minority, has increased during the last ten years by approximately eight percent to a quarter of all districts.

A similar polarization of urban districts has been observed in Vienna, another mixed conglomeration, with a large number of non-EU residents mostly coming from the former Yugoslavian countries or from Turkey. Many of these immigrants live in rather deteriorated parts of the city with badly equipped dwellings. The often have restricted budgets for living, which makes it nearly impossible for them to benefit from any services unless they are for free. But many of these families maintain a tradition of mutual help, although they would not see this within a “Homeservice” concept. This observation is also true for the Finnish town of Kouvola, with 2.6 % of the inhabitants of foreign origin, mainly from Russia. In the resident interviews it was noticed that they tend to rely more on mutual social self-help than ethnic Finns.

The situation in Bilbao is slightly different, because, in spite of the recent tendency towards immigration from outside Europe, the percentage of the population not born in Spain is still relatively low in Bilbao (3.1% in 2001). There is also a trend among elderly people to return to their places of origin, most of them Spanish migrant workers who came into the Basque Country in the 1950ies and 1960ies in search of work. Today’s immigrants are generally young, of American (60%) or African (20%) origin, while European and Asians only represent 18% and 5%, respectively. The three large cities absorb about 50% of this international migration, which also proceeds largely from urban areas. Bilbao and Zarautz differ considerably regarding migration: the city received almost 1,400 new citizen from outside of the Basque Country and, in a high percentage, women, but lost more than 1,000 inhabitants due to internal migration. This indicates that people from Bilbao tend to move to the surrounding areas, while the city centre is gaining a more culturally diversified population. Zarautz, in turn, is gaining population coming from outside and from the Basque Country in similar proportions. In view of the rather low percentage of immigrants, the Basque population did not perceive ethnic tensions as a major problem as recently as 1999.

The situation in Portugal is comparable to that described in the Basque Country and is also marked by a rather late start of immigration and a cultural composition, which clearly reflects the colonialist past of the country: in the 70ties there was a major movement of residents from African colonies to Lisbon and other Portuguese cities, which had a big impact in the composition of the community and also in economic and cultural activities. In recent years there was a significant movement of Brazilians to Lisbon, searching for jobs, mainly in the service sector. Afterwards, immigration from East European countries has started, with jobs in the construction and also in the service sector. Despite of the rather low level of immigration, the Portuguese are quite aware of the difficulties associated to it: they see discrimination against foreigners and ethnical groups as the fourth problem at global level.

The tendency of ghetto building in most European cities, in combination with increasing social conflicts and the lessening influence of social housing could turn out to be an explosive mixture. At the same time, different cultural attitudes related to service provision or self-help may actually lead towards the diversification of service supply, whether commercial or non-commercial. In this sense, the Spanish best-practice service provider Emaus points out that “demand for the social services offered by Emaus, especially long-term aid programs, is growing, due to the extension of mental illnesses, family disintegration and a different social attitude towards poverty, which is now perceived as a minority problem. Social exclusion is increasingly affecting women and people belonging to the age group of 45 to 65, for which few services are offered by public institutions. It is also affecting an increasing number of immigrants, who are not allowed to work and make a living, and even less so in the professions they were trained for. These immigrants not only suffer from economic shortages, but also from psychological problems derived from the loss of self-esteem and alienation, but Emaus’ possibilities of intervention are largely restricted by the Spanish Law on Immigration.”

In deprived areas, preferences regarding service provision are different from those observed in higher-income neighbourhoods. Examples such as the Portuguese Banco de Tiempo show that self-help is more important in these neighbourhoods and may become even more so in the future, obliging

municipalities to provide a greater number of social services, in cooperation with non-profit organisations. The increasing multicultural composition of the European cities will also create a demand for specific services or self-help, and will at the same time require the development of new information and communication strategies, as employed by the Dutch best-practice service provider Information Caravan.

4.3 Conclusions

Service supply either by housing organisations or by external service providers depends on some general demographic structural indicators that described the housing situation in a town. In accordance with the national housing market it is important to find out the proportion of owned versus rented dwellings, the dominate building structure - multi dwelling houses versus building with one or two dwellings and the rate of vacancies. However these indicators sometimes show contradictory results, as e.g. the vacancy rate in Amsterdam is nearly zero, and in spite housing organisations offer a bundle of Homeservices, whereas the Portuguese towns have significant vacancy rates but only a small Homeservices offer. In that case further parameters influence the service provision. The absence of large housing organisations in Portugal and also in Spain is an important factor in this field. But also social tendencies in the cities and towns, such as cultural diversification, ageing, or the degradation of certain urban neighbourhoods exercise an important influence on the demand for services and self-help. Higher density of population combined with the majority of multi-dwelling buildings support service supply in the big cities whereas in small locations the small amount of potential clients can be a significant hindrance for the provision of services.

From the residents' perspective the extra costs that are linked with the Homeservice supply primarily influence their demand for these services. The cost of housing has a significant influence on the households' purchasing power and the extent to which they can make use of extra services that are not provided for free. In the survey it turned out that the major difference between the southern and three northern housing markets – Amsterdam, Berlin, Vienna – is related to the regulative function of social housing that allows an easier way of financing housing costs.

On the other hand economics can be a pushing factor for a service demand in a certain area. A good example is the cost for household expenditure on water, energy, and waste. In those countries where these costs are high, the demand for Homeservices directed towards water and energy savings or waste prevention is more important. Regarding mobility and delivery one would estimate a higher demand for public transport. Mobility patterns throughout the surveyed cities and towns vary a lot. However, it can be generalized that potential changes and improvement are more linked with the provision of parking spaces for bikes and cars and the offer of combined mobility services including individual as well as public transport.

Also socio- cultural features influence the provision and demand of Homeservices. One important item is the increasing number of single households throughout all of Europe, although the tendency is not that significant in the southern countries. Linked to that trend is the maintaining and enhancing of the ability of (elderly) people to live independently at home. This seems to be a key priority for the future, which needs a well developed network of social as well as housing services.

Based on literature review, the interviews of stakeholders and the discussion in the local Actors' Groups, the research institutes involved in this project have estimated the demand for each of the service fields enclosed in the "Long List of Homeservices" (see annex 9.6). The results, displayed in table 4.9., confirm those tendencies, which have been explained in the foregoing chapters. There is a general consensus that demand for care & supervision services related to persons is growing, as well as the demand for energy-related services. Waste disposal is also a major concern in most cities and towns, and so are counselling and information activities related to environment and energy. Parking areas seem to be a major problem in most locations, and so is the quality of repair services, especially as related to household appliances

Leisure time activities related to social communication are also highly appreciated in all countries, except for the two Basque Locations, where the social environment has improved, according to the residents and official statistical data. In most other service fields, demand is largely determined by the

local supply situation, for example, the service provision and the infrastructure already available in a given neighbourhood, so that general conclusions valid for all countries cannot be drawn.

Service Areas	**Demand Estimate** ☺ Strong –☹weak					
	Austria	**Germany**	**Netherlands**	**Spain**	**Finland**	**Portugal**
1. Counselling & Information						
1.1. Environment & Energy	☺	☺	☹	☺	☺	☹
1.2. Social Aspects	☹	☺	☹	☹	☺	☺
1.3. Financial	☹	☺	☺	☹	☺	☺
2. Care & Supervision						
2.1. Building	☺	☹	☹	☺	☺	☺
2.2. Apartment	☺	☹	☺	☹	☺	☺
2.3. Persons	☺	☺	☺	☺	☺	☺
2.4. Pets & Plants	☹	☹	☺	☹	☹	☹
3. Leisure Time Activities						
3.1. Sport	☺	☹	☹	☹	☺	☺
3.2. Social Aspects	😐	☺	☺	☹	☺	☺
3.3. Culture & Communication	☺	☺	☹	☹	☺	☹
3.4. Food Services & Catering	😐	☹	☹	☺	☺	☹
4. Repairs	☺	☺	☹	☺	☺	☹*
5. Mobility & Delivery						
5.1. Vehicle rental & Sharing	☹	☹	☹	☺	☺ (Rental) ☹ (Sharing)	☺
5.2. Parking Areas	☺	☹	☹	☺	☺ (cities)	☺
5.3. Delivery	😐	☺	☹	☺	☹***	☹
5.4. Others	☹	☹	☹	☺	☹	☺
6. Safety & Security						
6.1. Building	😐	☹	☺	☹	☹	☺
6.2. Apartment	😐	☹	☺	☹	☹	☹
6.3. Persons	😐	☺	☺	☺	☹	☹
7. Supply & Disposal						
7.1. Energy Supply	☺	☺	☺	☺	☺	☺
7.2. Water Supply	☹	☺	☺	☹	☺	☹**
7.3. Waste Disposal	☺	☹	☺	☺	☺	☺

*strong for household appliances
** strong for water supply
*** strong for elderly and disabled

Figure 4.14 Summary table of demand estimate for each country

The findings obtained on national and local level confirm that Homeservices can be an important element for improving the ecological and social sustainability in cities and towns, although the strategies for introducing and communicating them are highly dependent upon the characteristics of each local housing market and even on the specific demand in each neighbourhood. Demographic change and growing environmental awareness, social polarisation and the multi-cultural composition of the European cities are general tendencies that will keep exercising its influence on service provision in coming years. On the other hand, factors such as the cost of housing or the influence of social housing organisations will to a large extent determine the actors' response to this increasing demand for services.

5 The Residents' Perspective

Chapter 4 discussed the framework factors that can influence the supply and demand of Homeservices. The existing structures of supplying services for households differ between the countries. To name a few differences, in Germany there are several large social housing organizations that have historically provided a fairly wide set of duties for their residents. On the other hand in Finland the public sector has tended to provide a plenitude of services to people. Neither of these structures exists to the same extent in the southern countries of the sample. On the other hand, there are also Europe-wide similarities like the growing question of taking care of the elderly. How should these findings be interpreted in the sustainable Homeservice context? One interpretation is that even if in each country there are niches for such services, they must be tailored according to the existing framework of supply.

Nevertheless, it is not sufficient to think only of the framework conditioning the supply and demand of Homeservices. Particularly as regards the demand, we need to get an idea what the consumers themselves wish to use and pay for. In order to deepen our understanding of the consumer preferences, we conducted a survey among them in five countries of the sample[18]. What we detected is that there is demand for multiple Homeservices but that the consumers are willing to pay for only certain services. It also appears that the service use culture varies between the countries of the sample. The residents' perspective was assessed by means of a questionnaire developed in order to understand which services the residents already use and the market potential for new Homeservices. The questionnaire was divided in three parts:

Part A – General description

The objective of this part was to characterize the interviewed residents, namely the composition of the household, type of dwelling and neighbourhood and also what type of criteria are important for the residents when choosing products or services.

Part B – Services

The objective of this part of the questionnaire was to evaluate the residents interest in the Homeservices described in each service area of the so-called "Long List of Services". It was designed in order to evaluate which kind of services the residents already use, how these services are delivered and which measures are necessary to improve them.

Part C – What Homeservices would you like to have?

This part was dedicated to the evaluation of the market potential for new Homeservices.

An instrument called "Long List of services", was developed for the project, with the objective of organising the services studied under the seven service areas (see annex 9.6) The Long List of Services is an extensive list of Homeservices and it was used implicitly for the questionnaire development and also for its application. As the range of Homeservices studied in the scope of the project (Long list of Services) was large - about 350 services, distributed by 7 service areas - the strategy used in the resident's survey was to have major detailed information from each interview, instead of a large number of interviews with limited information. For this reason, the goal was not to have an average national sample representative of each country, but to interview 50 residents in the 5 cities and 30 residents in each of the 5 towns. As a consequence, the results from this survey should be used carefully and only as an indication of the service mentality in the participating countries.

5.1 Characterisation of the sample

In total, 333 questionnaires were answered in the five cities and five towns covered by the residents' survey. Figure 5.1.shows the number of respondents per country and respective city/town.

[18] Germany did not participate as a similar but larger survey had recently been conducted by the partnering institute IZT, and its results could be used to reflect the German situation.

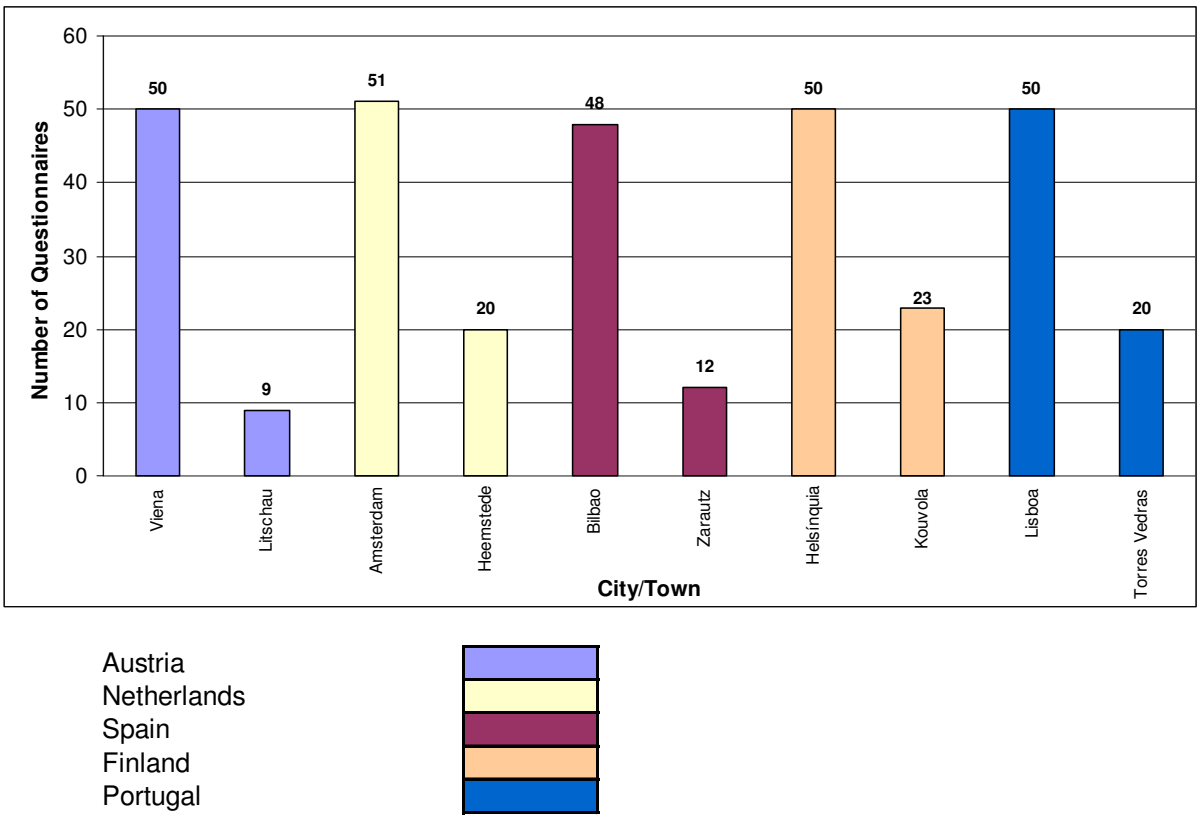


Figure 5. 1 Number of questionnaires applied in each country and respective city/town

Characteristics of the respondents

The characteristics of the respondents may be summarized as follows (Table 5.1.): They are mainly adults between 26 and 65 years old (76%), a slight majority are women (58,3%) and live in the city centre (52%). There is a relative majority of cases where the household is constituted by 2 adults, and an absolute majority of situations without children (62,8%), elderly (82%) nor pets (63%). When it comes to compare the respondents from the cities with those from the towns, it can be observed that the only remarkable difference relates to the location of the house: in the cities the dominant situation is that of respondents from the city centre, whereas in the towns most of them live in the suburb.

	Cities & Towns	Cities	Towns
Age of resp.: 26-65 yrs	76,0%	76,7%	73,8%
Gender: female	58,3%	55,4%	66,7%
Location: city centre	52%	59,4%	(29,2%)
Household: 2 adults	41,7%	42,2%	40,5%
Children: no	62,8%	67,1%	71,4%
Elderly: no	82,0%	84,7%	73,8%
Pets: no	63,0%	65,5%	56%

Figure 5. 2 Characteristics of the respondents - Percentages of predominant features

Characteristics of the respondents' housing situation

On what concerns the ownership of the dwellings (figure 5.2), in most of the cases, the houses are rented, but this characteristic varies significantly in the different countries: in Lisbon and Bilbao the owned dwellings dominate amongst the respondents, in Vienna and Amsterdam it is otherwise. In Helsinki the responses are fairly divided amongst rented and owned houses. The towns of the same countries follow the same pattern, except in Litschau: unlike in Vienna, here all the respondents live in their own houses. The tenure situation that is represented by the sample corresponds largely to the overall relationship between home owners and tenants in each locality.

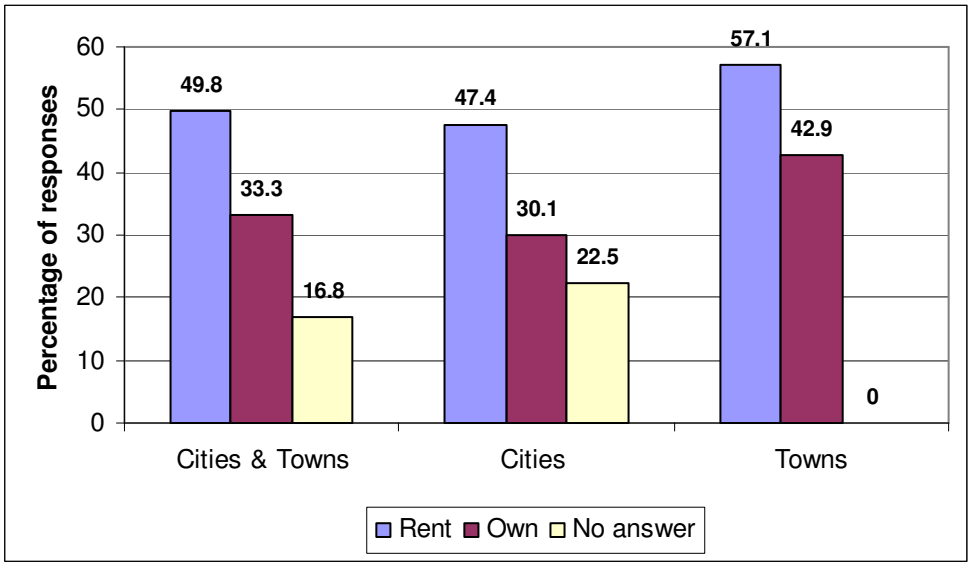


Figure 5. 3 Ownership of the dwellings

The type of housing is shown in figure 5.3. The results are scattered amongst the housing categories defined for the project, with a relative dominance of the free market housing (37,5%). The less represented category is condominium management (only 13,8% of the cases).

Each country we assessed a city and a town, trying to see if there were significant differences in the supply of services between the cities and towns.

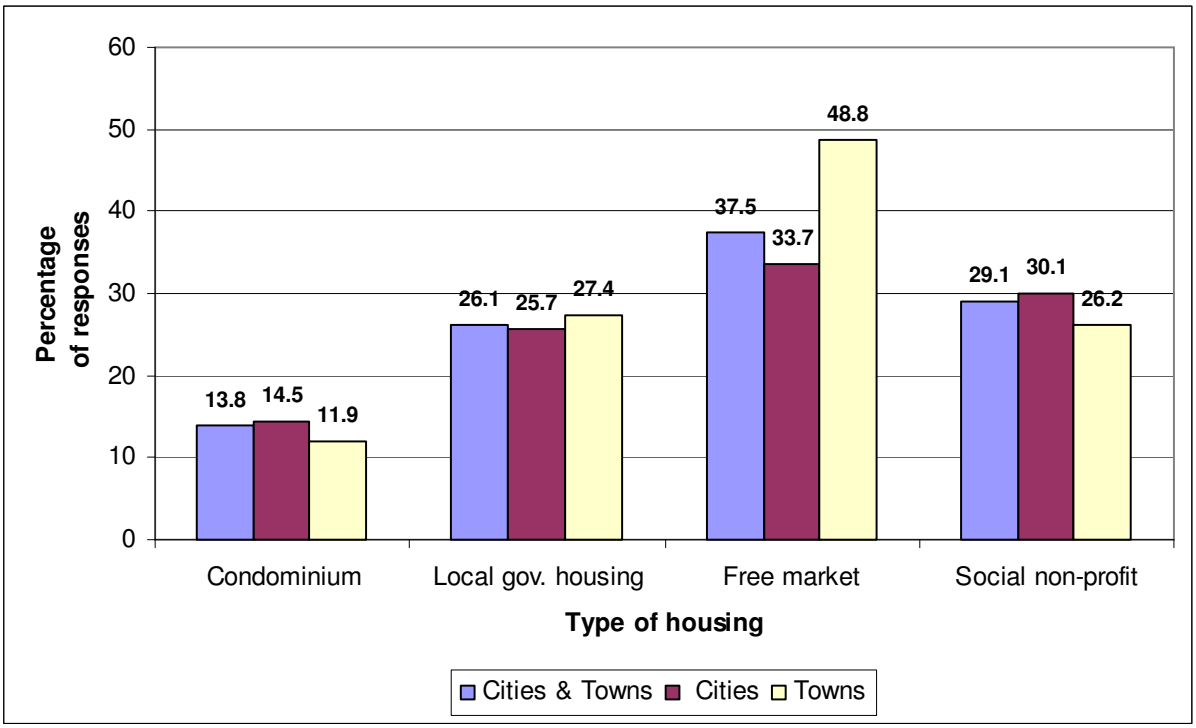


Figure 5. 4 Type of housing

As for the level of satisfaction with the housing management, the services provided and the surroundings of the residence, a 5 points scale ranging from very unsatisfied to very satisfied was used for the answers. A significant percentage of respondents is actually satisfied with the housing management (49,2%), with the services provided at the dwelling (51,4%) and with the surroundings (43,2%). The next category is “so-so”, with 20,1%, 22,2% and 18,6%. The category “very unsatisfied” was awarded a very low percentage of responses, ranging between 1,5 and 3,9%. To be noted that on what concerns the surroundings, the percentage of “very satisfied” is relatively important: 23%.

Socializing with neighbours

Another part of the questionnaire concerned the socializing with the neighbours. The majority of the respondents only meets the neighbours “by chance” (54,1% in total, 54,2% in the cities and 53,6% in the towns). In total, the most mentioned common activities are the condominium meetings (38,4%), mostly performed in the common parts of the building. The next most frequent type of activities is informal social contacts: in the towns this is actually the dominant type of socializing with neighbours, accounting for 48,8% of the answers. On the other end there are joint cultural and entertainment activities: less than 5% of the respondents do them.

Transportation of products

On what concerns those products required daily, respondents were asked to indicate whether they would prefer a delivery service, or to go buying them either walking or driving. The majority of the responses indicate that they prefer walking; as a matter of fact, delivery services do not seem to be used, accounting only for less than 10% of choices in total and this trend is even more important in the towns compared to the cities. These results are presented in figure 5.5.

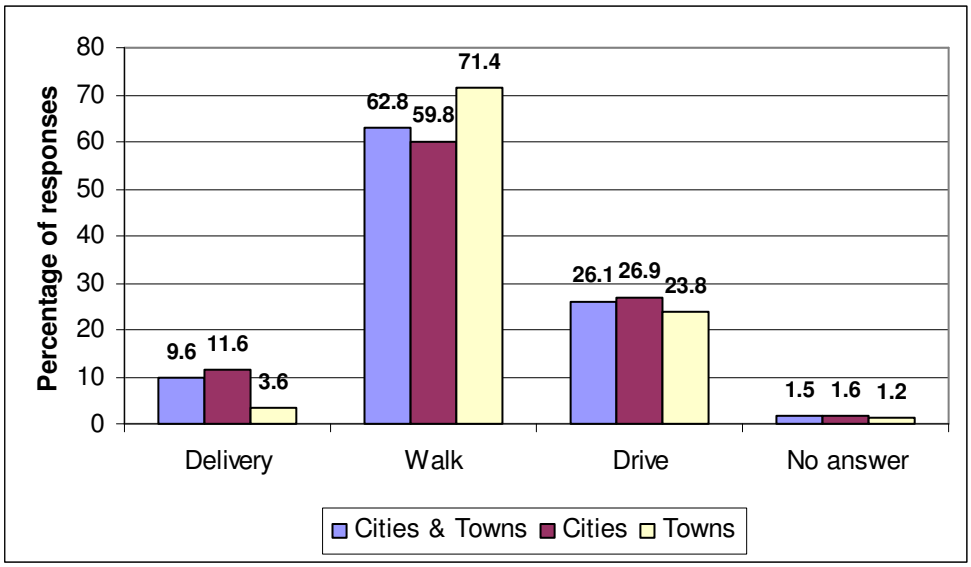


Figure 5. 5 Preferences for the purchase of daily products

Which criteria are important for choosing products or services?

As for the features that respondents most value in a product it is clear that quality is the one given higher importance, followed by price, convenience and comfort and finally the environmental profile. The latter is the response category that was given the lower percentage of "high importance" and the higher percentage of "low importance", but the "medium importance" category received over 40% of the responses. When it comes to valuing those features in services, the responses follow a similar pattern, except on what concerns "convenience and comfort" that rises to the second place of importance, followed by price. The overall figures showed in the graphic are similar to those observed for the cities only or the towns only; the most remarkable difference is the fact that in the towns the importance of the environmental profile of products and services is lower. These results are coherent with the ones achieved with the question on whether or not respondents buy eco-friendly products: most of them don't and this percentage is higher in towns than in cities.

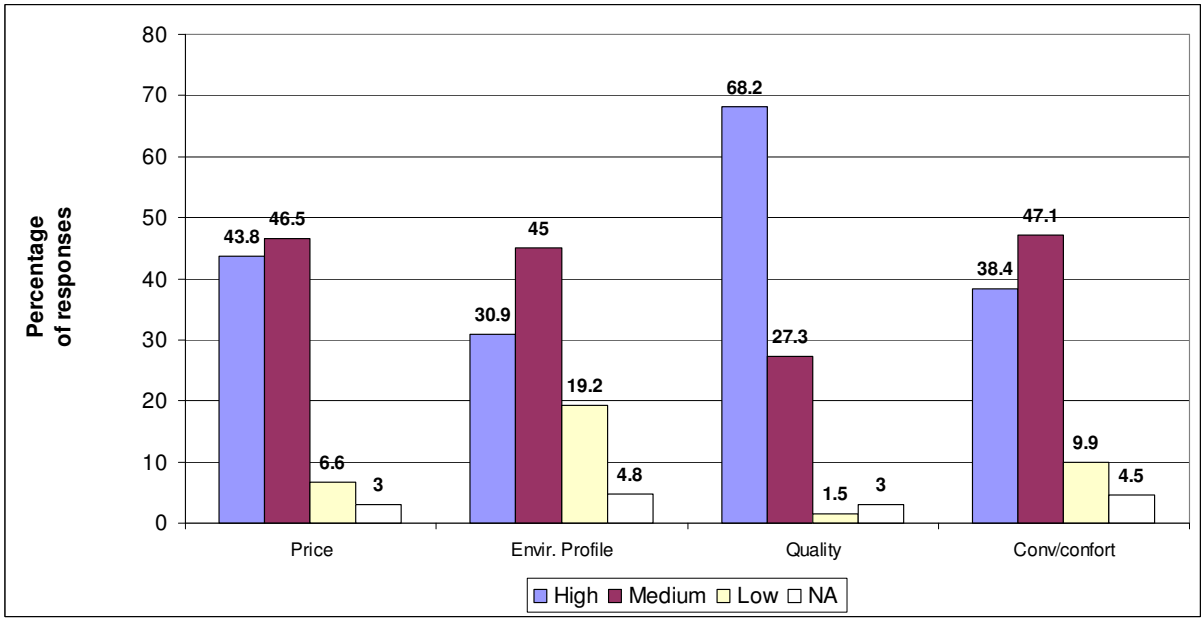


Figure 5. 6 Importance of given features for choosing products

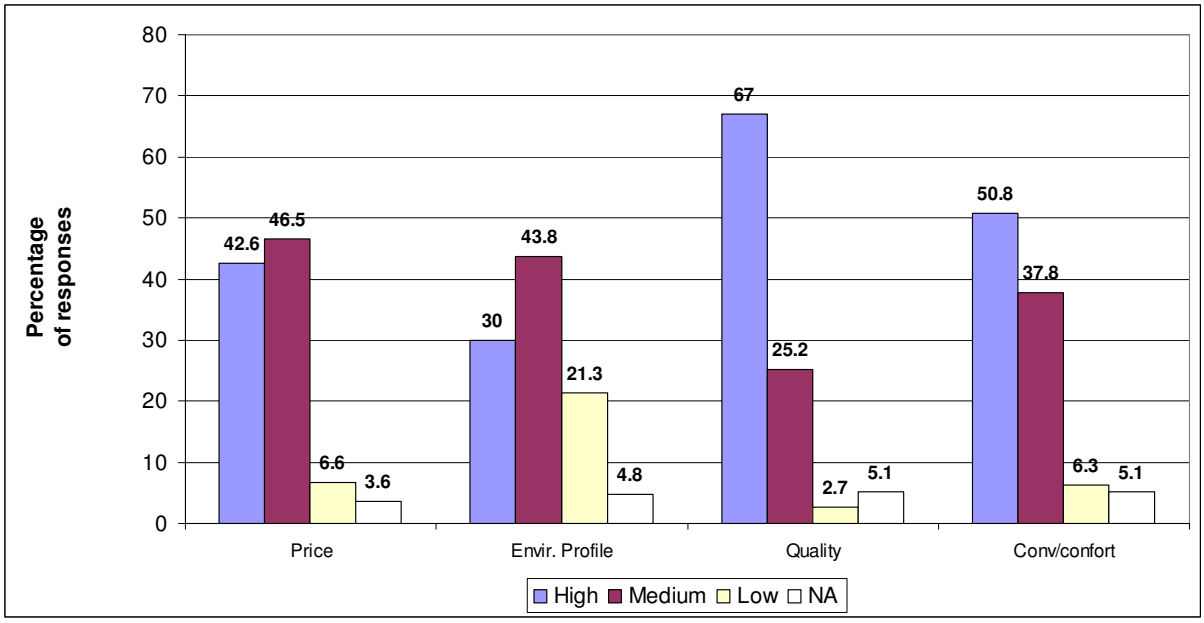


Figure 5. 7 Importance of given features for choosing services

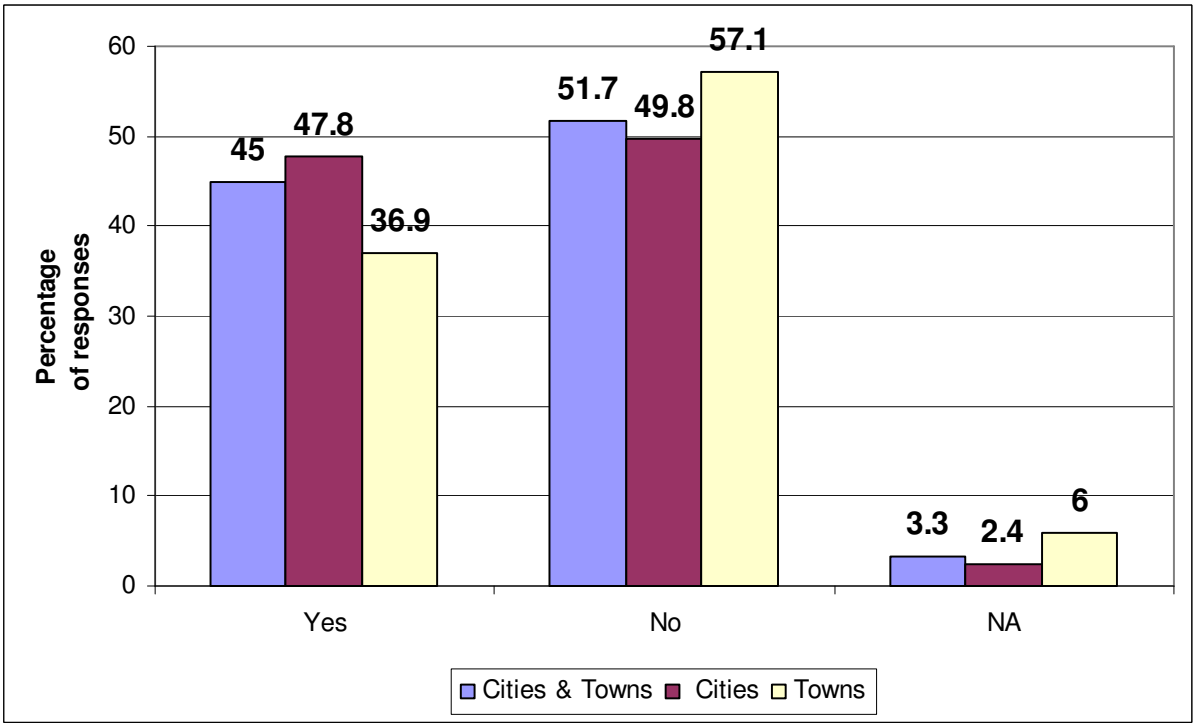


Figure 5. 8Purchase of eco-friendly products

5.2 Characterization of the used services

Part B of the questionnaire aimed at portraying the Homeservices respondents already use, organized according to the 7 categories defined for the project. For each category, respondents were asked to state up to three services that they would consider important and to characterize them.

In the 333 questionnaires, a total of 2471 services were mentioned. To be noted that their geographic distribution is not following that of the questionnaires: in Portugal, the 981 services described (in Lisbon and Torres Vedras) represent nearly 40% of all services (whereas in this country 21% of the questionnaires were applied). On the other extreme there is Finland: the 127 services from Helsinki

and Kouvola represent only 5% of the total of 2471 Homeservices characterized by the questionnaire to residents, against 23% of questionnaires applied in this country.

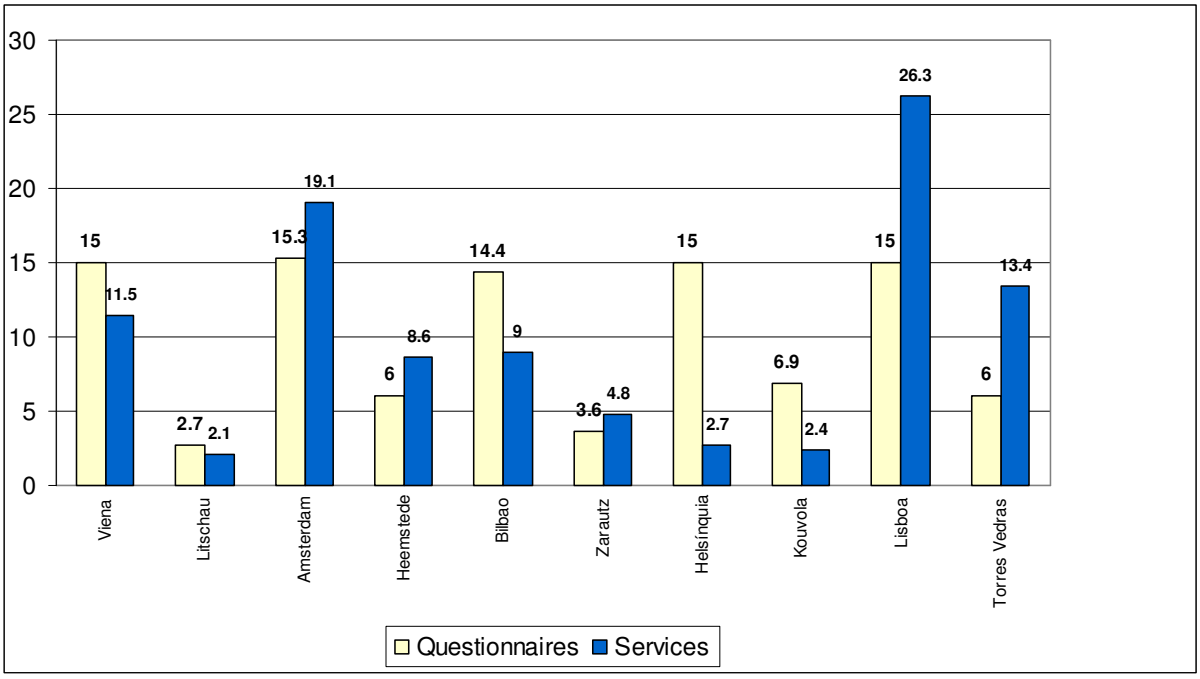


Figure 5. 9 Distribution of the questionnaires vs. distribution of the mentioned services

Preferred services

Figure 5.10. shows the distribution of mentioned services per service category. Services were categorized into seven service areas that are mentioned below:

Counselling & Information

Care & Supervision

Leisure Time Activities

Repairs

Mobility & Delivery

Safety & Security

Supply & Disposal

The most mentioned was Care & Supervision and the least referred was Safety & Security.

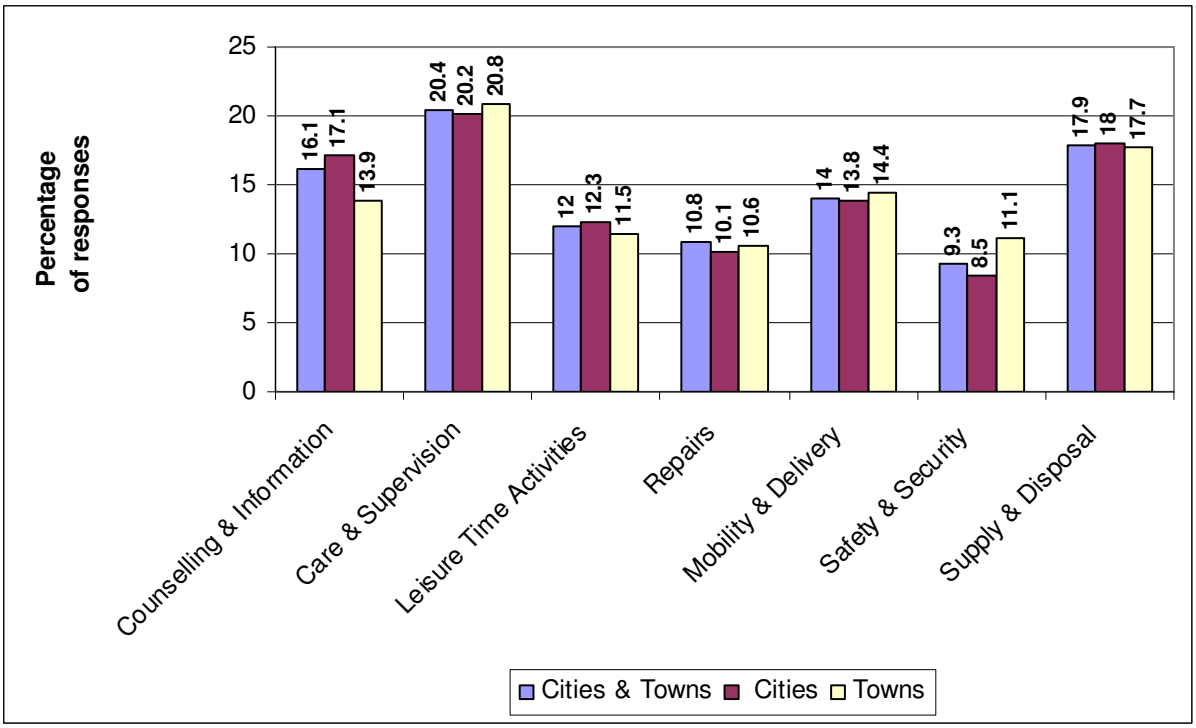


Figure 5.10 Mentioned services per service category

Addressing now the services individually, it was observed that there is hardly any service that is dominant in terms of frequency: they are quite scattered and the higher frequencies rarely go beyond 2%. Table 5.2.shows precisely the services with a frequency of responses higher than 2%. It can be noted that in this way categories counselling & information, leisure time activities and safety & security are excluded.

The most mentioned services include construction measures such as cable/satellite/internet or parking areas and basic services like energy supply in general, waste disposal and separate collection. It is understandable that residents found these services important. To be noted that although repairs is one of the lowest categories in terms of services mentioned, it accounts for 2 services with a relatively high weight (6.1% in total).

	Service	**Nº. of responses**	**Percentage**
Counselling & Information			
Care & Supervision			
	Supply of cable, satellite, and internet	71	2.9
	Cleaning service	82	3.3
Leisure Time Activities			
Repairs			
	Co-ordinated repair service that consults at the dwelling	85	3.4
	Household appliance repair service that comes to the dwelling	66	2.7

	Service	Nº. of responses	Percentage
Mobility & Delivery			
	Parking area for cars	94	3.8
	Meals on wheels	52	2.1
Safety & Security			
Supply & Disposal			
	Energy supply in general	81	3.3
	Waste collection area for separate containers for recycling	61	2.5
	Separate days for collection of old furniture, etc, and hazardous waste	69	2.8
	Waste disposal in general	57	2.3

Figure 5.11 Services representing more than 2% of the choices of residents

An analysis of the preferred services per service category and per country is now presented. Of course, some services mentioned below are not reflected in table 5.2 because although they may be highlighted in a more detailed analysis, in an overview such as the one presented in the table they loose importance in favour of the most mentioned services in general. The fact that the number of mentioned services varies significantly between countries also explains this situation. It is therefore important to take a closer look to each country and identify the most demanded services, here organized per service category.

Counselling & information

Austria: In Vienna, the most mentioned service was “blackboard – information board of facility manager”. In Litchau no service was distinguished in this category.

Netherlands: The services “consulting on security” and “information on financing and subsidies for tenants” were preferred in Amsterdam. The former service also showed a slightly stronger preference in Heemsted.

Spain: In Bilbao, “information on financing and subsidies for owners” was the most mentioned service in this category, whereas in Zarautz the preferred service was “blackboard – information board of facility manager”.

Finland: There was no service to be highlighted from the residents’ responses, neither in Helsinki, nor in Kouvola.

Portugal: Whereas in Lisbon, the preference went to “information on local infrastructure”, in Torres Vedras “information on financing and subsidies for owners” had a relatively higher preference.

Care & supervision

Austria: Again, the preferences in Vienna and Litchau do not coincide in this service category. In the capital, the most demanded services are “janitor”, “supply of cable, satellite and internet” and “cleaning service”, whereas in Litchau the preference goes to “chimney cleaning”.

Netherlands: Both in Amsterdam and Heemstede the “cleaning service” is one of the most demanded services of this category. “Supply of cable, satellite and internet” and “maid” (in Amsterdam) and the “janitor” service (Heemsted) are also to be mentioned.

Spain: The preferred services were “maintenance of heating, water supply and electricity” (in Bilbao) and “gardening” and “cleaning service” (in Zarautz).

Finland: Whereas in Helsinki there was not a dominant service to be mentioned in this category, in Kouvola “building care taker” and “common laundry room” are the most demanded ones.

Portugal: “Supply of cable, satellite and internet” was regarded as important by a relative majority of respondents in the capital and in Torres Vedras. Also to be mentioned are “maid”, in Lisbon and “health centre” (in Torres Vedras).

Leisure time activities

Austria: no services are to be distinguished in this category.

Netherlands: In Amsterdam the preference goes to “gardens provided to residents”, whereas in Heemsted the “housing organisation newspaper” is dominating the residents’ choices.

Finland: “Organization of residents meetings” was the most demanded service, in Helsinki.

Spain: The preferred service in this category is “sport hall”, in Bilbao.

Portugal: Both in Lisbon and Torres Vedras, the existence of an “open green area (field for recreation and sports) was dominating in this category. In Lisbon, “gym/fitness studio” was also high in the residents’ preferences, in Torres Vedras the “weekly market” is to be mentioned.

Repairs

Austria and Finland: No services dominated the residents’ responses in this category.

Netherlands: “Repair service that consults at the dwelling” (either coordinated or not) is the most chosen service in Amsterdam and Heemstede.

Spain: One of the most mentioned services was “household appliance repair service that comes to the dwelling”. In Bilbao, “coordinated repair service that consults at dwelling” was also one of the most mentioned services, In Zarautz preference was given to “preventive inspections”.

Portugal: Both in Lisbon and in Torres Vedras the most demanded service is “household appliance repair service that comes to the dwelling”; in the later, “workshop room for repairs” was also regarded as important by a significant number of respondents.

Mobility & Delivery

Austria: in Vienna a service was distinguished in this category: bicycle storage room.

Netherlands: “Bicycle storage room” and “parking area for cars” were the two most mentioned services. In Amsterdam, “meals on wheels” is also to be highlighted as preferred by the interviewees.

Finland: No services to be mentioned as clearly preferred,

Spain: Whereas in Bilbao the most chosen service was “shopping delivery”, in Zarautz many respondents indicated parking areas – for bicycles and for cars – amongst the most important services they use.

Portugal: “Meals on wheels” was again a highly mentioned service, in Lisbon, together with “parking areas for cars” and “connection to public transport” – these two were also very important in Torres Vedras.

Safety & Security

Only in a few studied cities or towns a clear preference for some services in this category was observed:

Netherlands: in Amsterdam the services to be highlighted here were: “fire alarm” and “separate walk and bike paths”

Finland: in Kouvola, the most mentioned service was “prevention of fear rooms”.

Portugal: security guard was important both in Lisbon and Torres Vedras. In the capital “video surveillance at building entrance with display in the apartment” was also mentioned by a significant number of residents; in the smaller city it was “security guard”.

Supply & Disposal

Austria: The most mentioned services were “energy supply in general” and “waste disposal in general”.

Netherlands: “Separate days for collection of old furniture and hazardous waste” were considered important by many residents in Amsterdam and Heemstede. In Amsterdam “energy supply with renewable energy” and “recording water usage per dwelling” were also important. In Heemstede priority goes to “billing warm water by unit consumed”.

Finland: In Helsinki, the service to be mentioned as most demanded was “waste collection area for separate containers for recycling”. In Kouvola, it was “waste disposal in general”.

Spain: In Bilbao, the service to highlight was “waste disposal”. No clear preference was found in Zarautz.

Portugal: “Energy supply in general” and “waste collection area for separate containers for recycling” were the most mentioned services in Lisbon and Torres Vedras. In the capital, attention was given to “energy efficient appliances” also.

Characteristics		Cities and Towns	Cities	Towns
Frequency of Use	Less frequently than monthly	39,8%	40,2%	38,9%
	Daily	31,2%	29,9%	34,1%
	Weekly	18,7%	19,2%	17,5%
	Monthly	10,3%	10,7%	9,5%
Know about The service Through…	Visible	48,7%	44,1%	59.7%
	Advertisement	35,2%	38,1%	28,7%
	Neighbours and friends	16,8%	18,1%	12,3%
Supplier	Commercial	41,1%	43,4%	35.9%
	Public organization	31,1%	30,3%	33%
	Housing organization	21.1%	18,3%	27.4%
Cost of Service	Paid	60%	64,5%	50%
	Free	40%	35,5%	50%
Willing to pay for improved Service?	No	86%	84,3%	90,1%
	Yes	14%	15,7%	9,9%

Figure 5.12. Characteristics of the services mentioned by the residents (total, cities and towns)

On what concerns the frequency of use, the way respondents got to know about the service, who provides it and whether they are free or paid, the results are very similar in the cities and in the towns and can be summarized as follows:

- The dominant frequency of use is “less frequently than monthly”, followed by “daily”. This means that frequency of use is not the main choosing factor: even those services that are seldom used can be very important for the users.
- Most of the respondents got to know the services simply because they were visible, i.e., they exist on the street or at the dwelling and in this way they are known by the resident, and the percentage in the towns is significantly higher than that in the cities. Neighbours or friends are the least mentioned vehicle for information about existing services.
- The majority of the mentioned services are paid, except in the towns, where the responses are even: 50% paid, 50% free.
- In the majority of the cases, the services are provided by commercial providers. The suppliers in the second and third place are public organizations and housing organizations respectively. Due to the relevance of the latter in the Homeservices project, a section describing the services they provide is presented separately.

Services provided by Housing Organisations

Housing organizations supply 503 of the total mentioned services, which corresponds to 20% of the total. Again, the services that are provided by these suppliers are so scattered that it is difficult to define a pattern. Still, the most mentioned ones are presented in table 5.4.

Service	No. of responses	% (in relation to total HO services)	% (in relation to total services)
Information binder on apartment	17	3,4	0,7
Blackboard – information board of facility manager	23	4,6	0,9
Janitor	38	7,5	1,5
Cleaning service	54	10,7	2,2
Co-ordinated repair service that consults at the dwelling	37	7,4	1,5
Bicycle storage room	34	6,7	1,4
Prevention of “fear” room	15	3	0,6

Figure 5.13 Services provided by Housing Organisations

Only coordinated repair service that consults at the dwelling coincides with the most mentioned services, disregard of who provides it.

Are residents willing to pay for improved services?

Respondents were asked to state if they would be willing to pay something/more for a service they use, if it was improved. In the far majority of the cases the answer was negative. The few cases that distinguish to this concern are shown in table 5.5.

Service	No. of affirmative responses	% (in relation to total services)
Health centre	13	0,5
Co-ordinated repair service that consults at the dwelling	16	0,6
Parking area for cars (outside or garage)	17	0,7
Waste collection area for separate containers for recycling	11	0,4

Figure 5.14 Services the respondents would will to pay for / pay more case of improvement

In spite of the fact that these were the services that had a higher percentage of positive responses, the number of people not willing to pay for them was still higher than the number of those who do. The only exception is service 90 (health centre) which was given 13 “yes” and 7 “no”.

Comparing the answers in the cities, in the towns and in total, it was observed that the percentages of services respondents were not willing to pay more were 84,3%, 90,1% and 86% respectively: in the towns, the negative answers were even higher in number.

5.3 Which Homeservices would residents like to have?

This part of the questionnaire was dedicated to the recording of services that the respondents would like to have, whenever these services were part of the Long List of Services or where new services or only corresponded to residents' concerns. All cities and towns were analysed individually and most relevant findings are summarised below.

Vienna

For the city of Vienna the residents' questionnaires showed that the primary demands are related to Leisure Time Activities, like sports, common facilities at the building, swimming pool, gym and sauna and also parking areas for cars, strollers and bicycles. In second place, services like waste separation, building waste pipe and use of renewable energies were mentioned. As a conclusion, Leisure Time Activities, Mobility & Delivery and Supply & Disposal were the most desired service areas for new Homeservices. New services outside the Long List of Services were mentioned (table 5.6.).

Services outside the Long List of Services
Library on wheels
Wake-up call
Motorbike sharing
Dry cleaning home delivery
Bike sharing

Figure 5.16 New services mentioned in Vienna

Amsterdam

The main area of concern in Amsterdam is safety & security at the building and at personal level, with services like evacuation plan / fire alarm, video surveillance at building entrance with display at the apartment, emergency telephone for elderly and emergency telephone in elevators being mentioned frequently. The second area of concern is care & supervision, namely child sitting, maid, technical care taker and medical care at Homeservices. Supply & disposal service area is mentioned in third place, with individual water usage recording, waste separation and central heating related services.

Services outside the Long List of Services
Restaurant with low prices
Windows cleaning (tall buildings)
Meals on wheels for elderly
Better door lockers
Car parking facilities for short time periods

Figure 5.17 New services mentioned in Amsterdam

Heemstede

For Heemstede there is a strong concern on Safety & Security related services, like building surveillance, fire alarm, technical surveillance, video surveillance (even in bicycle parking areas) and surveillance at building entrance with display at the apartment. The second area of concern is care & supervision, namely specialised cleaning, building maintenance and common laundry room. New

services mentioned in Heemstede were installation of electronic sliding doors and groceries delivery by bicycle.

Bilbao

In Bilbao most relevant wanted services are parking areas for cars, coordinated repair services and building cleaning services, belonging to Mobility & Delivery, Repairs and Care & Supervision service areas. In fourth place some Leisure Time Activities and Care & Supervision services were also mentioned, like elderly support, open green areas and building surveillance. New services outside the Long List of Services mentioned were better service information, wider range of services at common areas of the building and improved internet security.

Zarautz

In Zarautz the most important issues to be solved, in the residents view, are energy consumption management and waste separation and collection, belonging to Counselling & Information and Supply & Disposal service areas. In second place there are coordinated repair services and in third place are wanted Care & Supervision (child sitting, pet care) and Mobility & Delivery services (connection to public transport). There were no new services outside the Long List of Services mentioned in Zarautz.

Helsinki

In Helsinki the most wanted services are belong to Care & Supervision and Repairs service areas: care for children in general (child-sitting, child health centre), pet care and walking pets, workshop room for repairs (small repairs, computers, bicycles repair and tool rental). In second place Counselling & Information and Leisure Time Activities are mentioned, namely counselling on environmental issues and energy conservation, information trough ICT and sports facilities in general. Homeservices mentioned outside the Long List of Services are listed in table 5.8.

Services outside the Long List of Services
ADSL-internet connection possibilities provided by the HO
Possibility to buy repaired used household appliances
Cash dispenser at building
Janitor for the neighbourhood
Monitoring and optimisation of building automation
Recycling market

Figure 5.18 New services mentioned in Helsinki

Kuovola

The main concerns in Kuovola are at community level, specially those related with the integration of emigrants in Finnish/Russian discussion groups, in order to improve interaction of residents with different nationalities. Other services mentioned were related with Repairs service area, namely the household appliances repair at the apartment and common space and tools for bicycle repairing. Other services mentioned, with lower frequency, were walking pets, janitor, garage sales and common sauna. New services mentioned outside the Long List of Services were recycling room or market and hobby crafts for Christmas and Easter.

Lisbon

From the results of the part C of the residents' questionnaire for the city of Lisbon one can conclude that there is a strong concern with Counselling & Information on energy consumption, mainly related with measures that could be taken during building construction phase. The second most important

concern belongs to the Supply & Disposal service category, namely waste separated collection door to door. In third place appear services related with preventive inspections, coordinated repair services and elderly support services, belonging respectively to repair, care & supervision and Leisure Time Activities service areas. During the interviews several new services outside the Long List of Services were mentioned (table 5.9.).

Services outside the Long List of Services
Wood cellar
Home support done by the parish
CD / DVD rent with home delivery
Neighbourhood library
Information on selected cultural events
Improve the neighbourhood security

Figure 5.19 New services mentioned in Lisbon.

Torres Vedras

The interviews made in Torres Vedras showed that main areas of concern are the availability of parking areas for cars and elderly support. In second place were mentioned fields for recreation and sports and in third place there is a concern with waste collection areas. Several services outside the Long List of Services were also mentioned (table 5.10.).

Services outside the Long List of Services
Neighbourhood library
Citizen's support shops (identification card, water, gas and electricity payments, etc)
Construction and urban planning information service

Figure 5.20 New services mentioned in Torres Vedras.

German results on residents' demands

Tenants or owners living in multi-dwelling buildings form the most important customer group for home services in Germany. Therefore, the following statements regarding residents' demands and expectations according to home services are based on a tenants' survey conducted by the Department of Marketing and Consumer Research at the University of Hanover (Hohm 2003). In the context of a home service engineering project, the Dept. of Marketing and Consumer Research surveyed tenants of four different Hanover housing companies. The tenants' survey was sent to 8000 households and concentrated on resident's satisfaction with their housing condition as core factor for further home service engineering activities of housing organisations. Accordingly, the questionnaire included questions regarding:
Socio-economic data

Satisfaction regarding apartment, neighbourhood, janitor, their housing company and home services

Interests in particular home services at moderate costs.

2482 households responded on the questionnaire, which corresponds to a return rate of 35.5 %. The residents' satisfaction with their housing condition was determined by various questions regarding

apartment, close housing environment, neighbourly relationships and ample housing environment. The survey approved the assumption that satisfaction with housing conditions depends predominantly on the apartment's features. Regarding the own apartment, most important features were the cost-performance-ratio, the apartment's equipment and design as well as sound insulation (Hohm 2003, p. 17). In relation to the housing environment, most important aspects for the resident's satisfaction were "gardens and green spaces", clean buildings, social structure of the neighbourhood and image of the district. Therefore, home services complementing local housing conditions should react on these aspects to meet the residents' demands.
Finally, residents were asked on their interest for certain home services. The following tables present the most popular home services of the survey participants:

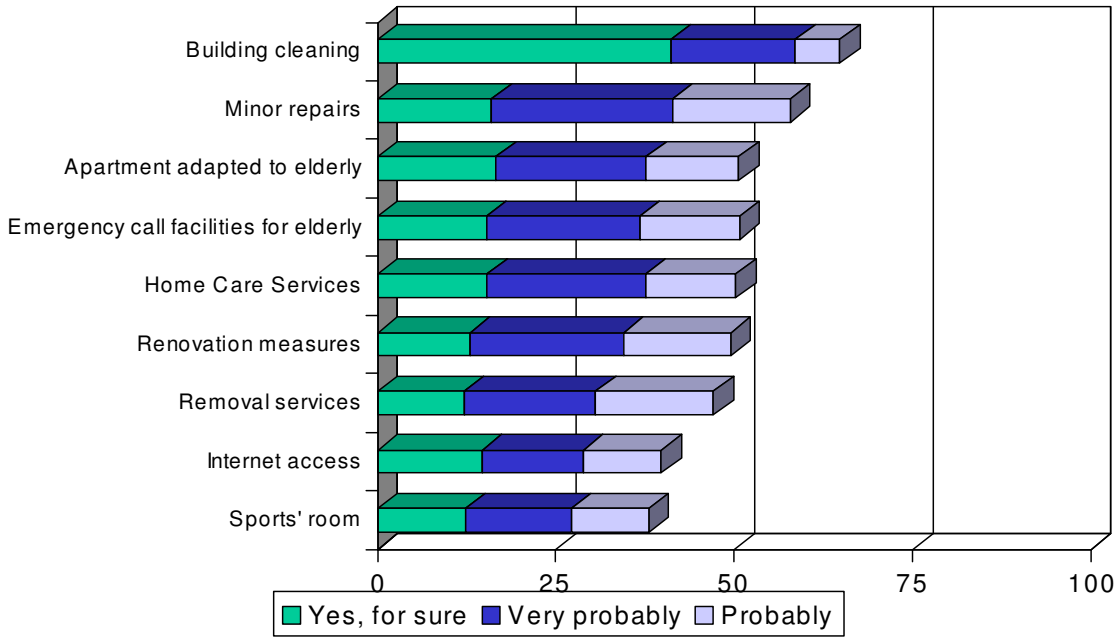


Figure 5.21: Most popular home services of German residents

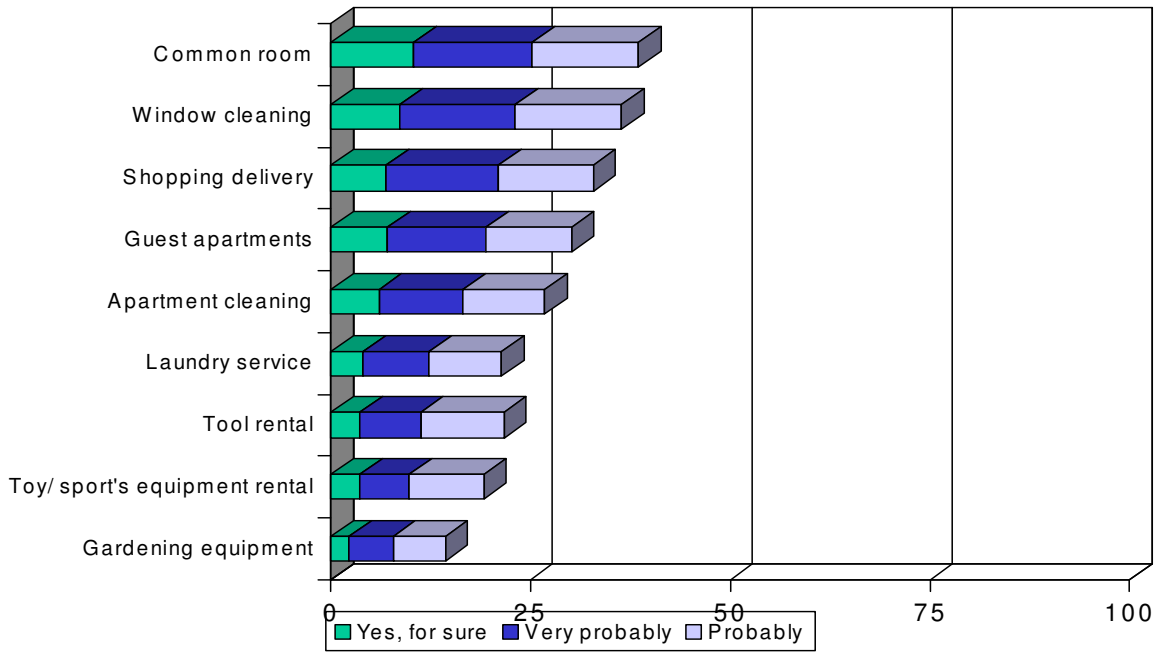


Figure 5.22 Less popular home services of German residents

Conclusion for sustainable home services regarding residents' demands

From this survey, we can draw the conclusion that most wanted home services are repair and renovation services as well as home services for elderly (about 40 – 50 % of the interviewees). A quarter to a third of the residents are interested in additional housing facilities to improve quality of life such as Internet access, guest apartments, common and sports' rooms. Only a small percentage (less than 25 %) is interested in help in the household by window or apartment cleaning and a laundry service. This result matches statements of German local actors that German residents have less interest in comfort services such as "dog walking" or a "separate wine cellar", but are interested in complementing services close to the core business such as renovation or maintenance of buildings. Moreover, building cleaning as the most demanded service must be taken into account, where housing organisations did not organise it centrally and included it in the housing costs.

In addition, the tenants' survey revealed that residents are generally not willing to pay extra for additional home services unless they are dependent on a service or act for conscience reasons. Apart from that, residents pay for home services that promise savings compared to alternatives or savings on a long-term.

5.4 Conclusion

The questionnaire applied within the Homeservices project aimed at providing indications on the residents' perspective regarding these services and it was by no means intended to have statistic significance; the studied sample is therefore small, but nevertheless some interesting results can be retained, which are relevant for the introduction of (sustainable) Homeservices in Europe:

1. There is a demand for Homeservices, particularly in market niches of care & supervision and counselling & information service areas: examples are elderly and children care, counselling and information on energy consumption and sports / green areas.
2. Are respondents willing to pay for the Homeservices? In general, residents are not willing to pay more than they already pay for services. However, it was observed that they are willing to pay more for services as health centre, coordinated repair, parking area for cars and waste collection area for recycling. These means that there is a market for Homeservices related with the money that residents already spent on services and also a good potential for the development of the services mentioned before.
3. There seem to exist some differences in the willingness to use services in the studied countries. On one extreme there is Portugal, with the highest number of reported services, and on the other extreme there is Finland, with the lowest. As stated before, the interviewing method was very different in these two countries, and it definitely influenced the results, but it is also the case that the Finnish partner identified cultural/behavioural reasons for services not being popular in the Finnish society, that may also contribute to explain this situation.
4. The environmental profile is not the most relevant criterion for the choice of products and services, but considered important by a significant percentage of the respondents. Nevertheless, the majority of them do not buy eco-friendly products. These results confirm the common understanding that at this stage a good eco-profile of a product or service is hardly a key selling point. And in case a superior sustainability performance implies increased price, the consumers' response is expected to be bad, since the vast majority stated that any improvement (not necessarily sustainability-related) in the services they use, should not lead to increased costs.
5. Housing organisations supply approximately 20% of the services. However, considering that in Portugal and Spain, the importance of housing organisations for supplying Homeservices is close to zero, it becomes evident that these organisations do play an important role for Homeservice provision in the other countries.
6. External service providers are nevertheless the most mentioned and used service suppliers.
7. It was observed that advertising was not the most mentioned vehicle for respondents to get to know about the service they chose as most important. In most of the cases they were "visible".

6 Homeservice Providers and their Offer

The layout of what could be sustainable Homeservices and their actual effects, as well as the influence of the housing situation have been set in the previous chapters. It is now time to ask who provides or could provide these services. Often when thinking about sustainable services, we tend to assume that new enterprises should appear to provide such services, or we try to pursue large corporations to adopt such product-service systems that enhance sustainable development. This project, however, has come to somewhat dissimilar results. We observe that sustainable or potentially sustainable household services are offered by a variety of providers from commercial enterprises or public sector service providers to non-profit organizations. We also introduce a new entrant to the provider arena, namely housing organizations. It appears that housing organizations are in many instances a natural agent to provide or act as an intermediary for Homeservices. Why is that? It is because they bear close proximity to the consumers, i.e. their residents, and hence have the opportunity to provide services directly to their or the premises. This fact, easiness of using services because they can be acquired as easily as products fulfilling the same need, is one of the main conditions for consumers to replace or supplement their product-based consumption with services.

Referring to chapter 1 different Homeservice provider were distinguished. Regarding housing organisations

- Profit-oriented housing organisations
- Non-profit housing organisations
- Local government housing organisations
- Condominium associations

are potential suppliers or intermediaries for Homeservices

To be consistent the same structure was given to the external service providers and the variety of different suppliers is structured into:

- public external service provider (e.g. municipalities)
- non-profit external service provider (private of public organisations that are partly subsidized, partly work with sponsoring or membership fees, but are not profit oriented)
- commercial external service provider

In part one and two the results of the analysis which services are mostly supplied either by housing organisation or by external service providers are summarized. The description follows the services areas and refers to national good practice examples or national particularities. Part three deals with institutional arrangements for both groups of providers, giving examples how the service supply can be fulfilled either by own supply, by co-operations or other ways of recommendation. Part four is the summary of this chapter.

6.1 Homeservices offered by housing organisations

As it was shown in chapter 4, the housing situation differs a lot in the participating countries. Therefore also the role of the housing organisations must be seen from different points of view. Housing organisations can be important providers or intermediaries of Homeservices in all countries, as they represent a central institution for residents to address to.

So before starting with the Homeservice provision by Housing organisations, the role they are playing in the national housing situation is described. As their field of action is closely related to the housing stock and differs strongly according to the local context, it is firstly necessary to determine the structure of the local tenure status. The distinction between rental sector and property gives a first hint on Homeservices potentially provided to tenants respectively proprietors. The following table presents data on the tenure status for one small town and one big city per country as indicated in the according national reports and the CIRIEC Housing Statistics in the European Union 2002 report (p. 34):

Country	Country/ City/ Small town	Owner-occupied dwellings	Rented dwellings	Others
Germany	**Germany**	**42 %**	**58 %**	4 %
	Berlin	23 %	77 %	
	Kleinmachnow	70 %	30 %	
Austria	**Austria**	**56 %**	**41 %**	3 %
	Vienna	17 %	79 %	4 %
	Litschau	90 %	10 %	
Netherlands	**Netherlands**	**52 %**	**48 %**	
	Amsterdam	13 %	87 %	
	Hemstede	63 %	37 %	
Portugal	**Portugal**	**64 %**	**28 %**	8 %
	Lisbon	48 %	52 %	
	Torres Verdes	69 %	31 %	
Finland	**Finland**	**58 %**	**31 %**	11%
	Helsinki	49 %	47%	4 %
	Kouvola	61 %	35 %	4 %
Spain	**Spain**	**82 %**	**12 %**	6 %
	Bilbao	87 %	10 %	3 %
	Zarautz	88 %	8 %	4 %

Figure 6. 1 Housing stock in the EU by tenure status and city/ small town 2002

These figures approve that the size of the city is closely connected to the rate of ownership, as in small towns owner-occupied dwellings outweigh rented dwellings in all countries. Therefore, the situation in German or Austrian small towns resembles rather to the Spanish situation in general than to the situation in Berlin or Vienna. On the opposite, the rate of owner-occupied dwellings in Lisbon and Helsinki is quite similar to the Austrian and Dutch average, although the Finnish and Portuguese averages differ considerably from them. Consequently, conclusions according to housing organisations as Homeservice providers are rather based on the size of a city than on the country.

Still, one cannot deduct appropriate housing organisations from a simple distinction between owner-occupied and rented dwellings, as e.g. rented dwellings include rented condominiums, buildings owned by single individuals and whole building complexes rented by a housing company. Therefore, we determined more precise rates for the case studies distinguishing four different types of housing:

Country	**Austria**		**Germany**[19]		**Nether-lands**		**Spain**		**Finland**		**Portugal**
Small town (ST), Big City (BC)	**ST**	**BC**	**ST**	**BC**	**ST**	**BC**	**ST**	**BC**	**ST**	**BC**	
Social / non-profit housing	17 %	23 %	12 %	30 %	22 %	55 %	0 %	0 %	n.a.	22 %	4 %
Local authority housing	3 %	23 %			0 %	0%	0 %	0 %	8 %	16 %	
Profit-oriented housing organisations	0 %	36 %	4 %	40 %	16 %	30 %	1 %	1%	0 %	0 %	28 %
Condominium associations	7 %	12 %	14 %	21 %	n.a.	n.a.	59 %	77 %	n.a.	n.a.	n.a.
Single individuals/ detached houses	69 %	6 %	62 %	9 %	63 %	15 %	41 %	23 %	n.a.	6 %	68 %

Figure 6. 2 Housing types per national small town and big city

As data on condominium associations is not available in most countries, it is henceforth more target-oriented to distinguish between social housing organisations, profit-oriented housing organisations and property-related housing organisations that relate to single individuals owning condominiums or detached houses. In spite of regional differences and diverse actors per tenure status, national data on owner-occupied, social and private housing can give an overview on the importance of housing organisations for a Homeservice provision for each country. Accordingly, the following table illustrates how national rates of ownership social and private rental housing changed during the last decade

[19] In Germany, social housing is predominantly provided by local authorities. As other social actors are negligible and local authority housing is presently broadly privatised, both categories are summarised.

(Neves 1997, pp. 23-64 and CIRIEC Housing Statistics in the European Union 2002, p. 35, National Reports):[20]

Country	Year	Owner-occupied dwellings	Rented dwellings			Other
			Total	Private	Social	
Germany	1995	38	62	36	26	0
	2002	42	57	39	18	0
Austria	1995	41	45	22	23	14
	2001	56	41	11	30	3
Netherlands	1995	47	53	17	36	0
	2001	52	48	8	40	
Portugal	1995	65	32	28	4	3
Finland	1995	72	25	11	14	3
	2000	58	31	15	16	11
Spain	1995	76	18	16	2	6
	2001	90	10	10	0	0

Figure 6. 3 Housing stock in the EU by tenure status 1995 and 2001

The rate of owner-occupied dwellings increased in all countries except of Finland since 1995. With regard to a further dissemination of Homeservices, it is more target-oriented to address rather one institution caring for several apartments than several single individuals owning each one apartment. As figures on the privately rented dwellings include also single private individuals and owner-occupied dwellings include owners organised in an condominium association, only the portion of the social rental housing can give a hint on single companies that own and manage a certain number of dwellings instead of a single apartment. Consequently, the ascertainable number of single housing organisations servicing a considerable housing stock is negligible in Spain and Portugal. While the portion of social rented dwellings decreased in Germany and Spain, it increased in Finland, the Netherlands and Austria since 1995. In fact, social housing organisations actually already offer a wide range of services in Holland, Germany, Austria and Finland, while their Homeservice offer is negligible in Spain and Portugal. Summing up, social housing companies are relevant Homeservice providers for about 15 % (Finland) to 40 % (Netherlands) of the residents. As privately rented dwellings also include single individuals, further conclusions from this data on potential Homeservice providers are not possible.

The structure of the housing market related to relevant actors

As the rental market predominantly relates to multi-dwelling stock in cities and the customer group of tenants, we expanded our analysis on further actors that are also important for proprietors. In order to define relevant Homeservice providers per country and to detect their Homeservice offer, it is therefore necessary to firstly detect all possible and actual actors on the housing market. The following actor groups[21] per market segment were determined in all national reports:

Social housing organisations:

Social housing organisations serve the subsidised rental market and therefore relate to deprived residents that cannot afford free market rents. According to their funding institutions, social housing organisations can be divided into social or local authority housing companies, cooperatives and foundations.

- **Social housing companies /Local government housing**: Social housing organizations were often founded by federal, state or local authorities in order to fulfil their responsibility of providing dwellings for vulnerable people. Generally speaking, social housing companies are present throughout Europe, although their importance differs strongly from country to country.[22] During the last years, social housing organisations in Finland, Germany, the Netherlands and Austria also gained the possibility to invest in profit-orientated fields like service providing such as management of condominiums or building homes for sale. As the functions of local authority housing are comparable to those of social housing companies in Germany, Spain and Portugal, it is therefore subsumed in this term.

[20] To illustrate changes in the housing market, rates of 1990 were applied when present data was not available.

[21] In this part we introduce further terms to precisely describe the different types of housing organisations. However when continuing only profit /non-profit /local government and condominium associations will be distinguished.

[22] Non-profit/ Municipal housing companies are important Homeservice providers in Germany and the Netherlands, whereas they are relatively unimportant actors in Spain and Portugal.

- **Cooperatives**: Property of cooperatives ranges from one building to whole settlements. The prerequisite to move into cooperative dwellings is to buy a certain cooperative share. Although the shareholders basically have a resident's status, they are involved in important decisions e.g. concerning modernisation measures.
- **Housing foundations**: Housing foundations are mainly founded by Christian institutions or on the base of private individuals' donations. As institutions for public utility, they usually address residents with special needs such as handicapped or single mothers. Housing foundations exist in each of the six countries, but their importance as Homeservice provider is only minor.

Profit-oriented housing organisations:

Private individuals own most of the dwellings and are therefore the most important actors in the housing market. However, they are the most dispersed actor group on the housing market, as their function and importance for Homeservice provision depends on their property. For instance, individuals owning complete building complexes can act like a commercial housing company. As condominium owners are organised in a condominium association, that can act as intermediator for services and their share in the housing market is also important for Homeservice provision if the property is rented.

- **Commercial housing companies**: Most commercial housing companies relate to the profitable housing market. Although, free market housing organisations do not underlie legal restrictions like social housing organisations do, most of them tend to follow as well social aims and goals in order to strengthen customer relationships. Therefore, their service offer often also includes social or environmental services.
- **Condominium associations**: In the case of apartment owners in multi-dwelling buildings, private individuals are obliged to form a condominium association that is in charge of the building management. They can be regarded as profit-oriented housing organisation, if the according

Property-related housing organisations:

Property-related housing organisations are important for owner-occupied housing. Although they are not important for Homeservice provision yet, they are the only housing organisations to address to for proprietors living in their own apartment or detached house.

- **Housing management companies**: Usually not owning dwellings, housing managers manage the stock of private individuals and of condominium associations. Therefore, their importance rises according to the proportion of property in the local housing market.
- **Building promoter**: Building promoters play a dominant role for property in detached housing. Building promoters usually buy and develop building land, raise a building and offer it for purchase. As many homes are built and sold by building promoters, they are relevant facilitators for energy-efficient building facilities on one hand and for construction-based services on the other hand.
- **Real estate agents**: These actors procure tenancies as well as the purchase and sale of property. Real estate agents mainly finance their business by gaining a provision paid by the new resident or the new owner. Although real estates agents have only minor importance regarding Homeservice provision in all countries yet, they can still be important for future proprietors in providing financial services or giving information on local facilities.

Figure 6. 4 The structure of the housing market related to relevant actors

The functions of housing organisations as Homeservice providers

In order to relate Homeservice offers to (potential) providers, the analysis of the housing organisations' field of action revealed that it is important to distinguish rather between the housing organisations' functions than according to their legal status. In all countries, the analysis of these functions results in a main distinction between:

- Construction and maintenance of building facilities and
- Housing management.

The following table illustrates the according functions per type of housing organisation.

Function	Providing housing organisation	
	Social / profit-oriented housing organisations	**Property related housing organisations**
Construction and Maintenance e.g. project development, building equipment, construction and maintenance of physical infrastructure in buildings and environments	Social housing companies Profit-oriented housing companies	Building promoters Real Estate Agents
Housing management e.g. renting or purchase of dwellings, controlling of housing costs, facility management, attending customer relationships, social management	Cooperatives Foundations	Housing managers
Customer group	**Tenants**	**Proprietors**

Figure 6. 5 Functions of housing organisations

Whereas social and profit-oriented housing organisations have in common that they usually own and let their dwellings and therefore serve both functions for their residents, property-related housing organisations generally serve either construction and maintenance or management activities for proprietors. Hereby, building promoters and real estate agents predominantly initiate services by providing adequate building facilities and services before an occupation of a dwelling; housing managers provide services for condominium and detached house proprietors throughout the total occupation of a dwelling. Accordingly, regarding owner-occupied dwellings, building promoters and real estate agents are the most important actors regarding the provision of construction related services, while housing managers focus on maintenance and housing management activities.

Thus, relating to their regional importance, property-related housing organisations are relevant Homeservice providers in housing markets dominated by property development and management – namely in Spain, Portugal and in small towns throughout Europe. Although, they still have a minor importance for Homeservice provision in all countries, they are the main potential intermediaries of Homeservices to address to in settlements that are marked by extended property development activities, as they represent a central institution that is closely related to housing and housing conditions.

Although their profession does not include liabilities and responsibilities of a proprietor, roles and duties of property-related housing organisations resemble those of social and profit-oriented housing companies regarding Homeservice provision. So, for instance, housing managers and social housing companies must inform residents on housing costs and could provide same counselling services on housing related issues. Consequently, the further analysis is based on the functions of housing organisations, referring only to certain actors where appropriate. Chapter 6.1.1 gives an overview on preconditions for Homeservice provision as related to the perspective of housing organisations. In order to detect potentials for a sustainable Homeservice offer, it is furthermore important to distinguish between Homeservices that are part of the usual business of housing organisations and additional service activities. Therefore, analyses of Homeservice offers were structured according to mandatory service activities of housing organisations (chapter 6.1.2), the housing organisations' core business (chapter 6.1.3) and complementary Homeservices (chapter 6.1.4) that are neither mandatory nor part of the core business.

6.1.1 The housing organisations' perspective on Homeservice provision

In all countries, the main precondition for housing organisations regarding a Homeservice supply is that financial investments must be held to a minimum as possible margins are minor in their field of Homeservices and the residents' willingness to pay extra fees is not very high. Therefore, housing organisations tend to prefer Homeservices that entail neither high costs in implementing (high construction intensity) or in the operating phase (personnel). Consequently, incentives for Homeservice provision are rather based on indirect profits for housing organisations.

Accordingly, important goals of Homeservice provision for housing organisations are the support of customer relationships, additional external economies and avoidance of social problems. As only few Homeservices have the potential to raise profits, most housing organisations concentrate on services that support customer relationships as well as on social services in neighbourhoods marked by social and infrastructure deficiencies. Apart from these similar preconditions for housing organisations in all

countries, there are some particularities to realise Sustainable Homeservices under these preconditions:

With regard to Sustainable Homeservice provision, German housing organisations tend to cooperate with NPOs that generally feature more experience with ecological or social services. As the main responsibility for service provision is transferred to the cooperating NPO, housing organisations are able to intermediate a broad range of services to their residents.

In Austria, the most important factor for housing organisations regarding Homeservice provision are comfort benefits for the resident in order to support customer relationships. Therefore, Sustainable Homeservices should entail comfort benefits in order to respond to the residents' demands.

Dutch housing organisations are experimenting with the provision of a wide range of services. In most cases they do not supply these services on their own, but develop various forms of cooperation with existing commercial service providers. Due to small distances between cities within the Netherlands and a high population density, some service providers such as "Lekker Leven" began to concentrate on Homeservices and provide their offer nationwide.

Finnish social housing organizations are interested in increasing their service offer by ICT-applications. If extra personnel are needed for Homeservice provision, the service is generally provided by outsourcing it to other service providers.

Although most Spanish actors do not regard the housing sector as the optimum level for the introduction for Homeservices, housing organisations – mainly building promoters and housing managers – indicate the following opportunities regarding residents' demands: an expected increase in demand due to demographic trends (e.g. ageing of the population, increased awareness and changes in social relations) and due to environmental benefits from service provision (especially in the field of mobility). Moreover, the increasing number of external service suppliers and the professionalisation of housing organizations enhance the transfer of information to the residents and public policies or subsidies may help to promote services with environmental benefits.

Summarizing, the housing organisations' expectations of sustainable Homeservice provision is closely connected to institutional arrangements for Homeservice provision as well to the residents' demands and needs regarding their housing and living conditions.

6.1.2 Mandatory service activities of housing organisations

In all countries, housing organisations are obliged to provide certain Homeservices to their residents. Regarding the function of construction and maintenance, most mandatory service activities of social housing organisations and commercial housing companies as well as those of housing managers and building promoters are similar. For instance, in all countries, all types of housing organisations are required by law to guarantee security in emergency cases as well as maintenance of apartments, building environments and technical installations. In addition, landlords and building promoters are generally obliged to provide additional building facilities in multi-dwelling buildings such as parking lots, storage facilities for bikes and strollers, safety applications (evacuation lighting, fire alarm etc.) and additional leisure time facilities such as playgrounds in Germany, Finland and Austria or common courtyards in Finland.

These requirements entail a number of activities that are not Homeservices for residents in the strict sense, but can be fulfilled more or less service-oriented. So e.g. for safety reasons, housing organisations have to prevent danger in emergency cases by installing evacuation plans or fire alarm installations in big building complexes. They are as well required to provide emergency calls in lifts and a contact for emergencies and to secure a safe access to the apartment e.g. by snow removal. Apart from that, the duty to maintain all building and apartment facilities is related to service activities such as gardening, maintenance of heating, waste, water and electricity installations, as well as building and chimney cleaning. Furthermore, co-operatives and condominium associations, respectively the according housing manager, must organize regular residents' meetings. As mandatory services are closely connected to the function of construction and maintenance, they concentrate on building related service fields (Safety & Security, Care & Supervision, Supply & Disposal). Mandatory services regarding the function of housing management consists basically in providing important information on legal, financial and technical aspects. The following mandatory Homeservices of housing organisations' were detected in the national reports:

Function	Counselling & Information	Safety & Security services	Care & Supervision	Supply & Disposal	
Construction and Maintenance		Evacuation plans Fire alarm installations Emergency call installations Safe access to apartments (snow removal etc.)	Gardening of common grounds Maintenance of common technical installations Building/ chimney cleaning	Maintenance of basic housing infrastructure	relate to fundamental common building facilities
Housing Management	Information of the resident on housing issues/ costs Legal advice Organisation of proprietors' meetings (condominium associations and cooperatives)				relate to fundamental housing issues

Figure 6. 6 Mandatory service activities of housing organisations

In general, social housing organisations, commercial housing companies and housing managers are also obliged to inform residents on basic housing related issues. Related service activities include counselling on technical and financial aspects of the apartment, building and infrastructure. Common means to fulfil this duty are information boards and central emergency telephones.

Moreover, housing organisations in all countries are required by law to secure a transparency on housing costs. Furthermore, Finnish social housing organisations have to organise possibilities for their residents to participate in decision-making and Spanish housing managers must represent condominium associations in legal and fiscal affairs in courts when authorized by the condominium association.

6.1.3 Core business of housing organisations

The core business of housing organisations relates to their function for the resident. Consequently, the building promoter's core business is construction and sale of property, while the housing managers' core business is housing management. As the core business of real estate agents is to intermediate a sale or a tenancy, they also relate to the function of housing management. Social housing organisations and commercial housing companies regard both functions as core business. Although core businesses of social and profit-oriented housing organisations overlap with those of property-related housing organisations, housing companies tend to offer a greater variety of these services than housing managers or building promoters that have only little motivation for diversifying their activity.

In general, service activities related to the core business of housing organisations are closely connected to their mandatory activities. However, core business activities surpass basic mandatory activities by relating to housing in a broader sense while promising additional business benefits. Whereas e.g. the supply and maintenance of common infrastructure for heating, water and sewage is a mandatory activity of a housing organisation, managing additional infrastructure (e.g. Internet access, laundries or common rooms) is regarded as part of the core business.

Furthermore, the analysis revealed that service activities of housing organisations that are part of their core business are closely connected to the according housing infrastructure. Therefore, it is often hardly possible to make clear distinctions between construction measures and service activities. For instance, construction measures for additional building or neighbourhood facilities (e.g. apartments adapted for elderly or energy-efficient building installations) can be supplemented by appropriate Homeservices (e.g. financial or legal counselling), but are rather defined as physical preconditions for service provision than as actual services. As core business activities mainly complement housing conditions, they concentrate on Safety & Security services, Care & Supervision services, Energy supply and Counselling & Information on housing related issues. The following Homeservices that are part of the housing organisations' core business were detected in the national reports:

Function	Counselling & Information	Safety & Security	Care & Supervision	Supply & Disposal	
Construction and Maintenance	Technical information on building facilities Information on and intermediation of additional apartment facilities Counselling on apartment renovation	Adaptation of buildings and apartments to elderly/ handicapped residents Surveillance of building complexes (concierge, janitor, video/ alarm installations etc.)	Supply of additional neighbourhood facilities (common rooms, laundries, sports' facilities etc.)	Additional features for energy supply (controlling of energy supply, energy contracting etc.) Supply of additional media infrastructure (TV, Internet etc.) Pre-purchase activities (administrative procedures, utility contracts etc.)	Relate to private/ additional common facilities
Housing management	Additional information on energy supply Counselling on housing related insurances Counselling debts' reduction Participation Mediation		Renting, cleaning etc. of common facilities Personal building care and supervision (janitor, concierge etc.)		Relate to general housing conditions

Figure 6. 7 Service activities as part of the core business of housing organisations

In all countries, housing organisations began to expand their core business activities by additional service offers in order to strengthen customer relationships. In spite of many overlaps, core business related service activities in particular depend on whether the function of the housing organisation relates to construction and maintenance or housing management.

The function of construction and maintenance

All housing organisations consider equipment and maintenance of physical facilities as part of their central core business. Hereby, tasks and duties of social and profit-oriented housing organisations are equivalent to those of building promoters regarding construction and to those of housing managers regarding maintenance.

With regard to services relating to additional building or neighbourhood infrastructure, it must be taken into account that the service activity field of housing organisations is determined by the existence of such facilities (apartments adapted to elderly and handicapped, swimming pools, concierge rooms, meeting rooms, etc.). These types of facilities are not very common for property-related housing organisations, but increasingly important for social or profit-oriented housing organisations. Differences in the actual service provision may derive from the distinction between multi-dwelling and detached housing as well as from local particularities, for example the impact of tourism, which leads to the provision of a greater number of services related to swimming pools, tennis courts, etc in Zarautz than in industrial Bilbao. The situation in Portugal is reversed: Lisbon as a big city has a greater number of luxurious apartments with a wide range of common facilities available than the small-town of Torres Vedras.

Maintenance related core business activities are mainly based on creating and maintaining according infrastructure, such as special equipment of apartments or surroundings as well as technical installations such as video surveillance or the supply of cable TV and Internet. Moreover, common additional features for apartments are special applications for handicapped or elderly, whereas common additional neighbourhood facilities are residents' gardens, sports' facilities and common rooms. Regarding maintenance related core business services, housing organisations in the Netherlands, Germany and Finland tend to found subsidiary maintenance companies or to outsource maintenance activities to specialized commercial maintenance companies.

The function of housing management

Housing organisations regard marketing and communication services e.g. via residents' newspapers, residents' meetings or information on the organisation's homepage as part of their core business. Further marketing and communication activities include all aspects of sale and renting of dwellings, mediation between residents in case of conflicts and participation measures. Another important tasks of housing organisations in the field of marketing and information is moreover to procure tenancies or

property sales. A further important marketing and communication activity of housing organisations is counselling on housing related issues, such as insurances or legal aspects of housing.

Furthermore, information on energy supply has become an important core business related activity of housing organisations, as housing costs increased in all countries during the last decades. Therefore, landlords and housing managers in all countries began to expand their maintenance activities e.g. by counselling on energy and resource consumption.

Housing management activities as part of the core business moreover comprises the management of individual and common facilities such as renting, cleaning and supervision of apartments, common rooms, tenants' gardens or sports' facilities. Although not mandatory, it is common for housing organisations to employ a janitor or concierge in order to provide a local contact person to take care of these facilities.

6.1.4 Complementary Homeservices of housing organisations

Distinctions between core business and complementary service activities are ambiguous and depend on the national situation: Whereas e.g. a Spanish housing manager may not regard counselling on operating costs as complementary services, German housing companies assume it as nearly mandatory or at least as part of the core business. However, still conscious of national differences, it is helpful to define complementary services as services that are not part of the usual core business of the according housing organisation. Moreover, complementary Homeservices rather relate to the residents' demands than to substantial needs that are served by the housing organisations' core business. Still, in case of providing complementary Homeservices directly to the resident, housing organisations in general prefer those related to the core business, as they feature the according knowledge and experience.

Service mentality has gained importance in the housing sector during the last years in all countries and there are plenty of projects to explore new fields such as services for elderly, residents' parties or multimedia appliances. [23] Therefore, complementary Homeservices span from social services such as counselling or leisure time activities to technical services like renovation services or removal support. The following table illustrates examples of complementary services provided by housing organisations:

Function and provider	**Counselling & Information**	**Leisure Time Activities**	**Repairs**	**Mobility & delivery**	**Safety & Security**	**Care & Supervision**
Construction and Maintenance			Apartment Renovation, Workshop room Repair service for household devices			
Housing management	Information on local infrastructure Counselling on debts' reduction	Parties/ get-togethers Day-trips Internet course Ticket sale		Car-Sharing Delivery of products Messenger services	Emergency call for elderly	Health care for elderly Youth centre
	Local reference		**Service provision at home**			

Figure 6. 8 Complementary service activities of housing organisations

An important field of complementary Homeservices is counselling on social, financial or ecological issues: While financial and personal investments are considerable, counselling services can have important effects on the housing company's or manager's marketing aims and goals. Further examples

[23] Some Finnish, German, Austrian and Dutch housing companies state that their business changed from mere providers of dwelling to providers of housing or "living arrangements".

of services promoting customer relationships relate to leisure time activities such as organising day-trips or the sale of discount tickets for cultural events and public transport.

Complementary services offered by particularly social housing organisations were furthermore established to respond on social tendencies such as increasing social disparities or the ageing of society. As particularly social housing organisations face concentrations of old, poor and foreign residents in their stock, they started several initiatives to support integrative activities in neighbourhoods. Apart from participating in neighbourhood renewal strategies, social housing organisations also often establish services exclusively for their residents, e.g. mediation in case of conflicts.

Complementary Homeservices provided by housing organisations span from Leisure Time Activities for elderly, children and youth to individual aid such as debts' counselling or mediation. This field is quite dispersed, but gains an increasing importance due to demographic and socio-economic trends like the ageing population or the social polarisation in cities. Apart from some similarities, housing organisations also show different reactions on these trends in each country:

German housing companies generally provide sophisticated social services e.g. continuous care taking of elderly or disabled residents in co-operation with local NGOs or social services. In this case, the landlord merely intermediates services such as "meals on wheels", shopping delivery, visiting services or home care.

In Finland local authorities are obliged by law to provide social services such as child and elderly care or meals-on-wheals. However, municipalities increasingly procure these services from private service firms or non-profit organizations. Because of that, there is little room for housing organizations in this field.

Consistent with the fact that the importance of social housing organisations and the according provision of Homeservices is very limited in Spain and Portugal, the provision of complementary social Homeservices is even more limited. Still, residents show a certain demand for social services due to demographic changes.

In the Netherlands housing organisations are experimenting with the supply of complementary services. They are predominantly developing subsidiaries to improve their image of a service provider and adapt their organisation to the specific requirements for the supply of services. By creating these organisations, they avoid conflict of interest between their roles as owner and facility manager. Such a subsidiary is for example the company "Goed Geregeld" that offers a complete home-care-service bundle to residents ageing 55 or older.

Complementary service activities of housing organisations actually represent the essential idea of Homeservices and have moreover the best potential for an optimisation according to sustainable development goals, as they basically already often relate to ecological or social aspects.

6.1.5 Conclusion: Homeservices offered by housing organisations

Regarding housing organisations as Homeservice providers, we firstly have to distinguish social, profit-oriented and property-oriented housing organisations in order to detect the according customership. Thereby, social and profit-oriented housing organisations relate to tenants, while property-related housing organisations relate to proprietors of condominiums or detached houses. The analysis revealed that the dissemination of Homeservices can be promoted by a central institution for residents to address to. So, social housing organisations, profit-oriented housing companies and condominium associations managed by a housing manager show best potentials for expanding Homeservice provision. As these housing organisations predominantly relate to residents living in multi-dwelling buildings and particularly to tenants, introducing Homeservices via a housing organisation would firstly address this customer group. However, property-related housing organisations could also act as intermediaries of a still restricted number of Homeservices for proprietors of detached houses.

Core business related service activities of housing organisations support usual business activities, while complementary service offers basically respond to needs demands of the residents and therefore contribute only indirectly to the core business through better customer relationships or an increased value of their housing stock. Mandatory services are part of the core business. Consequently, mandatory and core business related services of housing organisations are found in service fields important for the housing organisation (Safety & Security, Building Care & Supervision,

Supply & Disposal), while complementary services relate to all fields privately relevant for residents (Personal Safety & Security/ Care & Supervision/ Mobility & Delivery/ Repair & Renovation). Information & Counselling services are mandatory or part of the core business as long as they relate to housing issues on one hand. On the other hand, they are a complementary activity of housing organisations when relating to general issues. The following table illustrates these tendencies:

Function	**Construction & Maintenance**		**Housing management**	
Potential Providers	All social and profit-oriented housing organisations	Profit-oriented housing organisations: Building promoter, Real estate agent	All social and profit-oriented housing organisations	Profit-oriented housing organisations: Housing manager
Resident group	Residents	Proprietors	Residents	Proprietors
Mandatory Service fields	Care & Supervision services Supply & Disposal services Safety & Security services } for common building facilities		Information & Counselling on fundamental housing issues (housing costs, legal issues)	
Core business service fields	Care & Supervision services Safety & Security services Supply & Disposal services } for private/ additional common facilities		Information & Counselling on general housing issues (reduction of resource consumption, participation, mediation)	
Complementary service fields	Personal Repair & Renovation services at home		Local Information & Counselling on general issues (financial, entertainment, support for initiatives etc.) Local Leisure Time Activities Personal Care & Supervision services at home Personal Safety & Security services at home Personal Mobility & Delivery services at home	

Figure 6. 9 Functions, customers and service fields of housing organisations

6.2 Homeservices offered by external service providers

Homeservice supply is not only restricted to housing organisations. There are a lot of external service providers that offer a great variety of different services to residents. Within the group of external service providers three types of provider can be distinguished:

- Public service providers (from the municipality or regional government)
- Non profit organisations (most of them private, partly subsidized by public authorities)
- Commercial service providers

Public providers are institutions that are either completely part of the local administration or preponderantly owned by the municipality. As public administration is undergoing decentralisation processes in all countries, the variety of public services providers expanded during the last decades and new forms of Public-Private-Partnerships expanded in order to optimise their public mission of creating adequate living conditions for the whole population.

In the project analyses, non-profit service providers (NPO) were classified as NGOs[24] that do not gain profits. Although not part of a public institution, they often receive public subsidies in addition to private funding. As their funding is dependent on their corporate aims and goals, non-profit service providers predominantly serve fields of public utility such as counselling on social and ecological issues or non-profit leisure time activities. In contrast to public or commercial providers, the main characteristic of non-profit service providers is that they are mainly independent from political decisions or free market conditions.

Finally, commercial Homeservice providers are all kinds of private enterprises offering a broad range of services. However, they distinguish from general service providers in offering services that relate to housing conditions. Therefore, they represent a quite restricted section in the total service market and according companies are mostly small and medium enterprises. In contrast to non-profit providers (NPOs and public authorities), commercial providers focus on specialised services promising financial profits.

In all analysed countries, there are certain trends regarding the service offer of external service providers. So for instance, public providers often focus on Counselling & Information services as well

[24] According to the Webster Online Dictionary, a Non-Governmental Organization (NGO) is an organization which is independent from governments and their policies. Because of this negative definition, (the implication that an NGO is anything that is not government), many NGOs prefer the term Private voluntary organization (PVO).

as on Care & Supervision and Supply & Disposal services. This is partly due to the fact that in most countries, local authorities are responsible for basic water and energy supply as well as waste disposal or care and health that entail a wide range of related services typically supplied by public service providers.

Another commonly seen trend was that until recently municipalities have produced most of the services in their own organisation but the market structure is changing. Municipalities are procuring more services from NPOs and commercial service providers. In Finland the commercial care service providers sell most of their offer to the public social services, provided mainly by local governments, but the household market for home and care services is starting to expand. Similarly, providing public infrastructure and urban equipment (lanes, parking lots, cultural and sports centres, etc.) is managed by the public authorities, but the provision of these services depends largely on the municipality's financial means and on financing from other administrative levels. Subcontracting these services to specialized private providers is a very common procedure in Spain as well as in Portugal.

Most of the companies at the real estate and traditional home service field are small. According to Finnish Business Register[25] for example at field of real estate services 85% and at branch of home services, 76% of the establishments had less than 5 employees. This seems to be similar also in other countries as lot of these companies are operating in niches markets.

Regarding the differences between the surveyed cities and towns, one can say that the service offer diminishes with the down going number of inhabitants and thus potential costumers. However national differences have been detected in the variety of services that are offered in smaller towns. Whereas on one hand in some countries like Germany the surveyed town is some kind if a "service-desert", meaning that there are only very few single services offered, on the other hand, for example in Austria, also in the small town a great number of different services are offered, however in most case there is only one provider. So the costumer has not opportunity to choose but must accept their offer.

6.2.1 Homeservices offered by public providers

Public providers supply services that fulfil the basic needs like water, energy, and social services, even though some of these services may require a lot of personnel and high labour costs and therefore cannot be provided profitably by commercial service providers. Hence, public providers will often be found in the service areas Supply & Disposal Counselling & Information and Care & Supervision. Services from the area Leisure Time Activity are e.g. rooms that can be rented for various events. As these rooms are often situated in schools, the public authorities as the responsible school manager can easily rent them out other services, like the waste management, are legal obligations to the public authorities.

Another focus of services is in the area Counselling & Information. Providing information on specific issues requires the knowledge of different information sources and networks. So it seems easily understandable that public providers focus on those services, because they unite a lot of different specialists in their administration.

However, there is a significant trend to outsource these services. In Austria for example the Viennese government transformed the former public energy and traffic supplier into two commercialised companies that however still are owned by the municipality. The advantage for the municipality is that these companies do not get subsidies any more, but must work profit oriented. Public providers generally concentrate on mandatory services such as water supply and waste management, health care and certain Homeservices for elderly and disabled people. From that enumeration it turns out clearly that mandatory services differ a lot throughout the participating countries. Running through the different services areas one can detect the highest number of mandatory services in the area Supply & Disposal. It often includes water supply and waste management. For example in Austria water supply as well as waste and sewage management is regulated by federal law. Waste management and any activity for pollution prevention are carried out by one particular department of the municipal administration. Water is supplied by the Viennese Waterworks, which are part of the Viennese City Works. Additionally, water supply is by law excluded from earning profit for any company (private or public).

[25] Statistics Finland and Tax administration, printout 28th Nov. 2001

Another service area containing mandatory services that are provided by public authorities is Care & Supervision. An example is Finland, where municipalities are legally obliged to provide social services that can be considered as Homeservices, such as meal service, transportation for disabled and handicapped people, shopping assistance, home nursing, care services, emergency telephone, and several more. Municipalities can decide by themselves how they organise these services (direct supply, outsourcing by public procurement, public-private partnership). These services are not free and the income of the person who is applying for the service and the amount/quality of the service needed effects on the fee. In other countries, mandatory Care & Supervision service of public authorities are merely restricted to the provision of a basic care for all residents' groups. In Germany for instance, only 10% of beds in nursing homes are provided by public carriers[26], although it is a public mission to provide adequate shelters for all people

Throughout all of Europe a general trend is the growing demand for care and Homeservices, because of the ageing population; however the resources for the services are not expanding any more (places in the hospitals, personnel, and budget). Therefore the service efficiency must be increased.

That means the there are different ways to fulfil this goal. One is that Homeservices are outsourced to NPOs; they receive subsidies from local authorities or private institutions. In some cases they are involved in re-employment projects that offer long-time unemployed people to re-enter the job market. By this means, costs for services provision can be reduced.

Some housing organisations set up subsidiary companies or cooperate with external companies (Lekker Leven) that focus on intermediary services between the resident and the provision of services by external service providers. Examples of subsidiary companies are 'Proliving' of the housing organisation Patrimonium and 'Lekker Leven' that organise the supply for housing organisation De Key. These companies supply services that are complementary to the core business of housing organisations and are supplied by a various external service providers.

Finally it can be concluded that public authorities in the future act more as intermediaries to service supply and are less involved to in the service supply as such.

6.2.2 Homeservices offered by non-profit organisations

Non-profit organisations mostly provide services with a certain mission statement in mind. Often these mission statements involve employing low-skilled or disadvantaged workforce and less sophisticated and expensive technological infrastructure. Many of the non-profit organisations concentrate their services supply in the service areas Counselling *& Information, Care & Supervision* and *Leisure Time Activities*.

The service offer is often linked with labour market stimulating measures. This leads to a double positive effect. The NPO clients profit from the service supply and the NPO employees profit from the opportunity to re-enter the regular job market.

On the other hand, services that are offered by non-profit organisations can in some cases also be easily provided by neighbourhood help or by illegal work. Due to the fact that labour costs are very high, people tend to save money by preferring the "black market", and also not all unemployed are interested in giving up their "income". It also should be secured that NPOs' service offer does not compete neighbourhood help and by that burden the development of a good neighbourhood and housing community. Non-profit organisations mostly focus on services that demand a high amount of human resource especially in the service areas Care *& Supervision* and *Leisure Time Activities*. Related tasks can easily be performed by interns, part-time employees, civil servants, and volunteers. These jobs often require a social engagement that goes beyond that of a regular job, e.g. the Equal project in Austria and Finland and the Neuraum GmbH in Germany.

Whereas in the other countries certain focuses have been remarked Germany shows a particular situation. There the non profit organisations are the most important actors for the dissemination of sustainable Homeservices as they complement the whole range of services that are demanded by the public but do not promise political or commercial profit.

[26] (Statistisches Jahrbuch 2003, S. 484).

Sometimes similar services are offered by all three groups of external service providers. For instance in Germany, 55 % of the nursing homes are provided by non-profit organisations, while 10 % are provided by public providers and 35 % by commercial providers[27]. However they address to different customers.

Going through the service areas it turns out clearly that in most of the countries the focus in services offer is in Counselling & Information and Care & Supervision.

In Finland for example, non-profit organisations concentrate on, Care services like shopping and home assistance, cleaning, etc. but also social and recreational aspects of the Long List of Services. The reason for this might be that these services do not need expensive technical and financial investments and therefore are perhaps easier to organise by only few professionals and volunteers working for these organisations.

In Spain the non-profit organisations perform two separate functions within the housing sector. Firstly, they provide certain counselling, social and health services at home, and also organize social and cultural activities for socially disadvantaged groups or try to prevent social exclusion. Secondly, they help these groups to recover social stability through education, special job offers and programs for self-employment within the social economy.

To conclude one can cluster the main services that are provided by NPOs in all surveyed countries according to the service areas.

Counselling & Information	Care & Supervision	Leisure Time Activities	Repairs	Mobility & Delivery	Supply & Disposal
Environmental counselling: waste, detergents, gardening	Maintenance of the building (cleaning, gardening), of individual flats and personal services for children, the elderly, the handicapped, as well a health services	Social activities for young and elder people	Repairs, particular of household appliances	Home delivery	Collection of domestic waste and used products such as clothes, furniture, etc.
Counselling on social questions		Organisation of markets			
Information on subsidies for public housing					

Figure 6.10 Main services provided by non profit organisations.

Regarding a sustainable organisation of service provision, NPOs seem to be characterized by alternative employment structures based on mutual aid, public employment programmes or voluntary work. This is due to their restricted budget on the one hand and due to their social corporate aims on the other hand. Therefore, according service offers generally consist of simple tasks that do not require a certain specialization to be performed by interns, part-time employees, civil servants, and volunteers. Again, these employment opportunities are particularly found in the service areas Counselling & Information, Care & Supervision and Leisure Time Activities. However, when the NPOs benefits for a sustainable development predominantly relate to organisational aspects (e.g. environmental friendly transport of goods or employment measures), they can serve a wide range of services and consequently each service area.

6.2.3. Homeservices offered by commercial providers

[27] (Statistisches Jahrbuch 2003, S. 484)

The spectrum of Homeservices offered by commercial providers is rather broad but is limited to profitable Homeservices. Therefore it is not possible to stick with the running of the previous parts of this chapter to discuss the services offer more or less per service area. Instead the services supply by commercial providers will be described by country as to many national particularities hinder an effective comparison.

In order to gain customers, they generally compete with other providers in fulfilling customer demands. In all countries, this results in two different strategies: Specialisation and diversification of the service offer. Commercial service providers choose the strategy to specialise their service offer particularly in markets with a demand for highly sophisticated services, which predominantly exists in big cities. Apart from that, some Homeservices such as technical services or particular health services demand a certain specialised know-how. As the demand for these services is often only temporarily relevant, e.g. during the construction of a building or in case of illness, commercial service providers also act on the regional level in order to serve less dense regions as well. Hereby, specialised service providers are often small and medium enterprises. The Finnish Business Register[28] for example states that 85% of all Finnish real estate service providers and 76% of all Homeservice providers have less than 5 employees. Another example is the Dutch company "Lekker Leven" that concentrated on Homeservice provision. However, "Lekker Leven" is only able to act nationwide, because the Netherlands has an area-wide dense population and can be considered in most parts as a big metropolitan area. However, some of these specialised commercial service companies like "Lekker Leven" were outsourced as service companies from another service branch.

In Austria there is no evident specialisation in any service area. In Vienna, most of the commercial service providers are just service companies while in the towns the service is often an additional offer to support the core company activity. That is easy to understand: offering just services in a small community in most cases would not work because there are too little potential clients. Hence, commercial providers always have to have different fields of action. It is difficult for commercial providers to enter markets in which there already are existing providers that receive public aid. These markets show large price differences between the two types of provider, which makes it difficult for the commercial provider to survive.

In Finland commercial providers are working in the same areas with public service providers and NPOs such as shopping service, nursing, and cleaning, offering their services for both institutional customers (local and other public authorities) and households. Recently, commercial service providers that have traditionally offered cleaning, laundry and real services have broadened their services from estate management to personal care (e.g. nursing, shopping assistance). The presumed reason is the restructuring of public sectors social tasks. They procure or outsource more services. Reason for this is that the spending on public services is being cut down.

One of the most important private sector service areas is the real estate and facilities management. As stated earlier the real estate management and administration services are mainly outsourced and privatised in Finland. Real estate services are also expected to expand due to the fact that municipalities are also starting to outsource their facilities management services the same way as cleaning services have already been procured for some time.

So far there has been some co-operation between companies and non-profit organisations in home and care services, for example in tutored homes[29] in the way that the NPO owns the facilities and the company takes care of some services (maintenance, care taking, cleaning, etc.). Development of co-operation and co-operative service models may be difficult due to competition between companies and organisations in the field of public procurement.

In Spain the companies dedicated to Integrated Building Maintenance mainly centre their activity on the maintenance of the building's common elements, but generally do not offer their services, from cleaning to the maintenance of electrical installations, waste management to individual residents. Social Homeservice companies, in turn, do offer their social services to residents, but do not take on maintenance works in the building. Although both activities are rather recent, they can be attributed to

[28] Statistics Finland and Tax administration, printout 28th Nov. 2001

[29] Tutored homes offer their most often elderly residents a mixture of medical care and support in daily life and personal freedom. They are not forced to stay in a particular residence for elderly, but live in specially equipped apartments in groups of three or four and manage the everyday life as good as possible. A nurse and a household help shows up every day to support and secure the elderly.

the growing tendency of externalising services and of concentrating them in one single company. In both cases, medium and long-term perspectives regarding their evolution are optimistic, as demographic factors such as the ageing of the population, the integration of women in the labour market, and the increase of income levels could push private initiative ahead.

The service areas of Repairs, Mobility & Delivery services, Care & Supervision and special services like care of animals, catering and financial counselling are the least popular among the commercial service providers. However, some of the largest companies are now starting to enter these markets, especially catering, delivery services and repairs. Hindrances for companies are the lack of demand (most visible in pet care, car-sharing and car-pooling), lack of competence in fields covered by the public administration (transport, parking lots) and the direct provision of these services by other providers.

In Portugal there is a strong representation of commercial providers in all service areas. Commercial services are well developed, even in social areas, traditionally provided by public providers, such as health. The only service area where a sharing of responsibilities actually exists is related with social assistance services, provided by public providers and non profit organisation, (like, for instance, fireman organisations. Examples are dedicated phone help lines (paediatrics information, AIDS, drugs, poisoning, domestic violence, child abuse, etc.), medical care and appropriate living conditions for elderly and handicapped. In general, there is a wider range of services in big cities than in small cities. In small cities there is a lack of specialised services (for instance renting services), ICT related services and also some social.

From the above examples one can deduct that regarding commercial providers no common trend can be found. On the contrary, a lot of national economic particularities influence the companies' strategies and plans. This is indeed a surprising result because within the other types of service suppliers, common European trends were easily detectable.

6.2.3 Conclusion on Homeservices offered by external providers

The survey made clear that nearly every Homeservice can be provided by an external service provider. However due to external, most often economic factors, many of them particular public providers and NPOs focus only on some service areas.

For most of the external service provider the service supply is the core business. This is reasonable from an economic perspective, as the provider does not get much benefit from only being an intermediary. However, in some countries as the municipalities are outsourcing a lot of services there has been a significant switch in the services offer from public to NPO or commercial providers.

It is obvious that external service providers cannot offer services that require extensive space or technical infrastructure in the building unless they work together with a housing organisation during the planning and construction phase of the building.

The service areas Counselling & Information and Care & Supervision usually are provided by non-profit organisations and public providers, infrastructure and construction measures fall into the domain of the housing organisations. Commercial external service providers are often found in mobility or security services that demand more technical equipment than working hours. However, due to the fact that public and non-profit external service providers often get subsidies for their employees, it is easier for them to provide more labour intensive services.

While for example in Germany and Finland there is as significantly reduced service offer in the small towns, and the opposite was detected in Austria and Spain. In the Finish town, Kouvola, the number of extended/non mandatory services provided by the municipality and local government housing company is lower; also the variety of external service provision is smaller than in Helsinki.

The difference between big cities and small towns is related to factors that cannot be easily influenced by political and economic decisions. It is due to the smaller number of residents and thus of potential clients, that there are less external service providers in small towns. Particularly surveys in small towns in Austria made clear, that also in cities with very few residents, all types of external service providers (commercial, non-profit, public) are necessary to provide the full range of Homeservices. However, this difference concerns the number of service providers, but not the number of services. It

means that also in small towns a similar service offer exists like in big cities, but for one service there might only be one provider instead of five different providers in the city.

This again is contrary to the Spanish situation where differences in service provision between the large city and the small town mainly refer to the quality and number of services provided by the public administration, since the financial means of the local administration depends on the number of inhabitants. Also, the network of commercial service providers is much more complete in the city, as the market is larger. Likewise, NPOs are more numerous in the city, although a considerable number do not operate on city, but on regional level.

Although the Homeservice market served by external providers is more dispersed than the market served by housing organisations, there are certain trends regarding the service offer of external service providers in the analysed countries. For instance, as local authorities are responsible for basic water and energy supply and waste disposal as well as for health care and these services entail a wide range of according services, public providers focus on Counselling & Information services as well as on Care & Supervision and Supply & Disposal services. In contrast, NPOs and commercial providers are not obliged to fulfil a certain service offer and therefore serve a broader range of service fields. Still, non-profit providers are often dependent on public subsidies and therefore in general concentrate on services that fulfil a certain public aim such as counselling on ecological housing or on social issues. Finally, commercial Homeservice providers rather focus on specialised services promising financial profits. They distinguish from general service providers in offering services that relate to housing conditions or that are offered on-site.

In all countries, the Homeservice market is presently undergoing a change process due to decentralisation strategies of public institutions. Whereas public providers tended to directly provide most of their services in the last decades, they recently began to outsource services to or cooperate with NPOs and commercial service providers. So, subcontracting specialized private providers for initially public services is already a common procedure in all countries.

Apart from that, the commercial Homeservice market is characterised by either specialisation or diversification strategies. This leads to all-round service companies on the one hand and to professional specialists in one service on the other hand. In all countries, generalists tend to serve markets in regions with a low population density, while specialisation tends to occur in big cities. Likewise, NPOs that often serve niche markets are more numerous in the city, although a considerable number do not operate on city, but on regional level.

The task-sharing of all groups of external providers is most evident in the social service sector and partly also in counselling on ecological issues, namely in the service fields of Information & Counselling, Care & Supervision, Leisure Time Activities. However, each type of provider refers to other customer groups. The common tendency is that services of public and non-profit providers are also affordable for low income residents, while commercial providers offer a profitable equivalent.

6.3 Institutional arrangements for Homeservice provision

The following table illustrates possible institutional arrangements for a Homeservice supply:

Direct supply by Homeservice provider		**Cooperation of housing organisation and external provider**		**Residents' involvement**	
Direct supply	Outsourcing	Co-production	Recommendation	Organised by service supplier	Organised by residents
Centralised, e.g. information and counselling	Third Party, e.g. gardening, maintenance	Contracted partners e.g. with energy suppliers	Recommendation of local service providers e.g. shopping delivery	Provision of premises, gardens etc.	Residents meetings, parties etc.
Decentralised e.g. concierge, janitor	Associated organisation e.g. insurance company	Non-contracted partners e.g. local energy consultants	Sale of products e.g. public transport tickets	Organisation of residents activities e.g. renovation	Swap shops, barter rings etc.

Figure 6.11 Institutional arrangements of homeservice provision

Direct supply

Housing organisations, NPOs, public authorities and commercial service providers have the possibility to provide Homeservices directly by an internal central or decentralised institution or to outsource them to an independent external or associated organisation. The exclusive supply of Homeservices is the main term of supply for commercial service providers. Housing organisations prefer a direct supply only when the service is closely related to their core business.

Cooperation
In case of cooperation, the service provider can choose between either co-production or recommendation of cooperation partners respectively their products. In the case of co-production, the cooperation is generally based on a contract or an informal agreement between the partners. It is predominantly relevant for services that are dependent on a long-term use and on a considerable trust between service provider and consumer, e.g. home care, car sharing or supervision of children. Furthermore, housing organisations recommend services in order to meet specific residents' demands or to complement infrastructure deficiencies. In the case of recommendations, housing organisations gain minor profits from the cooperation by low investments, while a co-production is profitable for both partners. In general, external service providers only recommend services, when their field of action is related to information and counselling.

Residents' involvement
Housing organisations can involve their residents in the service provision by transferring certain tasks to them (e.g. managing common rooms) or by initialising services completely conducted by the residents (e.g. swap shops). Particularly housing co-operatives traditionally involve their residents in common activities and services. NPOs and public providers often integrate residents in their service provision, as their personal and financial resources are restricted. Initiating mutual aid is therefore often their only mean to provide services that fulfil existential needs for people who cannot afford to pay for services. Due to their specialisation, commercial Homeservice providers do generally not involve residents in service provision.

6.3.1 Institutional arrangements for Homeservice provision by housing organisations

An important determinant for a Homeservice supply is potential providers on the housing market. While main Homeservice providers on rental markets are cooperatives, as well as social and profit-oriented housing companies, housing managers are the most important actors for Homeservice provision on property dominated housing markets. Although other actors such as building promoters or foundations can also act as Homeservice providers, the following analysis concentrates on those housing organisations that are relevant for a critical mass of residents on a long-term.

By analysing institutional arrangements for complementary Homeservices, it must be taken into account that they differ considerably from one provider to another, as they generally do not represent the core business of the housing company. Consequently, each housing organisation develops own strategies for service development and management. In all countries, the most important precondition for a Homeservice provision by housing organisations is that financial and personal investments are held to a minimum as capacities of housing organisations are quite limited – particularly in cities that are marked by high vacancy rates.

Homeservices that are dependent on additional building facilities do not continually require extensive personal and financial investments, as they mainly consist of the basic management (renting, maintenance etc.) and counselling on this infrastructure. Although initial investments and ecological impacts are high, services based on additional building facilities (such as swimming-pools or common rooms) are quite popular and considerably contribute to cohesive neighbourhoods.

In conclusion, housing organisations have to plan the term of supply of Homeservices according to their spatial, personal and financial resources. In case of co-operation or residents involvement, they furthermore have to negotiate service conditions with the relevant partners in order to secure a constant Homeservice offer. Institutional arrangements basically depend on the type of service: While an exclusive supply is preferred for Homeservices closely related to housing, cooperation is the main institutional arrangement for services only distantly related to housing. Finally, residents' involvement is initiated for rather simple services that do require considerable personal resources or for services that aim to integrate deprived residents on the job market.

Direct supply

Housing companies, cooperatives and managers prefer to supply directly Homeservices that are close to their core business and consequently refer to housing conditions and environments. They also tend to outsource some of those activities to maintenance firms or subsidiaries if possible. An exclusive Homeservice supply promises best social, ecological and economic benefits for the provider on one hand, but also entails most responsibilities and expenses for the service provision on the other hand. A typical example for a direct supply is information and counselling services on housing issues or the organisation of residents' get-togethers.

Cooperation
As complementary services that are only distantly related to housing often demand additional external professional experience, housing companies prefer to cooperate with NPOs, local authorities or commercial providers. Intermediating services of external service providers promise to fulfil the resident's needs by a minimum of effort, so housing organisations are able to offer a wide range of Homeservices. Hereby, housing companies differ considerably from housing managers regarding the provision of Homeservices that are only distantly related to housing. While housing managers showed only a minor interest in those services yet, housing companies and cooperatives particularly in the Netherlands, Germany and Austria already began to use the provision of various Homeservices as marketing instrument to support customer relationships. Examples for Homeservices provided by cooperation are gardening services or additional help for e.g. elderly residents.

Residents' involvement
With regard to social or community services based on residents' involvement, it is obvious that particularly communities of tenants and cooperative members are the targets of housing organisations activities. Still, condominium associations are also an interesting customer group for services that are based on common engagement as some examples from Finland illustrate. Therefore, with regard to the importance of property dominated markets, housing managers could play an increasing role in initiating mutual aid in future. Residents' involvement is common for community services such as swap shops or activities in neighbourhood centres.

6.3.2 Institutional arrangements for service provision of external providers

External service providers such as NPOs, public and commercial providers are only considered as Homeservice providers, if their services are locally available and relate to housing or housing conditions. As their service offer basically differs not imperatively from that of common service providers relating to housing, they mainly distinguish from them regarding the institutional arrangement that determines the local reference. Therefore the institutional arrangement is crucial for service providers to be regarded as Homeservice suppliers. Hereby, the size, service area and the location (big city or town) of the service provider basically determines the institutional arrangement, as e.g. an exclusive supply requires a critical mass of customers, while residents' involvement requires engaged residents to participate.

Direct supply
Regarding an exclusive direct service supply, the local reference can be either based on delivery, home visits or local branches in certain housing estates. NPOs, public or commercial providers that provide mobile or delivery services must call additional attention to residents, as they are not present on site. Therefore, expanded marketing strategies to inform potential customers are essential for them. Possible distribution channels are e.g. web presences or local advertisements. Another measure to establish a local reference is to found local branches such as neighbourhood service agencies. Although this kind of local presence constructively supports the provision of Homeservices, it is also entails considerable personal and financial expenses. Therefore, particularly big commercial service providers acting in big estates that offer profitable services could afford this investment. Still, NPOs and public providers can also realise such local branches by resorting to existing resources such as local authority premises or non-profit neighbourhood institutions.

Cooperation
The most obvious way for external service providers to link their service offer to a local reference is to cooperate with housing organisations that already present the contact to a certain local customer group. Hereby, the according NPO, public or commercial provider benefits from a direct link to residents that allow concentrated marketing strategies in order to expand their customership. Moreover, providing their service offer via an housing organisation, external service providers can profit from information exchange regarding housing related issues such as on certain demands of residents due to infrastructural deficiencies or building conditions. While NPOs and public providers

aim to reach certain customer groups (e.g. “ecological milieus”, deprived residents etc.) by cooperating with a housing organisation, commercial service suppliers intend to expand their market. In case of small and medium enterprises, Homeservice providers also tend to collaborate or act in association with other service providers in order to condense their capacities.

Residents’ involvement
Service providers particularly resort to mutual aid, when financial and personal expenses must be held to a minimum. Therefore, NPOs and public providers are often dependent on residents’ voluntary engagement to provide a certain service offer. Moreover, particularly social and community services moreover originally aim to stimulate local capacities by initiating a long-term participation in service provision. Apart from that, services based on residents’ involvement aim to integrate deprived resident groups such as long-term unemployed or migrants. In this case, the employment measure can also consist of the provision of technical services in order to qualify the according resident. As residents’ involvement is based on voluntary engagement, preconditions for this institutional arrangement are capacities of residents on one hand and a structured organisation of the participation measures on the other hand.

6.3.3 Cooperation and distribution channels to promote Sustainable Homeservices

As the range of Homeservices spans over a broad and diverse field of action, it is firstly essential to determine usual institutional arrangements per service area. In order to fulfil their public responsibility, public providers and NPOs concentrate on services for residents who cannot afford a commercial service offer. As NPOs are generally publicly subsidised and even often founded by public authorities, their field of action and responsibilities often overlap with those of public authorities. Consequently, there are no clear distinctions between the Homeservice offer of NPOs and public providers, so both providers are subsumed in one category.

The service fields of Leisure Time Activities and Care & Supervision are provided by various service providers each promoting different goals. Whereas public and commercial providers concentrate on local sports’ facilities, housing organisations provide most of their social Leisure Time Activities in co-operation with NGOs and public providers. Furthermore, counselling services of commercial providers complement their core business, while counselling provided by public, non-governmental and housing organisations are basically non-profit. Similarly, information contents differ: housing organisations inform their residents on housing relevant subjects, public institutions on public frameworks and NGOs inform residents on social as well as ecological issues. The following table roughly illustrates these tendencies regarding potentially sustainable Homeservices:

It is obvious that housing organisations only directly provide services that are closely related to their core business of construction, maintenance and housing management. While commercial service providers serve all service fields concentrating on profitable services, NPOs and public providers directly provide services that also respond to basic needs of deprived residents.

Referring to this task sharing between commercial and non-profit providers, housing organisations cooperate with either one or the other provider, dependent on the according residents’ demands: While commercial providers are interesting for comfort and highly specialised social or technical services, they address NPOs and public providers for cooperating in social and community services. Therefore, they tend to rather provide with commercial service providers Repair, Mobility & Delivery, Safety & Security and Supply & Disposal services, whereas housing organisations rather cooperate with non-profit providers regarding Information & Counselling, Leisure Time Activities and Care & Supervision services.

Services based on residents’ involvement either consist of simple tasks for neighbours and environments (Leisure Time Activities, Care & Supervision) or employment measures for deprived residents (Information & Counselling, Repairs, Safety & Security). Employment measures are often realised by cooperation between housing organisations and non-profit respectively public providers.

	Institutional arrangement					
	Direct supply			Cooperation		Residents' involvement (HO, NPO, PP)
	Housing organisation	Commercial provider	Public provider/ NPO	HO - commercial	HO – NGO/ Public provider	
Counselling & information						
Environment and Energy	Basic information on housing	Eco-commerce	Ecological consumption		Environmental issues	Energy counselling
Social aspects	Basic information on housing	Medical counselling	Social services		Social services	Social services
Financial matters	Information on housing costs	Financial services	Subsidies	Insurances, services	Subsidies	
Care & Supervision						
Building/ environment	Supervision of building	Maintenance	Urban Renewal		Regeneration of environments	Cleaning / renovation
Apartment		Maintenance, Comfort services				
Person		Medical care, comfort services	Care & supervision services	Support for elderly	Support for elderly/ youths/ children	Basic care & supervision services
Pets		Comfort services				
Leisure Time Activities						
Sport	Residents' facilities	Comfort services	Neighbourhood facilities			
Social aspects	Residents' facilities	Comfort services	Neighbourhood facilities		Neighbour-hood facilities	Neighbour-hood facilities
Culture and Communication	Residents' offers	Comfort services	Neighbourhood offers		Neighbour-hood offers	Neighbour-hood offers
Food services / catering		Comfort services				
Repairs						
Repair and renovation services at home		Home delivery, mobile services	Apartment renovation, repairs	Home delivery, mobile services	Apartment renovation, repairs	Apartment renovation, repairs
Mobility & Delivery						
Vehicle rental and sharing		Alternative concepts		Alternative concepts		
Parking areas		Extra parking				
Delivery		Messenger services	Food delivery		Food delivery	
Safety & Security						
Building, apartment, resident	Additional surveillance	Additional surveillance		Additional surveillance	Personal surveillance	Personal surveillance
Supply & Disposal						
Energy/ Water Supply, Waste Disposal	Additional facilities	Additional facilities	Additional facilities	Additional facilities		

Figure 6.12 Service fields and institutional arrangements

Initiating cooperations

German, Dutch, Austrian and Finnish housing companies and co-operatives have acknowledged the importance of Homeservices for their customer's relationships as the rental housing market is locally marked by vacancies, which result in a competition between housing organisations. Although housing companies and co-operatives regard intermediating Homeservices as an important completion of their core business, they can realise most services only on the basis of cooperation with commercial, public or non-governmental providers due to restricted personal and financial resources.

Therefore, they actively initiate co-operations for Homeservices demanded by their residents by approaching relevant service providers executing the service. While public and commercial providers generally form an inactive part and housing organisation must convince them by presenting their benefits of a co-operation, NGOs profit equally from those co-operations and often actively approach even small housing companies or co-operatives in order to reach a broader public. On the opposite, large housing companies in urban areas can be attractive to public and commercial service providers as they represent the contact to a broad customership.

Housing organisations acting on property-dominated markets did not initiate cooperation with external service providers yet. Still, increasing demands of local residents could lead to further activities in this field. As proprietors are generally not the target group of NPOs and public providers, particularly commercial service providers could have an interest in cooperating with local housing managers, building promoters or real estate agents.

Distribution channels for Homeservice provision

As Homeservices still lack the residents' attention in all countries, Homeservice provision demands a central institution that represents a central contact and information point for the residents – e.g. a service centre, a public relations employee or a web presence. Regarding rental housing, concierges or janitors already partly play such a role as central contact and information person. Therefore, appropriate resources should be taken into account when the housing organisation plans to establish or expand its Homeservice offer.

However, there are different distribution channels to reach local customers. In the Netherlands, for instance, the commercial service provider "Lekker Leven" concentrates only on the provision of Homeservices and promotes its service offer nationwide via Internet. The Finnish ELIAS Internet service is another information platform that makes it easier for residents to find local service providers by simultaneously offering these mainly small and medium companies a media to market service with minimal costs. In contrast to these virtual channels, the housing organisation "Harlacherweg" in Vienna established a local technologically optimized service centre serving 800 dwellings in order to be present on site.

These examples have shown that consolidating all service related activities such as service marketing, management and assessment in a single institution is far more effective than providing Homeservices besides the usual workflow. Furthermore, these institutions can act as promoters that pursue marketing strategies to convince commercial and non-profit service providers of their benefits in co-operating with housing organisations.

A central contact point for Sustainable Homeservices is also helpful in case of a property dominated housing market in order to focus management or marketing activities. As particularly proprietors of detached houses are a quite dispersed customer group intermediaries for Homeservice provision, local actors on the housing market such as housing managers, building promoters or real estate agents could represent such a central local contact institution.

Furthermore, local non-profit organisations such as neighbourhood and consumer associations could act as intermediators of Homeservices. The exact number of neighbourhood associations is difficult to determine, as they are set up for a specific purpose related to the area and they tend to spread their ideas and proposals by informal means or verbal communication and not through formal communication channels. Consumers' associations are mostly represented through their Federation and exercise mainly as advisors to the consumers in case of complaints. Still, both institutions show good potentials to act as Homeservice intermediator, as they already facilitate legal and financial information on housing, on public services and on service providers by phone or Internet.

Moreover, specialised magazines and homepages play an important role in spreading information on certain services and service providers and in raising consciousness among consumers on environmental and social housing related issues.

6.4 Summary: Homeservice providers and their offer

With regard to their customer group, housing organisations can be divided into social and profit-oriented housing organisations relating to tenants as well as property-related housing organisation relating to proprietors. While Homeservice offers for these customer groups are basically similar in all countries, their popularity and variety differs strongly from one country to another according to their share in the housing market. Therefore, property-related housing organisations are predominantly important for Spain, Portugal and small towns throughout Europe, while social and property-oriented housing organisations are particularly relevant for big cities in Germany, Austria, the Netherlands and Finland.

In order to determine actual and potential Homeservice offers per provider, **housing organisations** should firstly be distinguished according to their main functions for the resident. While social and profit-

oriented housing organisation serve construction and maintenance as well as housing management functions, these tasks are separately served by property-related housing organisations. Accordingly, building promoters care about construction measures, whereas housing managers and real estate managers relate to housing management activities. Considering these both main functions, the actual Homeservice offer of housing organisations can furthermore be distinguished in mandatory service activities, services related to the core business and complementary services.

In general, housing organisations do not consider their core business or mandatory performances as Homeservices that are rather represented by complementary activities of housing organisations. Housing organisations are required by law to maintain apartments and housing environments, to guarantee security in case of emergency and to provide certain additional building facilities e.g. parking lots or leisure space. In general, they do not regard mandatory activities as services but as a common requirement to fulfil. In Germany, Finland and Austria housing companies as well as housing managers in all countries must also secure a transparency on housing costs. Mandatory service activities of housing managers include most of the management activities of housing companies, but also contain legal advice and condominium management. Mandatory service activities of housing organisations therefore relate predominantly to the function of construction and maintenance of common building facilities. Mandatory housing management tasks are basically restricted to information on fundamental housing issues.

Housing organisations consider equipment, maintenance and renting of physical facilities as part of their core business including additional equipment of apartments or surroundings as well as technical installations. Moreover, the management of energy supply has become an important core activity of housing companies during the last decades. Apart from that, housing companies regard marketing and communication strategies as a core activity. In general, housing organisations prefer to offer services close to their core business in order to profit from internal resources and knowledge. Although the core business of social and profit-oriented housing organisations distinguishes from that of property-oriented housing organisations, according Homeservices related to the core business of construction and maintenance respectively housing management are mainly the same. The core business of housing organisations surpasses mandatory activities and relates to construction and maintenance of private or additional common facilities, respectively housing management activities relating to information on and care of general housing conditions.

Their complementary service portfolio can mainly be divided in services to support customer relationships such as counselling services or the sale of discount tickets and social services to prevent social and spatial disparities. Whereas housing organisations tend to intermediate sophisticated complementary services such as home care, they directly provide less complex services e.g. counselling on waste prevention. For the Homeservice provision in property-dominated housing markets, the housing manager is the central figure providing directly or indirectly potential services to residential buildings. Regarding residents' or cooperative housing, the relevant housing company or cooperative acts as a Homeservice provider. Apart from repair and renovation services for the resident, most complementary service activities of housing organisations belong to the function of housing management.

Public authorities are required to provide public transport, energy and water supply, leisure time and social infrastructure as well as certain social services. Thus, most of their services refer to Supply & Disposal as well as public sports facilities and are generally provided by municipal companies. Counselling services relate mainly to social and financial aspects, but consist generally in mere information on public frameworks.

NGOs centre their activity on labour-intensive tasks that are useful for society and permit at the same time the reinsertion of socially excluded residents in paid employments. Main actors on the non-profit Homeservice sector are environmental associations, welfare organisations and urban renewal initiatives. Whereas welfare institutions provide social services for special groups such as young, elderly, disabled and disadvantaged residents, environmental associations consult residents on diverse ecological subjects regarding plants, nutrition and sustainable consumer's behaviour. Urban renewal initiatives concentrate on a certain area and provide a broad range of community activities such as mediation, debts' counselling or residents' participation. Non-profit organisations are important actors for a dissemination of Sustainable Homeservices as they correspond to all sustainability sectors in complementing the whole range of Homeservices by activities that are demanded by the public but

do not promise political or commercial profit. Most of the NPO have either a social or an environmental focus in their service provision; sustainable concepts are not so easily found.

Commercial providers: Whereas public providers as well as NPOs clearly show European tendencies regarding their service offer commercial providers are closely linked to national economic framework. It might be said in general that commercial providers focus more on services that are related to *Mobility & Delivery*, *Repair* and to a certain degree to *Care & Supervision*. However they prefer services that demand a higher degree of technical equipment than human resources.

There are three main **institutional arrangements** for a sustainable Homeservice provision: Exclusive supply by the provider, cooperation and residents' involvement. Housing organisations generally exclusively provide Homeservices that are closely related to their core business. External service providers that provide services directly to the resident must have a local reference to be considered as Homeservice providers. This local reference can either consist of a local branch for service provision or of mobile or delivery services promoted by local advertisements or Internet.

Cooperations are often initiated by housing organisations in order to fulfil customer demands in service fields that are only distantly related to the housing organisations core business. While NPOs and public providers aim to reach a certain resident group by cooperating with housing organisations, commercial providers intend to expand their pool of customers. Apart from that, small and medium commercial enterprises offering Homeservices collaborate in order to condense their capacities.

Residents' involvement can either be based on voluntary mutual aid or on measures that aim to integrate deprived residents. While mutual aid is predominantly initiated by housing organisations, integrative activities are often realised by cooperation of housing organisations, NPOs and local authorities.

In general, institutional arrangements relate to specific service areas. External service providers serve nearly all service fields. Still, there are considerable differences according to their corporate aims and goals: Whereas commercial service providers directly provide profitable, highly specialised services, NPOs directly provide services responding on basic needs of predominantly deprived people. Housing organisations only exclusively supply services that are closely related to their core business. Therefore, they concentrate on information and counselling on housing issues, provision and management of common residents' facilities as well as on additional service activities regarding Safety & Security and Supply & Disposal.

Cooperation between housing organisation and commercial service providers relate basically to specialised services demanded by the residents. In contrast, housing organisations tend to cooperate with NPOs and local authorities regarding social and community services for deprived residents that cannot afford a commercial service offer. These public private partnerships regarding social services also often include training activities for deprived residents in order to integrate them. Apart from that, residents' involvement in service provision is initiated by housing organisations, NPOs and local authorities in order to strengthen local communities by mutual aid.

7 Potentials and Promotion of Sustainable Homeservices

One of the goals of the European Union is to strive to a sustainable development in Europe. The Union searches for policies to stimulate sustainable production and consumption. The stimulating of services is seen as one way to come to a more sustainable consumption. The basic idea behind the Homeservices project is the notion, that offering sustainable Homeservices directly at home can reduce environmental and social burdens. The question is now: *what is the potential of sustainable Homeservices to contribute to sustainable development in Europe?*

Offering services at home is a centuries-old custom all over the world. Merchants came to your home offering services and goods. Examples of services were knife grinders, etc. This offer of services directly at home has decreased in the last 25 years. Why is that? The first reason is that products have in general become cheaper than services, thus making services a less preferred alternative. In other words, buying a new knife is easier and cheaper than having your knife sharpened by a service provider. Why have products become more affordable? Firstly, due to more efficient extraction techniques of natural resources, materials have become continuously cheaper over the last decades. Secondly, the automation of manufacturing processes and removal of production to countries, where labour is inexpensive, have made also the production low. Consequently, products are more inexpensive than ever, a trend which has resulted as a throw-away rather than “use long and repair” culture. Other reasons for that are, that offering door to door is a time consuming business and people are often away from home.

But society changes. There are other developments that can have positive effects on the offer of services. Examples are: the possibilities of internet to order at home, the demand for more comfort at home and elderly people want have to stay longer in their own home. In the Homeservices project we search for Homeservices that can be an attractive alternative to material-intensive consumption, and simultaneously add comfort for their users as well as be economically sound for their providers, in other words contribute positively to sustainable development in its environment, social and economic dimensions.

The previous chapters indicate that there are many types of Homeservices available, provided by a variety of suppliers: SMEs, public providers, NGOs or occasionally larger enterprises. However, evidence implies that any Homeservices in general do not automatically lead to more sustainable household consumption. To that end Homeservices must be designed with sustainable aspects in mind. When planning or designing such services, it is good to keep in mind that there are certain incentives that can be made use of and, on the other hand, obstacles that need be dodged. This chapter will begin with the discussion of the promoting and obstacles for offering sustainable Homeservices at different national and European level. The latter half of the chapter will ponder strategies for implementing sustainable Homeservices.

7.1 Obstacles and promoting factors for Sustainable Homeservices

There are obstacles and incentives for provision of Homeservices in general and for Sustainable Homeservices in particular. The idea, that housing organizations would offer other than mandatory housing-related services for their residents, is fairly new, and in some of the six countries studied this idea is only at a sprouting stage. Some housing organizations, or other service providers, however, have begun to see that service offerings may entail positive outcomes from the business perspective, e.g. for housing organizations longer tenancies and reduced negligence toward the apartment and the building. For other service providers, Homeservices approach may offer e.g. a new aspect to strengthen their business idea. However, since the Homeservice concept is rather new[30], it is not surprising that the proposition of sustainability in that connection is even more novel.

[30] In that context it should be noted, that the traditional janitor-concept familiar in many countries in the past was some kind of Homeservice. Due to the fact that janitors are disappearing or have disappeared in many European countries – due legislative changes or competition liberalization reasons - housing organisations have to think of new concepts to fulfil these tasks.

This chapter will discuss the obstacles and promoting factors for such services. These obstacles and incentives stem from many different sources. We have divided them into four categories. The first three loosely follow the sources of isomorphic change outlined by DiMaggio and Powell (1991). These are legislation, market- or customer factors, and industry norms. In addition, there are factors that relate to physical infrastructures, which we will discuss separately. There are both similarities and differences in these factors between countries, mainly due to the variation of the institutional setting of housing and the different service cultures in these different countries.

7.1.1 Legislation, regulation and political factors

As the first chapters of this report underline in detail, the division of labour between the different actors offering services relating to housing conditions varies to a greater or lesser extent between the countries. One of the main sources of variation with regard to Homeservice provision is the legislation regarding duties of different actors, e.g. the public sector or the housing organizations. These determine to a considerable extent the market niche for external service providers. In countries like Finland where the public sector, i.e. municipalities and the state are obliged to provide a lot of social services (e.g. provision of day care for children or care for the elderly) there is less niche and need for for-profit or non-profit service providers, than in countries with fewer public sector duties like Spain or Portugal.

Promoting Factors: Tax deduction, public subsidies, labour market legislation, government employment policies

Tax deduction opportunity for Homeservices was recently introduced in Finland so that households can deduct 60 % of the costs of Homeservices they have used. Maximum amount for deduction is 1150 euros per spouse (in families). In order to have the deduction households have to use a registered service provider. Households can also deduct the indirect labour costs of an employee if they have paid salary and both direct and indirect labour costs of that employee, on the condition that the work is done either at home or summer cottage. Tax-deductible services are home assistance, repairs services, and care services, shopping assistance, cleaning and child-care (Talli 2003). Since 2003, some Homeservices are also tax deductible for private individuals in Germany.

Public subsidies are available for social purposes and energy efficiency. Social purposes include e.g. renovation for adapting buildings and apartments for disabled and elderly people.

Energy efficiency subsidies concern e.g. energy screening and investments for energy efficiency improvements of the building. In Austria, Finland, Germany and the Netherlands there are several types of energy efficiency subsidies available, both for screening and for installing energy saving facilities. In Portugal solar energy equipment is a tax deductible cost. Public subsidies are available in the Basque Country for the ecological reform of buildings in some Bilbao neighbourhoods (Surbisa), and subsidies for the change of heating systems in private buildings are available from the regional energy agency. The energy agency EVE-CADEM has been promoting an energy certificate for buildings for many years now, but this certificate is mostly issued for new buildings.

Voluntary energy conservation agreements for housing sector in Finland[31] are expected to encourage housing organisations to provide ecologically Sustainable Homeservices. It is expected that the objectives - to decrease heating energy and water consumption 10 per cent by year 2008 from the level of consumption in year 1998 and 15 per cent by year 2012 - cannot be achieved just by applying new construction measures at the building phase, but that the target also demands other services such as facilities management and changing the daily routines the residents. In Germany, some housing companies (e.g. “Stadt und Land” in Berlin) decided to establish an environmental management and agreed to a voluntary external evaluation according to the European environmental act EMAS II by participating in the Ecoprofit (Ökoprofit) project. The Ecoprofit project was developed and launched by the Graz municipality (Austria). 18 German municipalities adapted the concept of

[31] Ministry of the Environment, Association for housing and construction organisations –ASRA signed an agreement on promoting energy conservation in dwellings. Agreement covers 290 000 apartments which is over 65 % of the total social housing organisations dwelling stock. For example also VVO, SATO and the housing organization of the City of Helsinki are participating this agreement.

subsidising small and medium entrepreneurs that take environmental measures and equally save additional operating costs. So housing organisations e.g. realized sustainable water management concepts including rainwater collector and storage facilities for gardening and processing plants for grey water. Moreover, several construction measures were taken in order to reduce sealed land.

The energy issue is not important for now in Portugal, but there is indication that energy efficient buildings will be an important policy in future, mainly due to the new EU-directive on energy-efficient buildings. So the challenge will be in the beginning for new construction but at a medium term energy-efficient renovation will be an important issue.

Labour market legislation promotes Homeservice opportunities in some cases. For instance, changes in the German trade ordinance opened the Homeservice market for unskilled workers, as many handicraft operations were restricted to trained master craftsmen so far. Furthermore in 2003, new regulations for so-called ‚mini-jobs' (with a wage up to 400 €) determined a fixed rate of depreciation applied for tax purposes as well as minor social security contributions. Both amending laws make it easier for unskilled workers to offer Homeservices for a considerable price. For Portugal there is a special tax deduction for unskilled workers offering Homeservices such as home cleaning or child sitting.

In some countries like Austria and Finland there are particular government employment policies aiming at job creation for unemployed that can contribute to Homeservice provision. In Austria it is common that social enterprises[32], most often operating in the area of Repair or Care & Supervision, offer the chance for long-term unemployed people to re-enter the job market. Good examples of this type of activity are RUSZ repair centre in Vienna, T&T in Helsinki and also the Equal Project in Austria and Finland. In addition, in Finland, Netherlands and Spain there is a law about social enterprises, which often can offer Homeservices.

In Portugal, the government employment policy promotes Homeservices in an indirect way. Public organisations promote professional training and creation of new companies by unemployed persons, and thereby stimulate the creation of very small companies, which typically provide Homeservices (for example personalized transportation and ironing companies). These enterprises receive subsidies for the start-up costs, including new material acquisitions.

Obstacles: Taxation, Government control of employment, subsidies

Taxation is one issue to influence Homeservice offering. For instance high indirect labour costs were considered a hinder for labour-intensive Homeservices in Austria, the Netherlands, Finland and to some extent in Germany. In Austria, Finland and the Netherlands these costs add around 50% to the actual salary, and in Germany some 44 %, which is paid half by the employer and half by the employee[33]. In Austria it is, however, possible to obtain subsidies for labour costs if the employer participates in job creation projects. The indirect labour costs for Portugal is around 22%, comprising of indirect costs related with social security (19%), vocational training (0,5%) and other social costs, accounting for 2%. Taxation also comes into play in another way: workers may be unwilling to work if their already low salary is taxed somewhat high, and if they have the alternative to get social security benefits that are equal or nearly equal to their net salary.

Government control of employment in different forms was a hinder in both Austria and Germany. In Austria, trade licences are strictly regulated to narrowly defined professions, which leads to the situation that a potential "free-lance janitor" would need several licences from plumber to electrician. This applies also for external service providers, if they want to offer a bundle of services that are not closely related to each other. Also housing organisations face this problem, but housing organisations that offer Homeservices deal with it by creating a subsidiary for facility management that has the legal rights to perform certain services. In Germany, the so-called second job market where Homeservices could create employment is controlled by government. Homeservices can particularly create employment on the so-called second job market that is marked by a super-proportional rate of

[32] Called "socio-economic enterprises" in Austria.

[33] Example from Germany: Total labour costs = 43 329 € / 100 %. Thereof : (1) Direct labour costs (what the employee gets) = 24 557 € / 56.7 % and (2) Indirect labour costs (paid by employer and employee) = 18 773 € / 43.3 %. Thereof: 20.5 % is paid by the employer and 22.8 % is paid by the employee.

unskilled workers. But in Germany, employment services are in sole responsibility of the Federal Ministry of Economics and Labour and according municipal employment offices. Private recruitment agencies are restricted to the intermediation of temporary employments. Consequently, employment processes for subsidised jobs (e.g. for long-term unemployed) are often marked by bureaucratic obstacles and housing organisations have virtually no voice in choosing the person for their needs. Moreover, those jobs are often restricted on a short-term and extensions often result in a change of the employee.

Government subsidies tend to be rather a promoting factor than an obstacle, but in Austria construction subsidies hinder construction of common space, which is a precondition for some Homeservices.

As to other forms of regulatory restrictions, in Germany, the II German Operating Cost Ordinance excludes most Homeservices from transferring them to the rent. If a transfer is possible, all tenants must agree to supplementary changes in their tenancy contracts. Moreover, housing organisations are not allowed to transfer investments in social infrastructure (e.g. concierge, common rooms) to the tenants. Both restrictions aggravate the financing of Homeservices. However, The German Energy Saving Act of 2003 determines strict regulations for energy-efficient building standards and, it permits housing organisations to transfer investments in energy-efficient building infrastructure to the rents. In Spain the activities of housing managers are highly regulated, which leaves little room for additional initiatives. However, it is expected that the new environmental norms will create demand for these kind of services.

The Dutch government sets limitations to business activities of social housing organisations. These limitations are put down in the Dutch housing act. An article form this act 'states' that social housing organisations have to restrict their business to the field of social housing and are not allowed to undertake activities that are not in the interest of social housing. This act restricts the freedom of social housing organisations when it comes to developing new businesses, creating services and making profit.

7.1.2 Market factors and customer demand

In this section we will discuss factors that relate to the housing and Homeservice market situation as well as customer demand issues. We found that one fundamental background issue is the competitive situation in the housing market. In other words, is their shortage or oversupply of the dwellings. When there is an oversupply of dwellings, Homeservices can offer a competitive advantage to a housing organization. In a contrary situation where dwelling demand exceeds the supply, there is lesser incentive for housing organizations to compete with Homeservice provision) Vacancy rate in the studied cities varies from 13.9 % in Lisbon to 0 % in Amsterdam. Vacancy rate does not explain the whole situation as there maybe additional pressure on certain market segments like a lack of smaller apartments or effects of speculation on the housing market. However, even if the vacancy rate is low, housing organizations may have other aims like tenant loyalty (longer tenancies and less vandalism) that motivate them to offer Homeservices.

- **Incentives: ageing and lifestyle**

As **population is ageing** in all European countries and as an increase of elderly homes is limited due to the lack of financial resources, there is a tendency to encourage elderly people to live at home as long as possible (this also a general preference of the elderly themselves). This requires increase of Homeservices especially in the area of care and supervision. Services such as meals-on-wheels, security telephones, transportation and personal care services are examples[34].

Also the change of lifestyle contributes to increasing demand of certain Homeservice types. Throughout Europe the number of single household is growing, and particularly in the northern cities studied they are nearly or even more than 50% of all households. In the southern cities of our sample the respective is still only around 20 %.

[34] Often already for minor things like changing the light bulb or fixing a picture on the wall elderly need a little help from somebody

Vienna	Berlin	Amsterdam	Bilbao	Helsinki	Lisbon
44,5	49%	56%	22%	47,4	20,6

Figure 7. 1 Proportion of single households

Another shift observed e.g. in Austria and Portugal is that both spouses of the family more often work, and that increases the demand for elderly and childcare. This is an opportunity for service providers since the municipality or some other public sector actor is not obliged to provide these services. In Finland the trend of women entering to the full-time working life started already in the 1960s, greatly facilitated by the mandatory childcare provision of the municipalities. Hence such a market niche for commercially based services does not exist. In general, as regards the effect of lifestyle change on Homeservices we can see for instance in Austria, Finland and Spain that wealthier people have started to want Homeservices more often.

In the Netherlands, Finland and Portugal people increasingly demand fast internet connections at home. This is an incentive for housing organizations to provide this service. On the other hand Internet is a facilitator for offering homeservices. Namely, it provides a new, relatively inexpensive marketing channel for Homeservices. For instance home delivery service of organic groceries by bicycle in the Netherlands and in some other countries (by automobile transport) operate via Internet. In Finland there is an Internet market place for Homeservices called ELIAS, operated by the Work Efficiency Institute. Over 400 providers of a variety of Homeservices e.g. cleaning, gardening, small repairs, food services, health care services, errand services, walking assistance, and other services (hairdressers, etc.), are listed in ELIAS. In a survey it was found that an absolute majority of them experienced an increase in business due to this channel.

Particularly ecologically-oriented Homeservices like those oriented toward energy and water savings can reduce the housing costs of the residents. Sometimes also waste management services, e.g. consultation for waste reduction or separation can reduce costs. High energy and water prices add attraction of such services, both for housing organizations and the residents. For instance in Germany operating and resource costs have continually risen during the last years, and hence customer demands for counselling on reducing housing costs have increased. The following tables give indication of housing and utility costs in the six sample countries of this project. The expenditure consisting of housing, water, electricity, gas and other fuels consumption are highest in Finland and Germany with approximately 25 % total household expenditure. In Austria and the Netherlands they form around 20 % of the expenditure, whereas in Portugal and Spain these are only 10 % and 14 % of the household spending (see Table 4.6 *Housing, water, electricity, gas and other fuels consumption as % of total household expenditure* in Ch. 4). On the other hand, the relative share of electricity, gas and other fuels consumption of household consumption is the smallest in Finland (2 %), Spain (2.2 %) and Portugal (2.6 %), in the respective order (see Table 4.7 . *Cost of electricity, gas and other fuels as as % of total household expenditure* in Ch. 4,.)[35]. In the other three countries the share is clearly higher, between 3.4 and 3.9 percent.

These figures appear to correlate rather well with the popularity of Homeservices directed toward energy and water savings in these countries. They are common and popular in all three countries where the both expenditure categories are relatively high. In Finland where housing and utility costs together form a large share of household expenditure, but where electricity is cheap, there are some services directed toward energy and water savings by housing organizations (directly or as intermediaries), but the relevant actors are not as enthusiastic about this activity as they seem to be in the Germany, Austria and Netherlands[36]. These services do not seem to exist at all in Spain and Portugal, where both expenditure categories are low. We do not, however, argue that this is the sole reason behind the popularity of this kind of Homeservices. We assume that the general attitude toward environment of the country is an intervening factor.

[35] In Spain and Portugal the relatively low electricity and fuels consumption in housing sector can be explained by climate conditions, whereas in Finland the electricity is cheap.

[36] Assessed on the basis of how many forms of energy saving services are offered (service areas ”Consulting & Information” and “Supply & Disposal”) and what can be seen in the good-practice examples.

In addition to utility costs (in relation to income or total expenditure), the form of collecting utility fees has an impact on the attractiveness of this type services. If these fees are collected as a lump sum by the housing organization, there is less willingness among the residents to use these services, because they do not directly see the savings. However, there is evidence that even in such instances the motivation can be created. Cost savings can be used to reduce rents, or to block the rent increase. Alternatively they can used for some common good purpose like organising house parties, acquiring some equipment for the building or the like.

In Austria the common practice is to charge energy from individual households per consumption, but water is usually charged in a lump sum. Occasionally also warm water is charged separately. In Finland and Germany electricity and heating are charged according to consumption, but lump sum is the common form charging for water except for new buildings where separate billing of water usage is becoming a norm. In general, in Spain and Portugal there are separate meters for cold water and electricity, i.e. they are paid according to the consumption. In The Netherlands electricity, heating (gas) and water are normally charged according to consumption, expect for Amsterdam were water is charged with a standard monthly tariff.

- **Hinders: limited demand, costs, information gap**

One of the most typical hinders is that customers are not used to using Homeservices, and hence there is a limited demand. This seems to be the case in Austria, Finland and the Netherlands. Especially in Finland and to some extent in Austria, this fact is due to the do-it-yourself mentality. In Finland it is typically considered that only elderly or handicapped people, who can no longer take care of themselves, need services. Using services is, especially among population over 50 years of age, a somewhat shameful because it symbolises that one can no longer cope with the daily life by oneself. In Austria, the attitude of saving money has a lot to do with the do-it-yourself attitude. But in both countries this attitude is somewhat lesser among younger parts of the population. Our resident surveys indicated that this is quite different in Spain and Portugal. According to the mentality of these countries it is good to use services and, contrary to Finland, the social impression of service use is positive – one can afford to use services and does not have to do everything by oneself.

For another, there is the question of costs. This manifests itself either in reluctance to pay even if one could afford it, but on the other hand many who would need Homeservices the most, cannot afford them. If we look at a general overview based on statistics, comparison of the financial burden caused by the housing costs may give some indication of how much money households have available for extra Homeservices. As regards the countries in our sample, the Dutch people are best off, only three percent of the households are with heavy financial burden due to housing costs, and 76 % are without any burden in this respect. Finland comes after the Netherlands, with 11 % of households having heavy burden, and 56 % no burden at all. In Spain and Portugal housing costs form a heavy burden for approximately for one fourth of the households, and only 16.5 % of the Spanish and 25 % from the Portuguese households do not experience a burden due to housing costs. Austria and Germany lie in between these two groups (see Chapter 4, table 4.5 for financial burdens on households due to housing expenditure). In Spain labour costs are a great problem in the provision of social services to households. Families are simply not able to shoulder the burden of private care at home, so that there is a high risk that these jobs are taken over by immigrants who cannot obtain working permits and thus have to accept very low wages.

If one would draw a conclusion – albeit a somewhat mechanistic one – from the above figures, it would be that of the countries in this sample, the Dutch Homeservice providers have the best possibilities to find customers that can afford to pay Homeservices. Another matter naturally is the willingness to pay. According to the cultural norms of Spain and Portugal people would be on average willing to pay for Homeservices, but their financing is limited. In the northern countries of the sample, on average, the actual ability to pay for Homeservices is higher, but the cultural norm or general attitude favours saving

[37] In Spain and Portugal the relatively low electricity and fuels consumption in housing sector can be explained by climate conditions, whereas in Finland the electricity is cheap.

[38] Assessed on the basis of how many forms of energy saving services are offered (universe areas 1 & 7) and what can be seen in the good-practice examples.

money on this kind of expenses. This was also reflected in the questionnaire conducted in the HOMESERVICE project.

Sometimes the cost issue can be problematic due to the charging method. In the Austrian survey it appeared that residents often had a false idea of the charging for extra Homeservices. Some of them fear to pay for services that they neither want to have nor make use of. This bread reluctance toward Homeservice provision in general. However, the housing organizations usually charge extra services per unit consumed. The solution for this is that the housing organization communicates the cost basis better. In general there are information gaps in the noticed in almost all countries between service providers and the residents.

7.1.3 Culture, practices and norms of the housing industry

Next we will discuss that taken-for-granted ways of doing things within the housing industry and among the related Homeservice providers from the point of view of Homeservice provision. These are naturally intertwined with and influenced by legislative changes, or market/customer pressure, but the way that norms function and culture steers the decision-making, choices and action is more subtle and indirect than legislation or market pressure.

- **Incentives: profit-orientation and co-operation**

One of the main observations is that service mentality of housing companies – both private and social ones – is rare, but starting. Some innovative housing organizations can already be found in the four northern countries. Their role is changing from building care-takers toward providers of "living arrangements". Furthermore, in Finland, Germany and the Netherlands there is a trend of social housing organizations to become more profit-oriented, a fact that opens up opportunities for Homeservice provision, because with Homeservices it is possible to improve loyalty of tenants and thereby reduce negligence and vandalism as well as get longer tenancies. Some Finnish social housing organisation also saw Homeservice provision to add to competitiveness, because good services are also a way to attract well-educated and better-income tenants. In this connection it should, however, be noted that an increased profit-orientation and business-mindedness of housing organizations does not necessarily mean an increase or improvement of Homeservice offering. In Germany the fact there is no need for economic justification for all services that the social housing organizations provide, is actually seen to enhance to provision of especially socially Sustainable Homeservices, and the pressure to privatise social housing is a threatening the provision of socially-oriented Homeservices. In Austria housing organisations are more or less forced to find a substitute for the former janitor. This opens a chance to provide a broader offer of extra services and hence innovative housing organisation already reflect on Homeservices.

Co-operation between housing organizations and external service providers is yet another facilitator for Homeservices. The German social housing organizations have a tradition to alleviate social problems by Homeservice provision, and they are used to working with non-profit organizations to this end. In other words successful partnerships already exist. Housing organizations can utilise the knowledge and capability resources of NPOs. In Austria co-operations between commercial housing organisations and re-employment projects like EQUAL[39] start to work out well.

In the Netherlands co-operation between housing organizations and external service providers is increasing. In Finland housing organisations have outsourced a lot of activities traditionally considered to belong to them, such as all maintenance duties. As large maintenance firms have recently started to offer also other than maintenance services, for instance various care services, this makes it possible for them to extend the Homeservice offerings of new service fields. The benefit from the customer's perspective is that services are available via one provider. In the Netherlands some large housing organizations are establishing subsidiaries for this same purpose.

For Austrian housing organisations another incentive to supply Homeservices is the fact that the value of the dwelling or the building block rises and thus higher prices and rents can be obtained.

[39] The EU EQUAL Project is an initiative to create jobs for long-term unemployed people particular in the cleaning and maintenance sector and by co-operations with housing organisation in Austria and Finland.

In Portugal management of the buildings, is either taken care of by the residents themselves or entrusted to a professional housing manager or condominium management company. Housing cooperatives have a very limited Homeservices offering. On the contrary, condominium management companies tend to more and more offer a larger amount of services by cooperating with service companies. The market for this kind of services is increasing, especially in upper class neighbourhoods. Main reasons for condominium management companies provide more Homeservices are to get market advantages through differentiation. One example is Loja do Condomínio (good practice example).

On the opposite, the contradictory strategy of non-profit-orientation of Homeservice providers could also be an incentive to disseminate the concept of Sustainable Homeservices. The German situation on the Homeservice market is an example for the fact that particularly the concept of sustainable Homeservices can be a feasible alternative for the actual free-market conditions, that have directly and indirectly negative social or ecological impacts (exclusion of deprived people, globalisation, monopolisation, resource consumption for comfort benefits etc.). As the German housing market is served to a great extent by social housing organisations that follow corporal aims and goals of public utility, non-profit Homeservice providers dominate the market for sustainable Homeservices. There are two main preconditions for this particular situation. On one hand, providing ecological and social services is mostly not profitable according to free-market conditions and is therefore often dependent on public subsidies in order to be affordable also for residents with low income. On the one hand, most Homeservices classified as sustainable are based on non-profit economy in order to correspond to economic sustainability indicators, such as affordability for all residents and simultaneously profitability for the company. The non-profit-orientation could therefore open up possibilities in market segments that are neglected by commercial providers.

- **Hinders: concentration on core business**

Despite that there are innovative housing organisations; many of them still concentrate on their core business, providing the dwelling. Despite that partnerships and co-operation are emerging, there is still strong sectoral thinking to be observed at least in Finland and Netherlands. For instance housing organisations and public social and health services do not easily find ways to work together. However, as public spending is being cut in Finland the public sector is increasingly procuring its mandatory services from non-profit organisations. They on the other hand are more flexible in service and can also more easily offer extra Homeservices (provided that financing can be arranged).

In Finland there is a particular downside to outsourcing of maintenance. Since mid 1990s almost all real estate maintenance services have been taken care of by maintenance companies. At that time the real estate maintenance was released from any requirements that were considered hindering competition. Anybody was allowed to set up a maintenance company. This has lead to an abundance of these firms, the competition is fierce and the dominant competitive factor is price. As a result maintenance firms are stuck with ”a race for the bottom”, because they offer minimal services as cheap as possible. Maintenance firms would be a natural actor to offer other services than only the minimal, i.e. ”snow shovelling & sanding”, but it can be argued except for the few large ones there are many small ones that they lack the skills, service mentality, and monetary incentive to do this. According to interviews the maintenance profession is still not well educated and the companies in general do not tend to be very innovative.

In some countries like Austria the black market around certain Homeservice types (e.g. cleaning, simple renovation jobs) is considerable, and it impedes their qualitative development.

7.1.4 Physical infrastructure as a facilitator for Homeservices

Building infrastructure and city design have an indirect but of considerable role with regard to Homeservice supply. For some services, space in the building is needed. Where the building land is expensive there is a tendency to save in costs by using all possible space for dwellings instead of leaving common space. Let’s take an example from the capital area of Finland. The private ownership of dwellings is high, building land is expensive, and therefore market prices of dwellings are high. At the time of the dwelling investment people first and foremost try to minimize the cost. As every square meter of common space increases the price, builders and developers have low interest to add

common space. Consequently common spaces are created only in buildings where it is required by the city plan. The same is true for Portugal except for high-income neighbourhoods, where common spaces make the building more attractive for wealthy buyers. Likewise the German building stock is generally not equipped with common facilities. Costs for additional facilities are high and creating common rooms is not profitable for housing companies. Still there is often possibility to transform vacant premises into common rooms.

Apart from that, all over Europe the urban planning paradigm of functional separation of the 1960ies and 70ies led to the design of monofunctional living districts in the outskirts. The so-called “sleeping towns” are marked by strong deficiencies in commercial infrastructure. This indicates that the role of city planners is crucial in indirectly facilitating the Homeservice supply.

For cities or towns where there are only a few public playgrounds or where they are uncomfortable or unsafe, a playground in the building yard may improve the quality of life (e.g. social contacts between mothers and children). On the other hand in cities like Helsinki where the density of public playgrounds is high and they are well-equipped as well as often with social activities offered by the playground personnel, the importance of playground in the premises is not that relevant for the residents.

7.1.5 Summary of obstacles and promoting factors

As can be gathered from the above, there are certain factors that are more or less the same in different countries, such as the ageing population and the growing number of single households, both of which increase the need of Homeservices. Also the cost of household services is experienced as a hindrance in all the studied countries. In Austria, Finland, and to some extent Germany indirect labour costs were pointed out as one reason to the high cost of services. In the three other countries the cost of Homeservices was also named as a barrier in general. Due to the high costs, part of Homeservice provision is transferred to the black market. From the perspective of developing innovative Homeservices in general, and sustainable Homeservices in particular this is a negative factor.

Another similarity across the four northern countries of the sample was that some housing organisations are beginning to see Homeservice provision as a business opportunity because of the indirect customer loyalty and image effects. Liberalisation of social housing legislation and regulation backs up such a trend. This can be observed in Finland and the Netherlands where both the social housing market as well as parts of the Homeservice market were liberalised in mid-nineties. This has lead to an increased business orientation of the field, which is shaping the Homeservice supply. In Austria and to some extent Germany a similar trend is starting now. This opens up possibilities for different types of co-operative arrangements, as housing organizations do not tend to provide new services with their own personnel, but seek for collaborators. In general, however, the larger pool of housing organisations, have a tendency to stick to what they consider as their core business, offering the dwelling. One of the major factors influencing to the attractiveness of Homeservices as a business opportunity is whether there is oversupply of vacant dwellings. In situations of present or foreseen oversupply, housing providers need to compete harder and Homeservice offering is one possible source of competitive advantage.

The dynamic of obstacles and incentives differs between countries depending on whether there are large (often at least formerly social) housing organisations or whether private ownership of dwellings is the predominant form housing. In the latter case housing organizations cannot be a major agent with regard to Homeservice provision or mediation, but other facilitating actors and structures must be considered.

As to the customer demand, the service use cultures differ between the countries of the sample. There are more “do-it-yourself” cultures (e.g. Finland) versus the “use-services” cultures such as Portugal. This influences the Homeservice demand and to service design preferences, and makes it complicated to give general recommendations or to copy services as such from one national setting to another. The recommendations and service designs should always be designed on the condition of the local service use culture.

7.2 The potential of Sustainable Homeservices

In the above we outlined some of the main incentives and hindrances that influence the supply and demand of household services in general and sustainable household services in particular. The previous chapters, on the other hand, have shown that Homeservices are already available and that properly designed Homeservices have the potential to enhance sustainable development. In this chapter we will move on to explore the motivation for certain organizations to engage in Homeservice provision, and will outline national strategies for the six countries involved in the sample. Finally we will draft European strategies and policy recommendations for enhancing sustainable development through promotion of Homeservices.

7.2.1 The contribution of Homeservices to sustainable development

Of the vast amount of services offered, only a fraction can contribute to sustainability of household consumption. Roughly speaking, services can be divided into business[40] and consumer services. Of the latter group, consumer services, a part is actually offered at home. Even from that a large part is not sustainable. And finally, part of the sustainable services cannot compete seriously with alternative products and services.

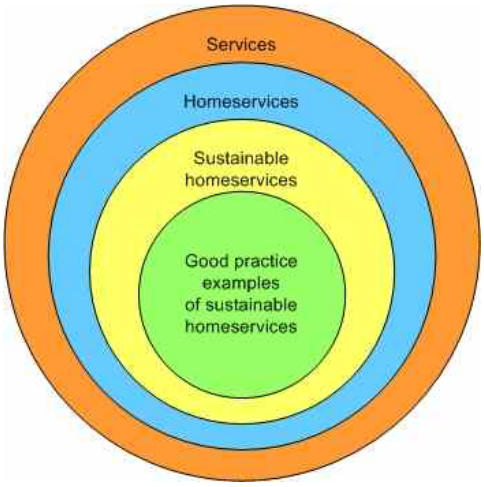


Figure 7. 2 Sustainable Homeservices as a subset of services

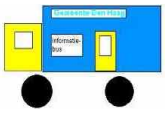
The results of the Homeservice project in the six countries indicate that there is a demand and an offer available that can lead to a renewal and extension of the sustainable services at home. We found out in all the countries that there is a strong variation in the offer of Homeservices. The actually supply of Homeservices is scattered and limited to some groups of residents in specific regions. In our survey of services there were two emphases: the first one was to study good practise examples and find how they can be brought to residents. The second one was to look at the Homeservices offered by housing organisations. Depending on the housing market we found in principle two different situations.

- In countries with large (social) housing companies there is potential for supply of services via these organisations and external service providers;
- In countries with a housing market dominated by owners/occupiers there seems to be more opportunities for direct supply of Homeservices by external service suppliers.

In both situations there is a potential for sustainable Homeservices, but this potential is limited to specific services areas in combinations with specific regions and groups of people. What we found out in the six countries was a subset of relatively new good practise sustainable Homeservices in market niches with the right conditions. These good practises differ from country to country depending on the local housing market and other conditions.

[40] Part of services directed to business enterprises can naturally enhance sustainable development.

Independent from type of supplier we present in figure 7.2 three good examples of Homeservices in the 6 countries.

Good practice examples of sustainable Homeservices			
Austria	**Central Laundry Service**  The housing organisation Hübl & Partner offers a laundry service in the ground floor of their good practice building in Attemsgasse in Vienna. There residents can leave their clothes and whatever they want have to be cleaned in the morning and take it back, when they come home in the evening.	**Repair of Household Appliances**  R.U.S.Z repairs or dismantles and disposes of a wide range of household appliances.	**Environmental Consult** die Umweltberatung "die Umweltberatung" offers independent consulting on all environmental issues in and around the household, supports other educators with projects and research, and informs and disseminates information in numerous publications and online.
Germany	**Neighbourhood Renewal Management**  Neighbourhood renewal management is a universal strategy comprising several community services (e.g. mediation, social services, supporting local initiatives etc.).	**Energy Contracting**  Energy contracting combines ecological and economic benefits in order to enhance sustainable heating systems based on renewable energy sources.	**Counselling on ecological housing** GRÜNE LIGA Netzwerk Ökologischer Bewegungen As an NGO, the Green League in Berlin offers counselling on different ecological aspects of housing, such as cleaning detergents, courtyard design, urban biotopes and species
The Netherlands	**Eco-Gardening**  Construct and maintain gardens in an ecological way: using ecologically materials and not using pesticides	**The Caravan**  In a caravan residents get information about energy reduction, burglary prevention, language courses, local services, dept reduction and jobs	**Energy Advice**  An energy expert pays a visit to your home and recommends which energy-saving measures to implement
Spain	**Eco-construction** 	**Marketplace for ecological products** Txillarre Nekazaritza ekologikoa 	**Recycling shop** Emaús FUNDACION SOCIAL GRUPO

	ABIL offers an integrated service for environmental friendly construction and renovation of residential buildings	Txillarre works on direct marketing of ecological products from farmers by internet	Emaus combines the collection, repair and sale of used products with initiatives for socially handicapped groups
	Resident act as Energy Expert	**Virtual marketplace for services**	**Collect and use bio-waste**
			
	 Tenants are trained as energy expert. They monitor, help other tenants and act as contact person to the housing organisation	 Elias is an internet marketplace for many service areas where providers and customers of Homeservices can meet	Maunula-Help helps residents to organize the on site collection and composting of bio waste to be used for soil improvement/green areas
	Internet banking	**Houses adapted for handicapped**	**Hour by hour service**
	 SIBS offers various banking services at home, such as service payment, purchase payments, balance enquiries etc	 The Open house program provide autonomy to handicapped people through technical adaptations of homes	Any investor willing to give one hour to a group will receive back one hour service for its benefit

Figure 7. 3 Good examples of Sustainable Homeservices

Why are these examples good? First of all they are more sustainable than the reference situation, because they contribute to a better environment, better living conditions and a more sustainable economic growth. Secondly they are adapted to the housing situation in the country and increase the comfort level of residents against a reasonable price.

7.2.2 The potential of sustainable Homeservices

Why do we want to stimulate the use of sustainable Homeservice in Europe? Our initial starting point was twofold. Firstly, substitution of products by services fulfils the same needs of the consumers, can contribute to a more sustainable development. Secondly, the previous European research project (Behrendt et al 2003) had lead us to observe that services should be as easily available for the consumers as possible, i.e. they should be offered directly to them at home or as near to home as possible. However, the research in the six countries indicates that many Homeservices replace other services and not every Homeservice is more sustainable than its alternative product of service. Furthermore many services are not interesting for the main stakeholders of Homeservices. Resident's demands and the aims of the housing organisation, external service suppliers, government and society have to be taken into account in order to introduce the right set of services.

So the second conclusion is that for many services it makes no sense to introduce them. Only in some cases the introduction makes sense. The key question behind a successful introduction of Homeservices is: *which incentives do the various stakeholders have for the introduction of which sustainable Homeservices?*

In the current supply of services many stakeholders are involved. Figure 3 give an overview of these stakeholders. (EPCEM, 2004)

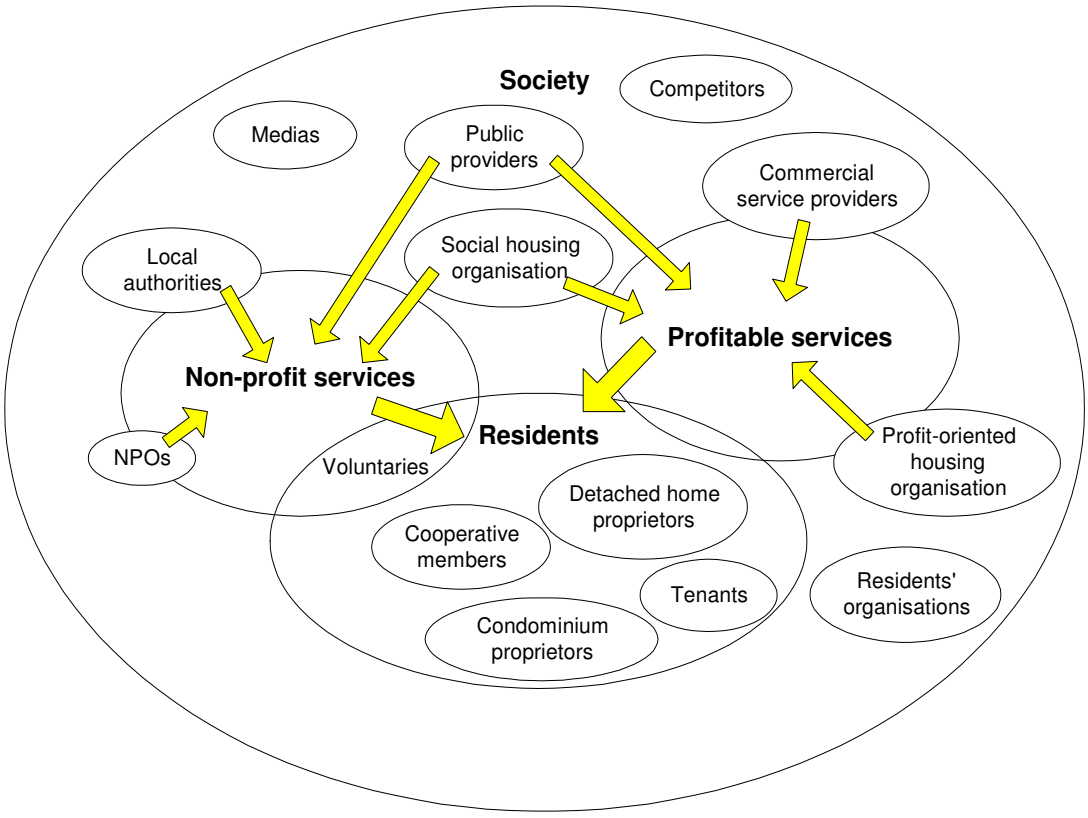


Figure 7. 4 Stakeholders for supplying Homeservices

The Homeservice project indicates that in each situation these stakeholders have different interests in issues of sustainability and their interest varies in importance. In order to identify the potential in various situations we first elaborate on the incentives of the main stakeholders in preparation of the service engineering chapter 7.2.3 and development of strategies in chapter 7.3. For this purpose we make a division of the incentives over the three elements of sustainability, namely the environment, the social and economy. In this chapter the incentives are presented that were distracted from the interviews and questionnaires in the six countries.

Environmental incentives
Environmental incentives can be related to various environmental effects. Examples are climate change, sustainable transport, threats to public health and managing natural resources. The various stakeholders elaborate this overall aim in different ways. Groups of residents aim to reduce the environmental burden of their consumption and groups of company's aim at environmental performance. In figure 4 these environmental incentives for the introduction of Homeservices are presented.

Environmental incentives for the stimulation of Homeservices	Stakeholder	Example services
Create awareness about sustainable development	Local authorities	Various services
Consume in an environmental friendly way	Residents	Environmental consult Marketplace for ecological products
Operate in a environmental friendly way	Housing organisations Local authorities External service suppliers	Energy contracting Counselling on ecological housing
Reduce the effects of climate change Energy reduction CO2 reduction	Society Local authorities / Regional and national government Residents External service providers	Energy advice Energy contracting Residents as energy expert Info-via-TV (F) Solar panels (Friedrich Engels Hof – A)
Reduce material consumption Reduce waste generation and Stimulate recycling	Society Local authorities Residents	Repair households appliances Electronic appliances repair & recycling (T&T, F) RUSZ (A)
Stimulate buying of environmental friendly food	Society	Marketplace for ecological products Biowichtl (A)
Reduce water consumption	Local authorities	Water box
Optimise space use in town	Local authorities	Neighbourhood renewal
Save nature around the building	Residents, NPOs	Green League (G) Eco Gardening

Figure 7. 5 Environmental incentives and stakeholders

Environmental problems often occur on worldwide scale and have to be solved by national and Europeans measures. The incentives are therefore often related to the 'society' as a whole". The national government for example has a broad perspective and is interested in the ecological health of its country. In some cases the introduction of a Homeservices has a negative effect on the environment; for example the service the Caravan needs additional materials for the Caravan itself in order to improve the neighbourhood atmosphere.

Social Incentives

In the field of social incentives we also found a distinction between incentives for the society as a whole and more individual incentives of specific actors. In both categories several social incentives were found in the six countries. In figure 5 the social incentives for the introduction of Homeservices are presented.

Figure 7.6 shows a wide variety of social incentives. Because of their core housing business, housing organisations seem to have more interest on economic and/or social elements of sustainability compared to the environmental aspects. Residents also seem to have more interest in social and economic aspects, such as health, security and employment.

Social incentives for the introduction of Homeservices	Stakeholder	Example services
Improving customers satisfaction Increase the comfort of residents Provide living arrangements instead of dwellings	Housing organisations Residents	Broad variation of services combined with a bonus points system (HO Attemsgasse, cleaning and washing service (A))
Attention for various lifestyles of residents	Housing organisations	From
Improving neighbourhood atmosphere Attract all social groups	Housing organisations Residents (A)	The Caravan (NL) Neighbourhood Renewal management (G) Maunula-Help's affordable homeservices (by employing local residents) (F) Wohlfühldienstleister in the Autofreie Mustersiedlung (A)
Reduce social exclusion Integrate immigrants, handicapped, elderly	Society Residents Local authorities	Eco debt reduction programme Electronic appliances repair & recycling (T&T) (F) Consulting on debt reduction (A)
Improving health care	Sick and handicapped residents	Houses for handicapped 24h health monitoring at home by IST WristCare (F) Cam care
Safety and security Measuers against vandalism	Residents	Safety certificate
Living longer in your own home Adapt houses for special groups	Elderly residents Handicapped residents	Houses for handicapped Shopping bag service for elderly (F)
Make districts attractive for all social groups	Housing organisations	Services for residents (F)

Figure 7. 6 Social incentives and stakeholders

Economic incentives

We found also a wide variation of economic incentives for the stakeholders. In table 7.5 we present the economic incentives. The economic incentives of the stakeholders differ strongly. Residents have interest in low costs services while service providers want to make money. The long term incentives form companies seems to better go along with the stakes of the residents.

We found several incentives for the introduction of Homeservices. These incentives are related to the various stakeholders around the concept of Homeservices. There seems to be potential for the introduction of a careful selection of sustainable Homeservices that is linked to the incentives of the stakeholders. We have to be careful. Firstly because stakeholders have normally other important incentives that are not in favour for sustainable Homeservices. For example for the residents we found out that the provision of services that are sustainable is not often a decisive factor for accepting services. Secondly, incentives of different stakeholders can clash.

Economic incentives for stimulating Homeservices	Stakeholder	Example services
Reduce living costs Reduce waste management costs Reduce energy costs	Residents	Energy Advice Debt consult Resident as energy expert Info-via-TV Low energy house (Attemsgasse, A)
Supply affordable services	Residents	
Profitability of the service Increased business opportunities	Housing organisation External service provider	Internet marketing place for Homeservices (F) BUWOG Hanging Gardens (A)
Long term continuation of the company Better corporative image of the company	Housing organisation	Bonus points system
Low vacancy rate / longer tenancies. Improving the value of the housing estate	Housing organisation	Bonus points system Relocation service Residents
Reduce maintenance costs	Housing organisation	
Stimulation of regional economy	Local residents Local authorities	Maunula-Help's Homeservices (by employing local residents) (F), Organic farming
Stimulation of local non profit economy Employment for youth and unemployed	Local authorities	Electronic appliances repair & recycling by employing disadvantaged groups Maunula-Help's affordable Homeservices (by employing local residents) (F)
Stimulate ICT developments		Services for residents (F)
Attract customers with a high income		Herrenhauspark (A) Augustinum (G) EXPO

Figure 7. 7 Economic incentives and stakeholders

Looking at the evaluation of the good-practice service examples (Chapter 3 and description in the annex), we can see that Homeservices can be profitable for their providers as well as create employment. These indicators scored highest of the economic effects. This indicates that when properly designed, sustainability can be in congruence with economic aims of the service providers (commercial, non-profit and public ones), as well as stimulate a societal goal, employment.

7.2.3 Improving the sustainability profile of services

In order to introduce new sustainable Homeservices, we need a method to design and redesign Homeservices that integrates sustainable aspects. Hereby, the method of "service engineering' represents a useful framework for service design. Combined with sustainability assessment, the service engineering concept could give a basic guideline for service providers expanding their service offer by new services or redesigning their service offer according to sustainable development goals.
Mandelbaum defined Service Engineering as follows (Mandelbaum 1998):
The goal of Service Engineering is to develop scientifically-based design principles and tools (often culminating in software), that support and balance service quality and efficiency, from the likely conflicting perspectives of customers, servers, managers, and society.

First approaches to establish a service engineering concept can be found in the Anglo-American discussion on "New Service Development" in the 1970ies and 80ies (Bowers 1985). Still, a scientific debate on systematic service development only recently began to reach a broader public by numerous related publications (e.g. Ramaswamy 1996; Cooper/ Edgett 1999; Fitzsimmons/Fitzsimmons 2000). Simultaneously, researchers in Germany and Israel coined the term service engineering as systematic service development using according instruments, methods and tools (Bullinger, Mandelbaum).

The reference method which can be used for the design of the Sustainable Homeservices is the service engineering concept that was developed on the initiative of the German Federal Ministry of Education and Research (DIN 1998). This concept is basically divided into three engineering steps: Service Creation, Service Design and Service Management. To provide a basis for Homeservice engineering, it is required to precede the actual engineering process with a fourth step, which is called, 'Situation analysis' of the local housing situation. Thus, the following phases constitute a systematic service engineering method:

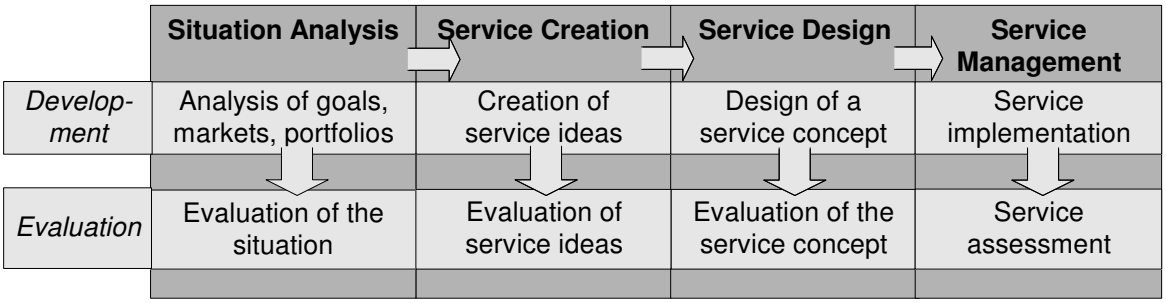
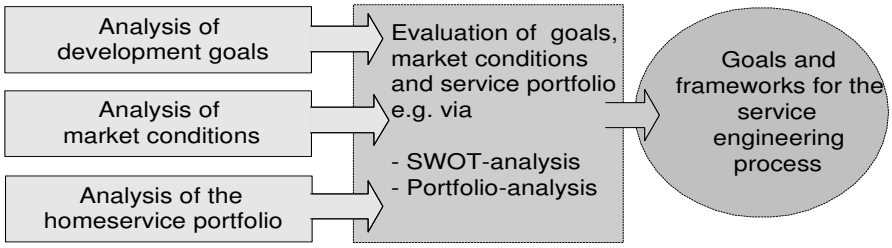


Figure 7. 8 Main service engineering phases

These four steps are divided into according development and evaluation stages in order to structure the development activities:

Step 1 Situation Analysis
The situation analysis aims to detect and specify goals for the service engineering process as well as to explore the relevant framework conditions that could obstruct or support an implementation of Homeservices in the market:

Figure 7. 9 Workflow of a situation analysis



The analysis of market conditions (see paragraph 7.2.2.) mainly refers to incentives of the various stakeholders that are connected to a provision of Homeservices. By analysing strategic goals of the according stakeholder, the service engineering process can be based on the prior motivation to provide Homeservices from the beginning. Sources of information are e.g. corporate identity declarations as well as interactive workshops or interviews. The sustainable related incentives (see paragraph 7.2.2.) play a mayor role in the development of sustainable Homeservices.
In addition, analysing market conditions can help to detect demands for Homeservices as well as important restrictions for a Homeservice supply. As housing is a basic need that contacts nearly all aspects of living (mobility, leisure time, consume etc.), the analysis of market conditions equally refer to a broad range of factors:

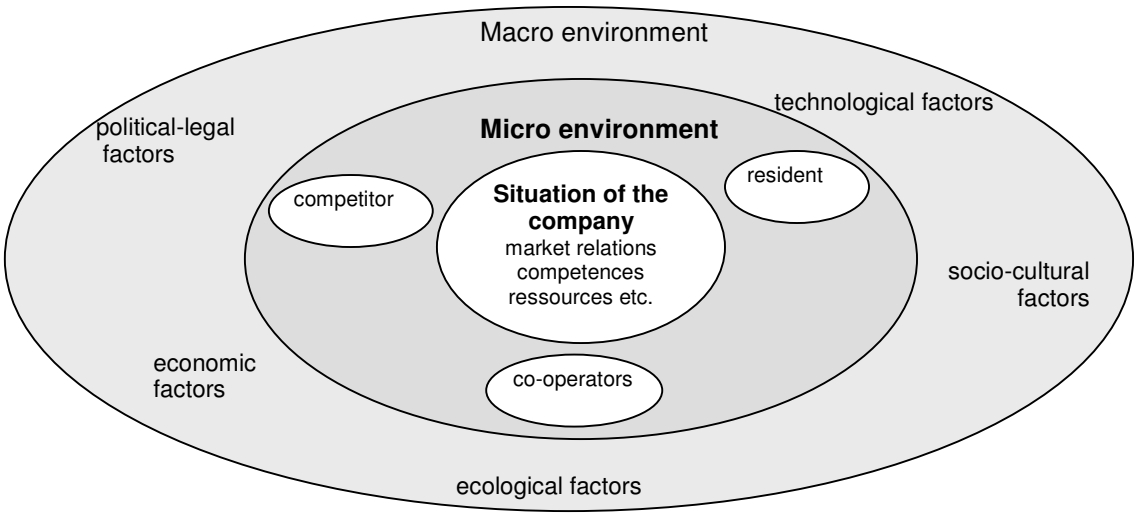


Figure 7.10 Factors of an analysis of market conditions for Homeservices

As the residents' demands is one of the most important factors regarding a relevant market for sustainable Homeservices, residents surveys or market research can help to detect potentials - even for presently non-existent service offers. In chapter 5 an example of a residents questionnaires for the analysis of demands for Homeservices is presented.

Moreover, service engineering should be based on an local analysis of the existing Homeservice portfolio, in order to detect relevant market potentials, practices and niches. This analysis should include the actual service portfolio of the according actor as well as Homeservice offers of comparable competitors.

Finally, the evaluation of the situation analysis results should summarize and assess all important factors that condition the provision of Homeservices. Hereby, according actors extract important framing conditions from peripheral ones, e.g. via SWOT analysis or a workshop. With regard to sustainable Homeservice engineering, results of the situation analysis should basically reflect as well the precondition that a new service offer fulfils general sustainable development goals.

Step 2 Service Creation
The actual development of services starts with the Service Creation phase that is, however, based on the results of the Situation Analysis. The first step is to create service ideas that correspond to the detected development goals as well as to the framing market conditions. The choice of methods depends on the actors' preferences, whether they intend to create completely new services by creative processes (e.g. Brainstorming or Future Labs) or by exploring the market for existent service ideas to assume (e.g. by scanning literature or interviewing actors). Subsequently, these ideas should be systemised and assessed in order to separate suitable service ideas from the whole bunch of generated ideas.

This is the second moment to include sustainability criteria in the engineering process. The sustainability evaluation tool newly developed in the Homeservice project is the instrument to check ecological, economic and social impacts of the given service idea (see chapter 3.1.). Consistently with

the project definition, sustainable Homeservice ideas should therefore have mainly positive scores on all impact areas (social, economic, environment) to be accepted for a further development in the Service Design phase. It is helpful to illustrate the results via a multi-dimensional graphic in order to make all aspects visible:

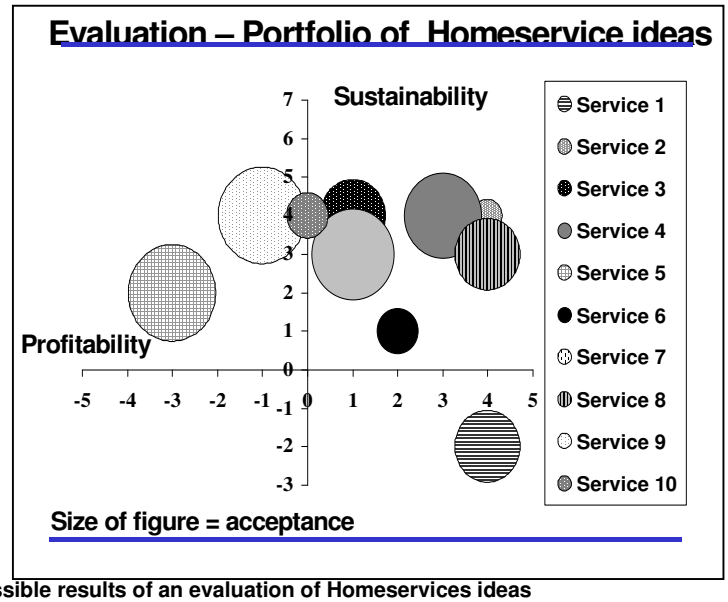


Figure 7.11 Possible results of an evaluation of Homeservices ideas

Step 3 Service Design

After having created interesting service ideas, these services should be specified in detail in the following Service Design phase. The Service Design process can be structured according to four concept stages:

What should be the Homeservice?	**How** should the service be provided?	**Which** resources are available for the service?
Service concept	**Process concept**	**Ressource concept**
What kind of marketing is needed for the service?		**Marketing concept**

Figure 7.11 Service, Process, Resource and Marketing Concept

Service concept

Firstly, the stakeholders have to determine the intended performance results. The following questions could guide through the product concept design:
- Who is the target group of the new service (e.g. elderly, youths, deprived residents)?
- What should be offered to the target group (e.g. help for removals, guest apartments)?

After determining an interesting target group, their demands should be analysed in order to increase the potential acceptance of the service. One relevant instrument to include customer demands in the Service Design process is the Kano model, that distinguishes between threshold, performance and excitement attributes (Kano et al. 1996):

- Threshold attributes are the expected attributes or “musts” of a service, such as a clean guest apartment. Customers do not accept to pay extra for threshold attributes.
- Performance attributes are the core aspects of a service, as a good performance improves the customer satisfaction, while a weak one reduces it. For a guest apartment, performance attributes are for instance the equipment (e.g. a tv, a washing machine etc.). Moreover, the customers’ willingness to pay is closely connected to the performance attributes.

- Excitement attributes are unexpected by customers but can result in a high customer satisfaction, however their absence does not lead to dissatisfaction. Relating generally to still latent demands and no direct needs, such as a whirlpool in a guest apartment, customers often are not willing to pay extra. Still, excitement attributes are an important competition factor.

The Kano model can be applied e.g. in residents' surveys or focus groups in order to determine important service features, that must or should be included in the Service Design process. On basis of the customer demand analysis, the according actors can specify the performance and prepare a descriptive product model.

Process concept
With regard to modelling service processes, it is helpful to define four lifecycle phases:
- Supply of physical components of the service (e.g. equipment of a common room, printing of information brochures etc.),
- Sales and distribution (e.g. via Internet, service centres etc.),
- Provision processes (e.g. reservation, accounting etc.),
- Service assessment (e.g. recording of complaints, employees' amendments etc.).

The core component of the process concept is the provision processes that mainly determine physical components, assessment, sales and distribution. The goal of the provision process design is to gain a concept of separate single activities. These activities can be illustrated by a so-called blueprinting that visualises activities according to actors and stages of interaction (external interaction with the customer, visibility of processes for the customer and the internal interactions). The following figure represents a blueprinting for a removal service:

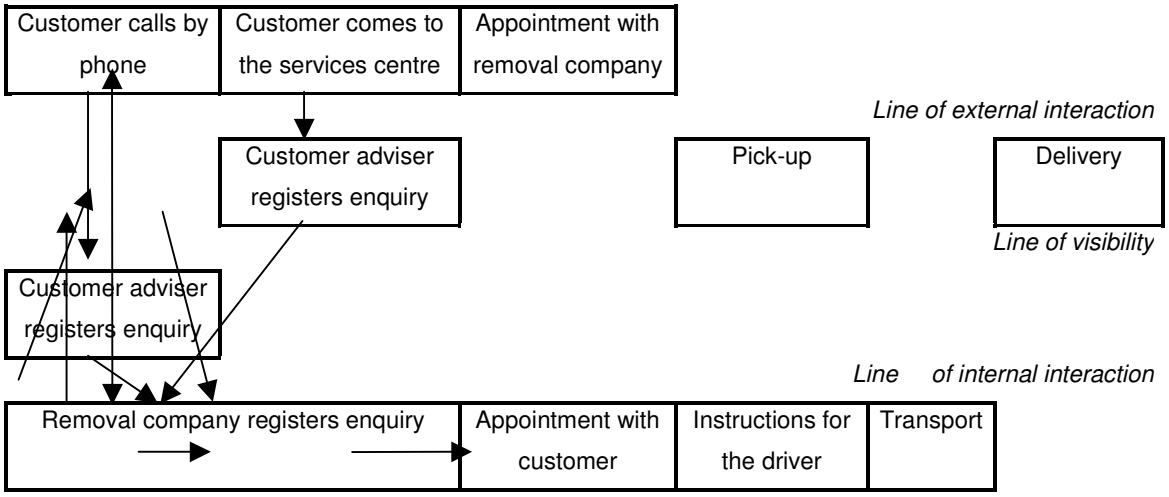


Figure 7.13 Blueprinting for a removal service

Process blue printings can be complemented by integrating sales and distribution activities as well as service assessment activities. By dividing the whole service into single activities, they also demonstrate clearly, where physical infrastructure is needed.

Resource concept
Finally, the stakeholders must detect relevant resources according to the product and process concept. The resource concept comprises choice and qualification of the staff, supply of physical and financial resources as well as ICT applications if required. One possibility to illustrate a resource concept are tables that list all needed resources according to the lifecycle phases. The following table illustrates a resource matrix for a guest apartment:

	Staff			Company resources			ICT		
	Own staff	External staff	…	Premises	Financials	…	Internet	Hotline	…
Supply of physical components									
- Choice of apartment	**X**			**X**					
- Equipment of apartment		**X**			**X**				
- ….									
Sales and distribution									
- Information on homepage		**X**			**X**		**X**		
- Article in newspapers	**X**								
- …									
Provision processes									
- Reservation	**X**								
- Key deposit	**X**								
- ….									
Service assessment									
- Recording of complaints	**X**						**X**	**X**	
- Treatment of complaints	**X**							**X**	

Figure 7.14 Resource matrix

However, such a resource matrix can only give a broad overview on relevant aspects that have to be considered in service provision. In general, resources must be continually adapted to the actual demand after implementation.

Marketing concept
The development of a marketing concept is a cross section on all Service Design stages. The marketing concept is basically based on the marketing strategy and the so-called marketing mix. The marketing strategy determines e.g. target groups, the position of the service in the whole company performance or internal responsibilities for marketing activities. In a traditional sense, the marketing mix includes all measures and instruments that support the supply of the service. Some components of a marketing mix are, for instance, pricing systems, sales and distribution models or advertising.

Evaluation of the product, process, resource and marketing concept
Modelling the process concept is the most important working step with regard to sustainability effects, as relevant ecological and social impacts relate to sales and distribution as well as to the provision processes. Moreover, physical components that often have considerable environmental effects are planned during this engineering phase. Therefore, the sustainability assessment tool (see chapter 3.1.) can be a helpful instrument to check the process concept on relevant sustainability effects and to find optimisation potentials if necessary.

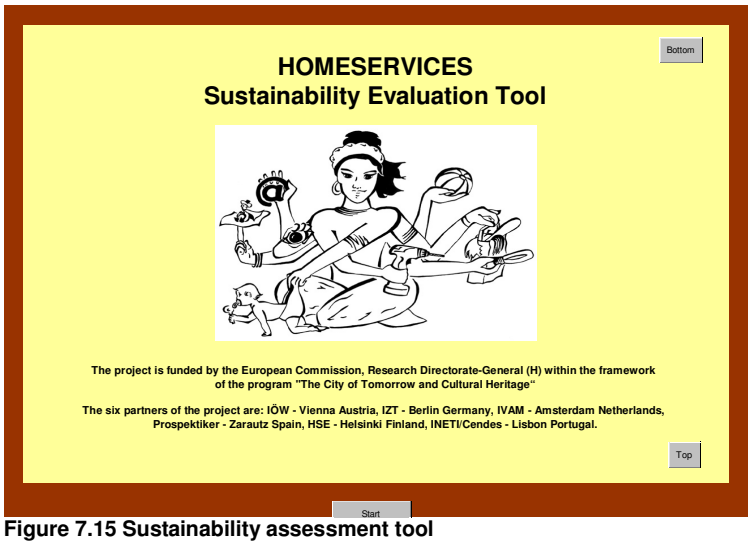


Figure 7.15 Sustainability assessment tool

Step 4 Service Management

Service Management as Service Engineering phase comprises the implementation of the service on the market as well as a long-term assessment. The implementation of the Homeservice consists in planning the institutional arrangement as well as in integrating the service in company operation structures. The long-term assessment can be divided into evaluation processes regarding profitability, acceptance and strategic goals - such as sustainable development in this case.

Service Implementation

With regard to sustainability effects, institutional arrangements can have various impacts. Firstly, a single-handed supply by the housing organisation or service provider results in sole responsibility of sustainability effects regarding the service content and logistics. Consequently, an NGO can for instance decide on developing a food delivery service by optimising sustainability effects e.g. by using bikes for delivery and concentrating on organic food from regional suppliers. In contrast, a cooperation is based on shared responsibilities between both partners. The providing organisation can therefore influence sustainability effects by optimising their own contribution and choosing suitable partners that also follow sustainability strategies. Finally, with regard to residents' involvement, the initialising organisation has influence on the general concept of service provision. So, for example, a housing organisation that forms a tenants' association in order to organise a swap shop contributes to sustainable development goals by initialising a non-profit, material saving service offer, although the service itself is carried out by the residents.
In contrast, the service's integration in the company's organisational structure permits only small scopes for influencing sustainability effects. Still, based on the resource concept of the Service Design phase, the service's integration determines its profitability for the organisation and can also include further sustainable economic aspects such as the employment of long-term unemployed for service provision if new staff is required.

Service Assessment

The long-term service assessment aims to continually improve the service performance. Hereby, there are three main aspects that should be taken into consideration while assessing the service's performance: profitability, acceptance and sustainability effects.

The profitability of the service can be evaluated by implementing a continuous control of the service's costs and of its use by the residents. Part of the profitability assessment is furthermore the examination of provision processes or staff expenses.

Moreover, residents' surveys can give information on the service's acceptance. While the use of the service relates to quantitative data, surveys can also detect the qualitative status of the Homeservice. Furthermore, according employees can often give additional information on the acceptance of the service.

Last but not least, the service's sustainability effects can be assessed by using the sustainability evaluation tool. The tools evaluates the sustainability performance of the services with help of 18 indicators. These indicators are presented in table (see chapter 3.1.).

Environmental aspects	Social Aspects	Economic Aspects
1 Material Use	7 Equity	14 Employment
2 Energy Use	8 Health	15 Financial Situation of the Residents
3 Water Use	9 Safety and security	16 Regional Products and Service Use
4 Waste	10 Comfort	17 Profitability of the Company
5 Emissions	11 Social Contacts	18 Profitability of the Region / Community
6 space Use	12 Empowerment	
	13 Information and Awareness	

Figure 7.16 The set of indicators for evaluating the sustainable performance of Homeservices.

7.2. Strategies for implementation

7.2.1. Developing strategies per country

On the basis of the incentives from paragraph 7.2.2, the six countries developed strategies for the implementation of Homeservices in the six countries. The main goal of the strategies is to implement Homeservices that can contribute to sustainable development. Along with that, these services should increase the satisfaction of residents and at the same time generate benefits for the involved companies.

In order to develop strategies we work out the following elements of the strategy:

1. Aim of the strategy
2. Stakeholders and target group
3. Instruments for implementation

Aim of the strategy

We found out in all countries that the concept of sustainable Homeservice is new and not yet established among the most relevant stakeholders in the six countries. There is a lack of information about Homeservices and their sustainable features. Sustainable Homeservices are now scattered offered throughout Europe. In some countries housing organisations and service suppliers experiment with the extended supply of Homeservices to residents. In these countries we found more good practise Homeservices compared to other countries. But the purposely and systematically supply of sustainable Homeservices was rarely found in the countries.

The overall aim of the strategies is therefore to go from this current situation of ignorance to the desired situation of support for the extension of the supply and use of sustainable Homeservices throughout Europe

Against this background the overall idea for the six countries is to develop information strategies to settle the idea of Homeservices, followed by demonstration and dissemination activities to spread the message amongst the main stakeholders and extend the offer of sustainable Homeservices in Europe.

Stakeholders and target group
Who are the main stakeholders? In paragraph 6.1 we presented the various stakeholders who can have influence on the implementation. In the strategy development we decided to focus on the main stakeholders, namely the residents, the housing organisations, public administration and NPO's. Depending on the housing market we found in principle two different situations:

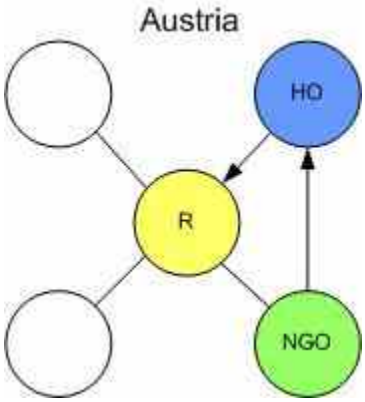
- In countries with large (social) housing companies there is potential for supply of services via these organisations;
- In countries with a housing market dominated by owners/occupiers there seems to be more opportunities fir direct supply of Homeservices by external service suppliers.

The target group of Homeservices are the residents. There are several sub groups within the broad group of residents for the offering of Homeservices. Each group has its own demand of Homeservices. Examples are the elderly people, families with young kids and handicapped people.

The developed strategy gives an idea how it to link supplies to the demand of the most important target groups. Homeservices can be offered to them by various organisations.

Presentation of strategies in 6 countries
Each of the six countries has its specific culture, demand, housing market and stakeholders. Depending on this situation each country proposed its specific strategies. These strategies are presented below.

7.2.2. Austrian Strategy



For Austria it is proposed to disseminate already existing good practice examples to all actor groups. In a second step the communication and cooperation between housing organizations and non-profit service providers should be promoted and intensified. The main stakeholders of this strategy are external service providers, commercial as well as non profit that already offer sustainable Homeservices, either directly or in co-operation with organisations (non profit as well as profit oriented one's) and employee organisations;

Why this strategy in Austria? In Austria a lot of single initiatives already exist. Due the particular legal situation – concerning the lack of the janitor's law - most of the housing organizations have somehow to deal with the Homeservice concept. From the external provider side there are also good practices, however they need to be better known. Actually both groups mostly work on their own and co-operations might ease their tasks.

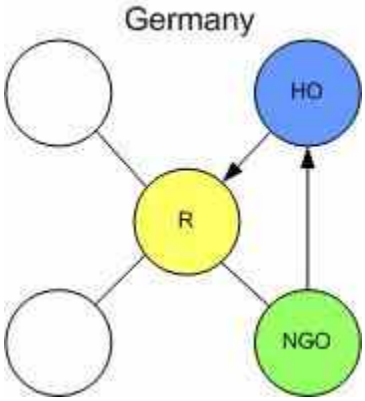
The main goals of the Austrian strategy are:

- to inform housing organisations but also employee organisations how the "janitor-problem" can be solved in a way that all actors – housing organisations, residents and service providers - are satisfied;
- to further analyse which sustainable Homeservices are attractive – from the point of comfort and cost - for residents;
- to offer housing organisations attractive sets of sustainable Homeservices for implementation;

In Austria main emphasis is directed to services that are somehow related to construction measures. Regarding the service areas, most promising are Care & Supervision, Counselling & Information and Mobility & Delivery. Improving the sustainable profile is directed to the services area of Repairs and Supply & Disposal. Regarding the terms of supply all alternatives are considered.

7.2.3 German strategy

In order to promote sustainable Homeservices in Germany, we propose to initiate a cooperation strategy between housing companies/ cooperatives and NGOs that provide sustainable services. Equally, existing Homeservices provided by housing companies should be checked according to potentials of improving their sustainability profile. Some Homeservices detected in the country report show good potentials for easily improving their sustainability profile (e.g. including an "organic food assortment" in an existing food delivery service). In Germany, housing companies and cooperatives are the most interesting multiplier for Homeservices, while NPOs dominate as providers of sustainable services. Therefore, cooperation between these stakeholders will connect both potentials and accordingly enhance sustainable Homeservices most effectively.

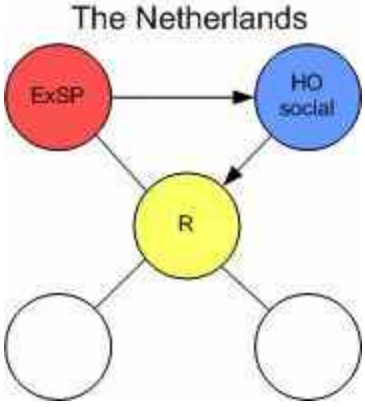


The main goals of this cooperation strategy are:

- to inform housing companies and cooperatives on interesting sustainable Homeservices;
- to further analyse which sustainable Homeservices are attractive for residents;
- to provide help in initiating cooperation with relevant NGOs (describing good practices/ "guidelines for a sustainable Homeservice provision") and support networking on sustainable Homeservices (e.g. via a certain website, workshops etc.)

The main stakeholders to involve in the strategy are the regional and national federations of the housing companies and housing cooperatives, the regional LA 21 actors/ groups, the regional providers of sustainable Homeservices and interested housing companies and cooperatives. The most interesting term of supply is cooperation between housing companies and NGOs – in some cases also between housing companies and commercial providers of sustainable Homeservices (if there is no non-profit equivalent).

7.2.4 Dutch Strategy



For the Homeservices concept we propose in the Netherlands to start with a combination of an information strategy and a demonstration strategy. Why is that? In the Netherlands there is relevant interest by the forefront of social housing organist ions to extent there offer of services in general to residents. The idea is that these organisations can improve the attractiveness of their stock with the supply of some specific services. We try to connect to this drive adding sustainable Homeservices to their services strategy. There is a lack of information about the concept of sustainable Homeservices by all important actor groups including the social housing organisations. So there we will start. We want to organise a demonstration project with the main actors: the forefront social housing organisations and their subsidiaries and external service providers. For the Dutch strategy the following incentives play an important role:

- HO: operate in a environmental friendly way and improve customers satisfaction
- Residents: safety and security and health care
- Commercial external service providers: profitability and increased business opportunities

Furthermore we want to involve some residents groups and the SEV as the experimenting organisation for the ministry of housing with the practical implementation of the innovative concepts such as Homeservices.

The main goals for the Dutch strategy are:

- to inform social housing organisations about interesting sustainable Homeservices;
- to further analyse which sustainable Homeservices are attractive for residents;

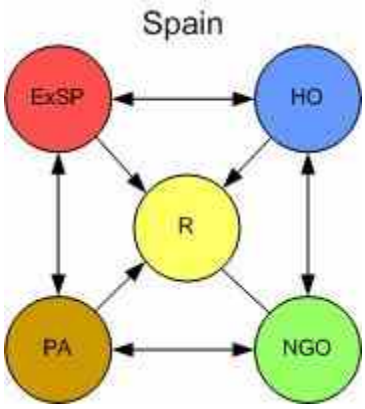
- to relate housing organisations to external service providers in order to offer attractive sets of sustainable Homeservices for implementation;
- to set up demonstration projects to help them with successful implementation;

In the Netherlands we will direct our first activities on five interesting 'packages' of sustainable Homeservices in the fields of safety, security, care, ICT, energy and waste. The idea about the terms of supply is that the social housing organisations act as intermediary organisations between external service providers and the residents. We will include the idea of 'bonus points' to make the service offer more attractive for both the housing organisations and the residents

At a first step we propose to disseminate a relatively small range of services, the 'top ten'. This range is closely linked to the most important incentives of the main stakeholders in the Netherlands. In order to increase the changes for success we want the introduction to go along with a type of bonus points system.

7.2.5 Spanish Strategy

The strategy for the Basque municipalities of Bilbao and Zarautz will largely depend upon the use that the local Actors' Group will make of the project results, since all relevant service providers are represented in this group. Zarautz has the opportunity of incorporating some of the ideas developed in the project in the context of the ongoing Agenda 21 process, while in Bilbao, further dissemination among the local administration will be necessary. There are also good changes for spreading the idea to other localities, due to the participation of the regional authorities in the actors' group. Thanks to this constellation, it is possible to envisage both dissemination and demonstration projects in the Basque Country. A first step in this direction has been done with the distribution of the Spanish summary to all actors.



As discussed in the SWOT-Workshop, there is a clear focus on the increasing demand for social services in the Basque localities, followed by service demand derived from new environmental legislation, which is particularly interesting to the housing managers. Also, the PPP tool has received considerable interest as an instrument, which would be useful in urban planning in order to evaluate the sustainability of development projects.

The primary goal of the strategy is that of disseminating the idea of sustainable Homeservices among public service providers, as a form of promoting innovation in the service field. A second objective is related to promoting cooperation between the administration and commercial service providers, so that the latter will find support when trying to improve the sustainability profile of their activity.

In view of the scarce knowledge on sustainable Homeservices in the Basque country and the absence of large housing organisations, the main actors for the promotion of these types of services are the different levels of public administration, in cooperation with the housing managers and some best-practice service providers, which may be NGOs or commercial.

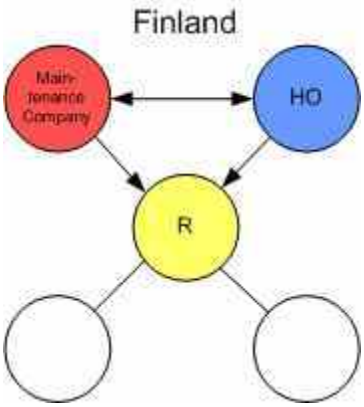
Since cooperation between the different actors is the main feature of the Basque strategy, the terms of supply depend on each actor's perspective. The housing managers will mainly act as intermediaries, while the public administration may act as facilitator or direct supplier. The external commercial providers are of course interested in supplying the service themselves.
The following fields of services have a considerable potential from the point of view of the providers in the Spanish Actors' Group: environmental and energy counselling, integrated facility management, specific services for the elderly (e.g. adapting the dwellings to their needs), integrated maintenance and advanced electrical appliances, all types of mobility services, delivery services on bicycle and

personalized delivery services, interchange of apartments, some security services such as personal protection and vigilance systems, as well as most energy services and the collection of rain water.

7.2.4 Finnish Strategy

In Finland a 2-line information strategy is proposed, aimed at the relevant actors who could start promoting (sustainable) Homeservices at different fronts. The main goals of this strategy are

- Put through the idea of (sustainable) Homeservices to relevant actors;
- put through the idea of co-operation as a basis for offering Homeservices;
- further analyse feasible business models for sustainable Homeservices.



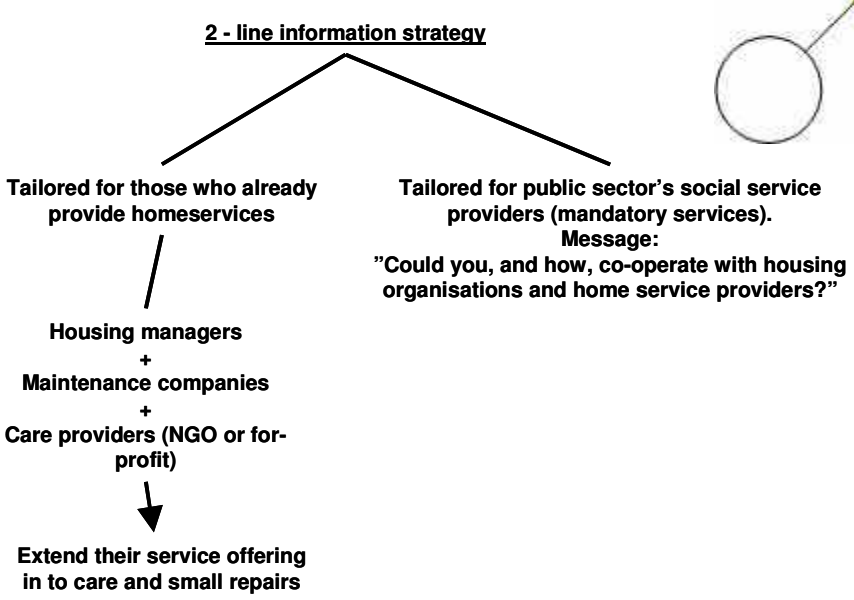


Figure 7.17 Finish strategy line

The first-line information strategy is aimed at the housing sector actors: the social housing organisations and maintenance companies. The *social housing organizations* compete for better tenants and longer tenancies. We want to infect them with the idea that their stock becomes more attractive if they provided better Homeservices, and furthermore, suggest that sustainability may offer a basis for ideas on how to tailor services so that they do not necessarily cost more for the provider or resident. The *Maintenance companies* are involved because, on one hand, they have to compete hard, and therefore they are interested in means of getting competitive advantage, either in terms of increased margin or more business. Extended and/or improved Homeservices offerings may be one such mean. In general, the need to improve quality of housing maintenance is well-recognised among the actors of the field. The Finnish Real Estate Association is already working on it, but added measures are needed. The most relevant actors for the first line strategy are the Finnish Real Estate Association, Association of Housing Managers, the Finnish Residents' Association, VVO (social housing organization), 2-3 forefront maintenance companies and 2-3 forefront housing management companies. In addition we hope to find 1-2 social enterprises operating in the Homeservice field that would be interested in innovative ideas of co-operation with social HOs maintenance companies.

The second line information strategy is directed to toward the public social sector authorities, it is based upon the notion that there are strong sectoral barriers between the public sector service providers (social departments of municipalities) and the housing sector. We want to suggest the idea of cooperation with regard to certain care services that are mandatory for municipalities. The most important actors for the second line strategy are the Association of Finnish Local and Regional Authorities, social and healthcare services (this should be body to be informed and which could then further the idea toward the municipal social authorities).

In Finland the main need would be in the field of care and small home assistance. Most prominent service niches relate to small home care activities, and casual child and elderly care. Small repairs, such as listed in service area 2 (care & supervision) is an area where the demand is considerably higher than supply. As to the terms of supply, people care services is an area where housing organisations or maintenance companies need to co-operate with professional service providers, whereas small repairs and home-assistance (e.g. key service, watering flowers) could be directly supplied by the personnel of the same maintenance company that provides the standard maintenance of the respective building. In addition, a rising service type is ICT-applications as a support for provision of certain services. We are not talking about the ICT-services as such, these facilities are increasing at any event, but they could be applied better in provision of other Homeservices.

7.2.5 Portuguese strategy

For the Homeservices concept we propose to apply a dissemination strategy. We start with a stakeholders platform followed by one or two demonstration projects to be defined within this platform. The goals of the strategy are to implement new interesting sustainable services or to improve the existing services' performance in the three sustainability dimensions: environment, social and economy, with the involvement of relevant stakeholders, namely condominium management companies and commercial service providers. Therefore we propose the following stakeholders: housing promoters, 1 or 2 municipalities, real estate companies, NPOs and commercial providers

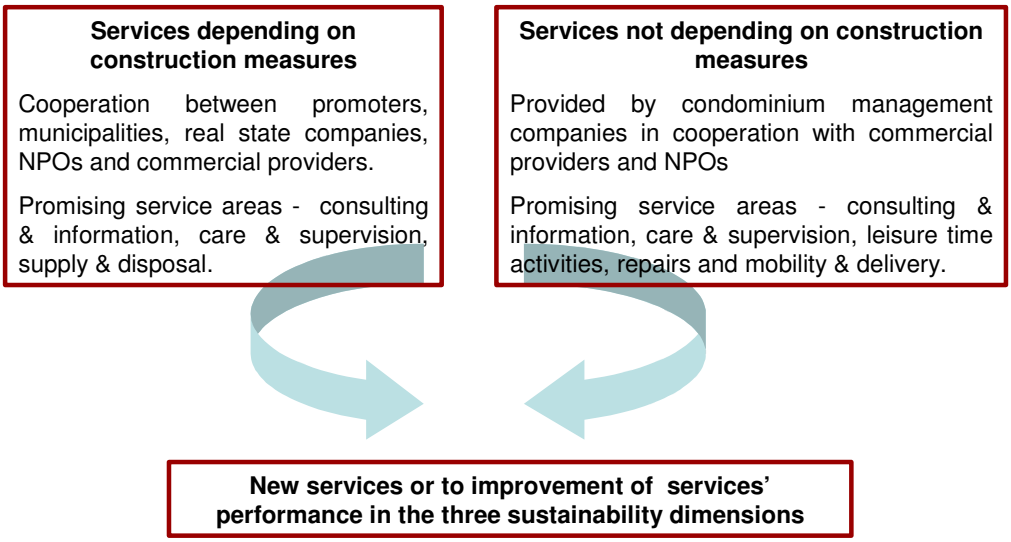


Figure 7.18 Portuguese strategy

In the current situation the supply of potentially sustainable Homeservices or good practice services is limited in Portugal and scattered over the country and service areas. Furthermore, the demand from residents is small and only found in certain market niches. Preferred characteristics for these services are increased quality, convenience and comfort, combined with equal or lower price than the normal service. The environmental profile is not relevant to choose a service. The Portuguese housing situation is mainly profit-oriented. Buildings' management is either performed by the residents' themselves or by a condominium management company, while home services are provided mainly by commercial companies and also by some NPOs. Condominium management companies are being asked by residents to provide Homeservices and are opened to work with service providing companies to deliver these services.

The most interesting services categories in Portugal are divided in two groups. For services depending on construction measures, the most promising service areas are consulting & information, care & supervision, supply & disposal. For services not depending on construction measures there is a high potential for providing services in service areas such as consulting & information, care & supervision, leisure time activities, repairs and mobility & delivery.

7.3. **European strategies and policy recommendations**

EU politics were analysed in order to recognise promising links between Homeservices and EU policies. In paragraph 7.4.1 we describe shortly the general EU strategies from Lisbon and Gothenburg and more sector oriented policies for services, housing and regions. In paragraph 7.4.2 relevant linkages between EU policies and Homeservices are presented. This chapter ends with recommendations for the EU.

7.3.1. Major aims of the European Counsel

Europe will face many challenges over the coming years. In March 2000, the European Council in Lisbon set out a strategy with aims to make the Union the most competitive and dynamic knowledge-based economy in the world by 2010. Furthermore this Summit called for new methods to promote sustainable economic growth, with more and better jobs and greater social cohesion. Later on during the Gothenburg European Council in June 2001, the Lisbon strategy was completed with the environmental dimension.

In these strategies, sustainable development was defined as ' meeting the needs of the present generation without compromising those of future generations and dealing with the three pillars, economic, social policies and environmental policies, in a mutually reinforcing way'. Environmental priorities include combating climate change, ensuring sustainable transport, addressing threats to public health and managing natural resources. Even though the European Union made progress on the Lisbon and Gothenburg objectives, much remains to be done, not least because the worldwide slow down in economic growth (source: Competitiveness, sustainable development and cohesion in Europe, from Lisbon to Gothenburg, 2003).

Next to this strategy the EU aims to narrow disparities between regions. With the enlargement with the new countries Europe will face extra challenges over the coming years including a dramatic increase in social en economic disparities. Furthermore Europe expects acceleration in economic restructuring as a result of globalisation. While the origins of change are global the impacts are regional and local. That is why Europe developed regional policies. Europe will spend 5 billion EUR for the least developed regions. Last but not least the European commission aims to improve their service economy. And that is important because the Europe services are omnipresent in today's economy, generating almost 70 % of GNP and jobs and offering considerable potential for growth and job creation (Commissions of the European communities, 13.1.2004).

We found out that developments in the housing market are important for the implementation of Homeservices. Traditionally the policies related to the housing market are left to the national governments. The Housing ministers of the EU stated clearly again in 2003 that they see no need for EU mandates in the field of housing (final document of the 15th informal and annual meeting of Housing ministers of the Members States of the European Union in Padua on November 27th and 28th 2003). In other words there is no legal basis for housing politics by the EU. Nevertheless the ministers indicated a number of important linkages between the national housing policies and the EU. Outcomes of the meeting relevant for Homeservices were:

- the ministers see housing as one of the fundamental elements in the struggle against alienation due to effects on the health and physical safety in deprived areas. Sustainable refurbishment and restructuring of deprived areas is a topic of priority. Ministers propose the diffusion of exchange of information about the national best practises in this field;
- The housing sector is quite important from the perspective the need to reduce energy consumption and CO2 emissions. The ministers welcomed the Directive of Energy Performance of Buildings. The enlargement of the EU with the new countries makes this directive even more relevant, because of the low quality of high-rise residential buildings with high energy consumption.
- their positions on the matter of limiting VAT reductions to a number of services that require intensive labour diverged:
- they also asked for more attention for improving building to make them more suitable for living by elderly or handicapped people

The conclusion it that although Homeservices as such are no part of any EU policy, there are many links between Homeservices are EU policies. In chapter 7.4.2 these links are presented.

7.3.2. Contribution of Homeservices to the EU policies

In this paragraph the outcomes of the Homeservices project are presented that can contribute to the practical implementation of the EU strategies mentioned in 7.4.1. In general the Homeservices project is a good example of a project in which sustainable development is considered as an integral approach, including economic, social and environmental aspects in a mutual way (see chapter 1). In the Homeservices project we therefore developed a method aimed at the critical evaluation of the sustainability performance of potential Homeservices in all its three aspects. The Sustainable Evaluation Method and Tool can be transformed in monitoring instruments that help the EU to safeguard sustainable development in the EU as stated in Lisbon.

When looking in more detail to the three elements of sustainability, namely economy, social and environment, we found several linkages where Homeservices can practically contribute to the EU policies.

Economy
Firstly, the Homeservices are part of the entire service economy. They form a subset of services that is offered directly at home. The offer of Homeservices is reduced in the last 25 years. But nowadays the demand for more comfort and the growing amount of elderly who stay longer at home create new business opportunities for Homeservices. The results of the Homeservice project in the six countries indicate that there is a (new) demand and an offer available that can lead to a renewal and extension of the sustainable services at home. The actually supply of Homeservices is now scattered and limited to some groups of residents in specific regions. Forefront housing organisations are extending their service offer. In specify niches Homeservices have the potential to offer potential for economic growth and job creation In Europe.

Contrary to global developments, the ‘ Homeservice concept’ can be characterised as a regional ‘ bottom-up’ approach in which small and medium sized service companies, NGO’s and consumers play an important role. Small companies and NGO’s supply most of the good practise examples of sustainable Homeservices. Although the individual services separately will not contribute strongly to the economy, the sum of all initiatives can give a strong impulse en help Europe to become a more competitive sustainable economy. This bottom up approach has also the potential to help deprived regions and new EU countries to accelerate their economic growth.

An important economic obstacle for the implementation of Homeservices is the high costs of labour. The EU can examine if the Council’s decision on reduced VAT tariffs (2004/259/EC, 2004/15/EC and 2004/161/EC) can be used to make the introduction Homeservices for companies more attractive. This Directive allows the reduced rates for added tax for labour intensive services listed in the categories set out in Annex K. until 31 December 2005

Social
Home services can also contribute to EU policies aimed at the improvement of the quality of life of its inhabitants. This improvement of the quality of live by Homeservices can be achieved both on personal level as on the level of neighbourhoods and districts.

On the personal level, residents are dispersed actors with various interests. How Homeservices contribute to the well-being of residents was assessed in the Homeservices project by means of a questionnaire in order to understand what the potential of Homeservices is. It is important to realise that in the last decades the lifestyles the inhabitants are changing rapidly. Two changes are relevant for Homeservices. Firstly, the number of single households is growing throughout Europe. Particular in the northern countries they are more they represent more than 50 % of all households. Secondly the European population is ageing. Due to the limited availability of elderly homes, elderly people tend to live at their own home as long as possible. It is expected that the demand for services will increase for both groups.

Problems of social cohesion and social exclusion are focussed in urban areas. Adequate housing in attractive neighbourhoods contributes very significantly to social cohesion. Housing organisations, local government and NGO’s can use Homeservices as part of their strategy to refurbish deprived neighbourhood. Good practise examples are: the Caravan and Neighbourhood renewal management.

These Homeservices can contribute to the well-being of the residents and make neighbourhoods safer.

Environment
The Gothenburg European Council set out four key environmental objectives. Homeservices can help to meet these objectives:

For the environmental aspect climate change the aim of the EU follows the Kyoto Protocol: that is to reduce greenhouse gas emissions to 8% below the 1990 levels by 2012 (Directive 2003/87/EC). The housing sector is quite important from the perspective of its potential contribution to save energy. This is laid down in the directive 2003/108/EU on Energy performance of buildings. In the Homeservices project we found a relatively great number of good practise service examples for the housing sector that can contribute to meet this target by reducing the energy consumption related to heating, cooling and warm water. Good practise examples that can be applied in this area are: Energy contracting, Resident as energy expert and Energy advice (see chapter 7.2.1.)

For the priority of sustainable transport the aim of the EU is to decouple gross domestic product from transport growth, in particular by a shift form road to other modes of transport. The possibilities of home services to contribute to this aim are limited, because we concentrated on the services that are offered directly at home. Good practise examples of home services that can be applied in this area are: Bicycle cab, Car pooling, etc

The EU has the third priority to respond to citizens concerns about health. Good practise examples of home services that can be applied in the area of healthy food are the Eco cook, Eco , Eco gardening, In the field of care we also found several interesting initiatives in the six countries:

There are also specific European policies and directives that Homeservices can support in terms of putting them into practice. Among them is WEEE, directive on waste of electrical and electronic equipment, which is one of the means of implementing Integrated Product Policy (IPP). WEEE is going to be reinforced in August 2005 and it requires that the manufacturer and importer take back their products after use. As regards consumer electronics and electrical household appliances, Homeservices directed toward recycling, repair and reuse could give a considerable contribution to implementation of WEEE's aims. Organizations that could offer this type of services already exist in at least Austria (R.U.Z.T), Finland (T&T) and Germany (Recyclingpartner). However, their operations are of fairly minimal scale, and would require considerable support to become more extensive.

How should this type of services be developed in order to become attractive in the market? On the basis of our resident survey one of the most wanted Homeservices are repair services at home. The repair service providers could develop their service toward a concept that repairs at home, or near to home. The latter alternative would entail that these organizations work together with, for instance, larger housing organizations who recommend them as repairers, or provide them space for at least "bring-in & pick-up" in different neighbourhoods. This way the residents could bring their appliances for repair or recycling near to their homes, and would not have to transport the equipment far. Presumably this type of a service would improve the willingness of the consumers to repair instead of buying new as easily as today.

7.3.3. Recommendations

Based on the analysis of the linkages between the concept of Homeservices and EU policies we formulate the following recommendations for the EU

1. Create business opportunities for Homeservices
We recommend stimulating the introduction of sustainable Homeservices into local development programmes of the EU. Thereby improve the image of service sector in comparison to the production sector. Next to the technical innovations on global level we recommend the EU to also give attention to the bottom up, regional, approach in which small and medium sized companies and NGO's play an important role. This approach can also support social innovation and help to improve deprived areas. Raising public awareness about good practices examples to offer and use Homeservices can

stimulate this approach. Furthermore national restrictions should be removed which hinder the extension of the offer of sustainable Homeservices.

2. Lower taxes on labour costs in order to stimulate (home) services
High indirect labour costs are hindering the introduction of labour intensive home services. We recommend the EU to lower income taxes from low paid jobs, or removing the taxes completely below a certain income level. Furthermore we recommend reducing VAT on services in line with the EU Council's decision on reduced VAT tariffs (2004/259/EC, 2004/15/EC and 2004/161/EC).

3. Promote sustainable growth by using monitoring sustainable implications of EU policies
The sustainability evaluation tool and related tools can help the EU to assess the sustainable effects of the EU service industry. We recommend to harmonise sustainability evaluation tools in Europe and apply them actively in order to communicate in one language to everybody what sustainability economic development is (Lisbon). The Commission can consider to systematically integrate all three sustainability aspects into EU directives and allow public service procure policies to select by these criteria. The sustainability service engineering method can be used to improve the sustainability performance of services throughout Europe.

4. Improve social cohesion by the introduction of specific Homeservices in deprived areas
Housing is a basic need and an essential element of social sustainable but so far not addressed on EU level. What the EU can do is to inform member states about good practise examples of Homeservices that can help to improve the quality of life in deprived areas.

5 More and better jobs in the service industry
In specific niches of the European service Market Homeservices offer the potential to create jobs especially in SME and NGO's. Furthermore the EU can stimulate employment projects like Equal, and integrate sustainable aspects in it.

7.4. Summary

To conclude the main results of the Homeservice projects, obstacles and promoting factors for the Homeservice provision were detected.

Throughout all countries it turned out that legislation, regulation and political factors are the most important items that can promote as well as hinder the demand. Particular tax deduction to reduce labour costs and subsidies given to providers as well as clients can directly influence. The governmental employment policies are a significant indirect factor that can ease the development of new forms of employment, which can be necessary for service provision. Regarding working hours, weekend regulation etc. services demand more flexibility than employment in the other economic sectors. On the other hand the same governmental control can restrict the Homeservice provision. As examples go trade licence regulations or particular restrictions to social housing organisations that prevent them from the Homeservice provision.

Apart from the political side, market factors and costumer demand strongly influence the Homeservice offer. Ageing population is a phenomenon recognized throughout all Europe that raises the demand for Homeservices. As well it contributes to another trend in living, that single households are wider spread than decades ago. However, not only elderly stay at home alone, but also young professionals that follow their jobs from one city to another. Both groups are potential Homeservice clients with a significant high demand in the service areas care & supervision, repair, and mobility. Contradictory to that trend, there often exists an information gap that hinders the clients' demand. This gap can be easily closed by housing organisations that act as intermediaries and provide information to their residents.

Whereas those factors can be found commonly in all participating countries, there are lot of national differences regarding practices and norms of the housing industry that influence the Homeservice provision. These factors are often linked with national culture, tradition and historical development of the housing situation. Nevertheless housing organisations can be encouraged to enforce co-operations with external service providers, which can be done independently from any national particularities.

As the survey in the six European countries showed, some sustainable Homeservices as good practice examples have been detected. So in fact there is a potential for their provision. Environmental, social and economic incentives relating to a great variety of different stakeholders can be found, in order to stimulate the Homeservice offer. However as the national situation has to be taken into account, different national strategies have to be developed to promote the Homeservice provision. Not only that in some countries the Homeservice concept is already known - at least within the innovative housing organisations - but also the means and ways of information of the residents as well as the housing organisations have to be different in all countries.

Although these national differences seem to be very dominant, it is possible and also necessary to develop a European strategy and derive policy recommendations. These are linked more or less with two major items

- improvement of business opportunities in combination with a reduction of taxes on labour costs
- improvement of quality and number of jobs in the service sector which partly is linked to improvements in the social climate in deprived areas

However even more important is the necessity to harmonise sustainability evaluation tools in Europe and apply them actively in order to communicate in one language to everybody what sustainable development is fact means.

8. Sustainable Homeservice summary: provider puzzle, user pleasure

Despite the high hopes placed on eco-efficient services, they have mainly not made great success among consumers. Why not? What could be done to make eco-efficient service based consumption models more attractive among consumers? These were the guiding questions the HOMESERVICE project team started out with in September 2002. During two years we studied sustainability potential of services provided to households directly to the dwelling or the premises. The project was funded by EU Commission and carried out in six European countries - Austria, Finland, Germany, The Netherlands, Portugal and Spain.

Figure 8.1 visualises the main building blocks of the project. We began by scanning household service supply in two locations in each country, a large city and a small town. This was done in order to understand how sustainable services fit into the overall service provision context in terms of the actors and the general service provision structure. Thereafter we selected a number of good-practice services in each city and town, altogether ending up with over 200 innovative sustainable services. The analysis of these services sheds light to missing links of sustainable household service competitiveness. One omitted competitive element appears to be social sustainability in the service design. We argue that mere eco-efficiency is not a sufficient condition for acceptability of household services that seek to compensate material product-based consumption. Best-practice examples of real-life services show that social sustainability, first and foremost the ability of services to improve the quality of life of their users – "user pleasure" – is a crucial determinant for the competitiveness of services in the market place.

In order to use services compensating products, consumers want to have them as easily as owned products. This means services ought to be offered directly to home or near to it. How to accomplish this in a cost-efficient fashion? There is a so far undiscovered natural actor to help in delivery of services to homes of consumers: Housing organizations. In chapter 6 of this report it is demonstrated that housing organizations by themselves or even more often in various forms of co-operation with other services providers could to be included in the supply chain of sustainable household services. A precondition is, however, that there are (large) housing organizations in the country, which was not the case in all the studied countries. In that case other actors like housing management companies or maintenance companies are relevant actors. This report also analyses other providers, that is, commercial, public or non-profit service providers, and identifies a variety of models for the "provider puzzle", i.e. the co-operation arrangements between these actors. It is noteworthy that large companies do not appear to play a dominant role in provision of sustainable homeservices. Small and medium-sized enterprises, public sector providers and non-profit organizations are more prominent ones.

In addition to the investigation of general homeservice supply structure and good-practice examples, we conducted a survey of 333 residents (consumers). It indicates that there are national differences in the service use cultures, but also some commonalities. For instance, consumers appreciate easy availability of services, e.g. availability of multiple services via one contact information. This means that there is room for service intermediaries through whom it is possible to get several homeservices. The willingness to pay seems to depend on the service. Consumers appear to be prepared to pay for repair services, care services and supply and disposal, whereas consulting and information services are mainly wanted for free.

We also analysed obstacles and promoting factors for sustainable households service in the European, national and local contexts. Based on that we propose both European and national level strategies to policy makers and regulators, as well as grass root -level implementation strategies for enterprises, housing organizations, non-profit organizations, and public providers. One of the preconditions for increased service use in general at the European level would be deduction of the indirect labour costs of services. As to sustainable households services in particular, support of social enterprises as well as support of service intermediaries are actions that we propose.

The remainder of this chapter provides a more detailed overview of the main findings of HOMESERVICE project.

Figure 8. 1 Building blocks of the HOMESERVICE project.

8.1. Background of the Sustainable Homeservice idea

The basic idea behind the Sustainable Homeservice project is the notion that environmental and social burden can be reduced by replacing products with services that fulfil the same need of the consumer. Previous studies indicate that consumers must be able to use such services as easily or conveniently as the products they own themselves. Therefore the services should be offered to consumers at their homes. Based on this idea, a *Sustainable Homeservice* is a service, that is offered to residents (consumers) at their home or within the premises and contributes positively to sustainable development in environmental, social, and economic dimensions. However, an Austrian study showed that this might be too strict: a service that causes a clear environmental improvement and increases comfort of the residents, but does not have a positive economic effect would be excluded from the list of sustainable Homeservices. As a pragmatic solution we decided for this study that if a service fulfils *two of the three sustainability conditions, it could be considered sustainable*. Consequently, for this study, we defined sustainable homeservices as

Pragmatic definition of a Sustainable Homeservice: (1) a service that is offered to a consumer at the premises, (2) contributes positively to sustainable development in two of its three dimensions.

The main goal of the project was to stimulate the introduction of sustainable Homeservices in Europe. The detailed list of research questions and goals of the project can be found in the very beginning of this report, Ch. 0, which presents the project outline. The housing market is changing, posing new challenges to different housing-related actors from housing organizations and city planners to residents. We are predominantly interested in new services as one of the means to meet the challenge. This means that the principal target groups of the project are service users, i.e. residents, and service providers, i.e. the housings organisations, other service providers and intermediaries, such as maintenance companies or energy suppliers. For the operationalisation of our primary concept, *Sustainable Homeservice,* having the above target groups meant that it has to be scientifically based but also applicable in practice.

Building on the concept of sustainable homeservices, we developed a method for assessing sustainability of services directed to households. This method consists of a set of 18 indicators relating to the ecological, social and economic dimensions of sustainability and an ordinal rating scale. The conclusion is that it is possible to assess the sustainability of a homeservice in a relative fashion, using 'no service' or the 'product alternative' as the point of comparison. Together the sustainability

indicators for homeservices and the ordinal rating scale form a Sustainability Evaluation Tool, a simple yet innovative method which researchers and other analysts can use for screening sustainability effects of consumer services, and which service providers can apply for developing their service offerings into a more sustainable direction.

Material use (environmental)	
The effect of the service on material use compared to status quo (status quo = situation without the service)	
-2 -1 0 1 2	
Increases material use	Decreases material use

2: a major positive change
1: a substantial positive change
0: the service does not make a change to status quo
-1: a substantial negative change
-2: a major negative change

Figure 8. 2 A condensed example of the ordinal rating scale within an example from the environmental dimension.

The indicators are relative, i.e. they indicate a move towards a positive (or negative) direction, e.g. a reduction in waste or an increase in employment. For a relative method, the point of reference is an important element. For this method, the point of reference is the 'status quo' alternative, where the service would not exist (i.e. the 'current situation' or the 'do nothing/base line scenario'). This would score 0 in the scale.

8.2. The analysed services and their sustainability effects

We decided to focus on seven service areas that relate to living at home. The analysis of Homeservices involved two steps. First one was scanning of household service supply in two locations in each country, a large city and a small town. The second step was selecting good-practice examples. The first stage was conducted in order to understand how sustainable services could fit into the overall service provision context in terms of the actors and structure. We applied a screening instrument that comprised of 280 services from seven service areas described below. It was assumed, that there might be significant differences between the different service areas concerning:

- number of services offered in different countries,
- service providers, and
- terms of supply/institutional arrangements around the service

At this stage we did not yet pay attention to sustainability of service, but only to whether the services exists. We just wanted to see what homeservices are provided the six countries and by whom. The goal was to be able to later on analyse the opportunities of potentially sustainable in the bigger picture of service provision. The service areas we screened included were the following:

1. Counselling & Information
The service area *Counselling & Information* includes counselling and information on all kinds of environmental and energy related items, on social aspects like e.g. living conditions for the elderly and financial counselling and information services that can be relevant for living at home.

2. Care & Supervision
The service area *Care & Supervision* deals with maintenance, cleaning, supervision, assistance and housekeeping of the building, the apartment, of persons and of pets and plants.

3. Leisure Time Activities
The service area *Leisure Time Activities* is related to leisure activities not necessarily practised at home but provided at home or in the neighbourhood. The service areas are organised in the categories sports, social aspects, culture and communication and food services and catering:

4. Repairs
The service area *Repairs* includes all services concerned with *Repairs* in the apartment or in the building, related to the infrastructure, construction and equipment. Included are supporting services

such as the provision of a workshop room for *Repairs*, tools rental, preventative inspections, spring bicycle repair services etc.

5. Mobility & Delivery
The service area *Mobility & Delivery* concerns the *Mobility* of persons and goods, which are of relevance to the residents, it includes vehicle rental and sharing, parking areas for bicycles, cars, taxis and other vehicles, and also delivery of products and other logistics.

6. Safety & Security
The services in *Safety & Security* are related to the building, the apartment, and the resident. Examples are surveillance, alarm systems, and emergency related services like an emergency telephone for the elderly

7. Supply & Disposal
In the service area *Supply & Disposal* the services concern the areas energy supply, water supply, and waste disposal. Construction measures as well as services are included.

Good practice examples were found in all service areas. Most often the examples are a combination of several services and not only a single service. Only about one quarter of the good service examples are provided by housing organisations. The main suppliers are commercial providers and non profit organisations whereas public providers only play a secondary role within the good practice examples.

As to the sustainability effects, in total the analysed services contributed most to social sustainability. What does this finding indicate? Firstly it implies that services offered to home improve the quality of life of the residents in general. Secondly this result warrants a special emphasis, because many of the selected services were originally environmentally oriented rather than designed with quality of life benefits in mind. As even in this case the social effects overweigh the environmental ones, an inference can be made that in order to survive in the market place, i.e. be used by consumers, the social aspect of sustainability should be paid taken into careful consideration. This means first and foremost paying attention to the quality of life effects that the service has for the consumers' daily lives.

The evaluated 215 good-practice services appeared to contribute most to emissions, energy use and waste for environmental sustainability, comfort and information and awareness for social sustainability, and finally employment and profitability of the provider for economic dimension. The analyzed Homeservices had the most positive effect on emissions, followed by energy and waste use. However, contrary to the assumption that service would reduce material consumption, the results did not imply major decrease in material use. These results do not support the common assumption that increased use of services would reduce the amount of material in the economy. Rather, it leads toward the notion that Homeservices should be specifically designed with the environmental aims in mind in order to reduce the material consumption of households.

Next it was interesting to see which service areas seemed to have the most noteworthy impact on the environmental dimension. The service area Counselling & Information outweighed all the other areas, which is presumably due to the fact that many novel good practice environmentally oriented Homeservices are based on the Counselling & Information – type of concepts. Supply & Disposal was the second-most important service area. This is quite natural because services aiming at the reduction in energy and water usage and improved waste management are quite common and in many cases mandatory in many European countries. We found some very good repair services in terms of all sustainability dimension, like a special repair and reuse service for household appliances or bicycle repair in the premises. However, in total there were few such concepts available. It seems that in spite of their good potential to enhance sustainable development, good service concepts in this area still await their time. For the time being they do not appear interesting for the providers.

Comfort and Information & Awareness were the main social sustainability effects resulting from the services. As to the economic effects, profitability of the provider, employment, and profitability of the economy/region/community were important sustainability effects. Service areas that contributed the most to both social and economic sustainability were Counselling & Information, Care & Supervision, and Leisure Time Activities.

8.3. What conditions the demand of sustainable Homeservices?

Sustainable homeservices are not provided in a vacuum – multiple factors set the frame for the provision of such services and shape the conditions of their demand and supply. As we see it, two major factors are firstly consumers' willingness to use sustainable homeservices, and secondly the structural matters relating to the housing situation. Next these two issues are discussed.

Consumers' preferences and an intertwined factor, national service use culture, influence the willingness to use services. We asked in a consumer survey, which homeservices consumers already use, what would they like to use and what they are willing to pay for them. Due to the small sample, the results from this survey should be interpreted only as an indication of the service mentality in the participating countries. In total, 333 questionnaires were answered in the five cities and five towns covered by the residents' survey. Due to the newness and difficulty of the topic, we applied mainly open-ended questions, and interviewed the respondents personally face-to-face.

It appears that although the service use habits vary on one hand between countries and, on the other hand, between small towns and large cities. On the basis of the resident survey we can draw some conclusions, which can be relevant background for the introduction of (sustainable) Homeservices in Europe. There is a demand for Homeservices, particularly in market niches of Care & supervision and Counselling & information service areas. Examples are elderly and children care, and counselling and information on energy consumption.

It is not surprising that people want services, but are they also willing to pay for services delivered to home or offered in the premises? In general there is willingness to pay for care services like child and elderly care, repairs or supply and disposal services. In general most residents are *not* willing to pay *more* than they already pay for services. However, it was observed that they are willing to pay more for some services that can, when well designed, support sustainability goals. Examples are coordinated repair services offered directly to home or in the premises, or waste collection area for recycling. It should be kept in mind that even good eco-efficient service may fail if it is in a service area for which consumers are not willing to pay (and if there is no other financial arrangement).

One of the most prominent homeservice concepts from sustainability perspective are perhaps coordinated (i.e. mediated by housing organization or a respective actor) repair services that consult the dwelling, particularly those directed to household appliances. Namely, from an environmental angle repairs mean longer life for products, and from social sustainability perspective they improve quality of life via comfort and time saving of the consumers (because no need to search for a new product or a reliable repair firm). Our consumer survey corroborates the demand for this type of service.

As to the differences in the willingness to use services in the studied countries, on one extreme of our sample there is Portugal, with the highest number of reported services, and on the other extreme there is Finland, with the lowest. The service use cultures in these two countries are quite different. For the Finnish people it is matter of pride to do many daily tasks by oneself – those who use a lot of services are perceived as "not coping by themselves" or perhaps "lazy", whereas in Portugal use of services is a status symbol, and households tend to use services, if only they have the money to pay for them.

Housing organisations supply approximately 20% of the services used by the respondents of the resident surveys. However, considering that in Portugal and Spain, the importance of housing organisations for supplying Homeservices is close to zero, it becomes evident that these organisations do play an important role for Homeservice provision in the other countries. One conclusion regarding service promotion strategies is that in "do-it-yourself"countries like Finland and Austria, it might be wisest to introduce relatively new sustainable Homeservices that can contain also a user-participation element (see e.g. example "Resident as energy expert" or sharing concepts for heavier tools) and mediate their use in order to make consumers interested. On the contrary, in "have-yourself-serviced" cultures like Portugal, it might be a productive approach to improve the sustainability profile of existing services, because consumers already use them.

To move on to the second item, structural factors such as housing situation also shape the demand and supply of homeservices in general and sustainable homeservices in particular. By housing situation we refer to issues such as structure of dwelling ownership, vacancy rate of dwellings, costs of living and housing with regard to the income level and socio-cultural features of the cities and towns.

One tendency that we could observe was that the number of large housing organizations influences positively to homeservice supply. For instance in Portugal and also in Spain the absence of large housing organisation seemed to at least partially cause the lesser availability of homeservices. Further, higher density of population combined with the overweight of multi-dwelling buildings support service supply in the big cities, whereas in small location the small amount of potential clients can be a significant hinder for the service provision.

Sometimes structural matters do not influence homeservice provision as expected. For instance, we assumed that the higher the vacancy rate, the higher the homeservice availability, because the housing organization would use services as a means to compete for tenants. Nevertheless, the vacancy rate in Amsterdam is nearly zero, and yet several housing organizations offer a bundle of Homeservices, whereas the Portuguese towns have significant vacancy rates, but only a small Homeservice offer. In this case we assume that an intervening variable is the housing organizations' – especially of the social ones – willingness to seek better tenant loyalty and less vandalism via improving resident satisfaction with homeservices.

From the residents' perspective mainly the extra costs that are linked with the Homeservice supply influence their demand for these services. The cost of housing has a significant influence on the households' purchasing power and the extent to which they can make use of extra services that are not provided for free. In the survey it turned out clearly, that the major difference between the southern and three of the northern housing markets – Amsterdam, Berlin, Vienna – is related to the regulative function of social housing, that allows an easier way of financing housing costs.

On the other hand economics can be a pushing factor for a service demand in a certain area. As a good example go the cost for household expenditure on water, energy and waste. In those countries where these costs are high, the demand and supply for Homeservices directed towards water and energy savings or waste prevention is more important.

8.4. Homeservice Providers and their offer

Often when thinking about sustainable services, we tend to assume that new enterprises should miraculously appear to provide such services, or we try to pursue large corporations to adopt product-service systems that enhance sustainable development. The findings of this research project, however, reveal somewhat more multifaceted picture of the potential or most prominent providers of homeservices. We observe that sustainable or potentially sustainable household services are offered by a variety of providers from commercial enterprises or public sector service providers to non-profit organizations. We also paid attention to a previously undiscovered actor in the provider arena, namely housing organizations. It appears that housing organizations are in many instances a natural agent to provide services or act as an intermediary for Homeservices. Why is that? It is because they bear close proximity to the consumers, i.e. their residents, and hence have the opportunity to provide services directly to the residents at home or in the premises. From consumers' viewpoint proximity means that services can be acquired as easily as products fulfilling the same need, which is one of the main conditions for consumers to replace or supplement their product-based consumption with services. It appears that in certain cases sustainable homeservice providers could create a new marketing channel for their services by co-operating together with housing organizations.

To start with housing organisations as service providers, they vary by type. To categorize crudely, there are profit-oriented, and non-profit/social housing organizations in the rental market and condominium associations for buildings where residents own their dwelling. As concluded above, the existence of (large) housing organizations usually indicates wider availability of homeservices. Property-related housing organisations are predominantly important for Spain, Portugal and small towns throughout Europe, while social and property-oriented housing organisations are particularly relevant for big cities in Germany, Austria, the Netherlands and to some but lesser extent in Finland.

In general it can be argued that housing organizations are more interested in offering services that are close to their core business. Rental housing organisations consider equipment, maintenance and renting of physical facilities as part of their core business including additional equipment of apartments or surroundings as well as technical installations. Moreover, the management of energy supply has become an important core activity of housing companies during the last decades. In general, housing

organisations prefer to offer services close to their core business in order to profit from internal resources and knowledge. Although the core business of social and profit-oriented housing organisations distinguishes from that of property-oriented housing organisations, according Homeservices related to the core business of construction and maintenance respectively housing management are mainly the same. The core business of housing organisations surpasses mandatory activities and relates to construction and maintenance of private or additional common facilities, respectively housing management activities relating to information on and care of general housing conditions.

For the Homeservice provision in property-dominated housing markets, the housing manager or maintenance companies are the central figures providing directly or indirectly potential services to residential buildings. Regarding residents' or cooperative housing, the relevant housing company or cooperative acts as Homeservice provider. Apart from repair and renovation services for the resident, most complementary service activities of housing organisations belong to the function of housing management.

The main motivation for housing organizations to offer homeservices is not the direct extra income. The benefits of these service come indirectly. Homeservices contribute to the companies' profile by increasing customers' satisfaction. Customer satisfaction means that tenants stay longer, and are inclined to treat the property better. Furthermore, better service offerings may attract better-income tenants.

To move on to other service providers, we could identify public sector service providers, commercial enterprises and NGOs/NPOs. Public authorities are required to provide public transport, energy and water supply, leisure time and social infrastructure as well as certain social services. Thus, most of their services refer to Supply & Disposal as well as public sports facilities and are generally provided by municipal companies. Counselling services relate mainly to social and financial aspects, but consist generally in mere information on public frameworks.

Non-profit organisations centre their activity on labour-intensive tasks that are useful for society and permit at the same time the reinsertion of socially excluded residents in paid employments. Main actors on the non-profit Homeservice sector are environmental associations, welfare organisations and urban renewal initiatives.

Whereas welfare institutions provide social services for special groups such as young, elderly, disabled and disadvantaged residents, environmental associations consult residents on diverse ecological subjects regarding plants, nutrition and sustainable consumer's behaviour. Urban renewal initiatives concentrate on a certain area and provide a broad range of community activities such as mediation, debts' counselling or residents' participation. Non-profit organisations are important actors for a dissemination of Sustainable Homeservices as they correspond to all sustainability sectors in complementing the whole range of Homeservices by activities that are demanded by the public but do not promise political or commercial profit. Most of the NPO have either a social or an environmental focus in their service provision, sustainable concept are not so easily found.

Commercial providers focus more on services that are related to *Mobility & Delivery*, *Repair* and to a certain degree to *Care & Supervision*. However they prefer services that demand a higher degree of technical equipment than human resources.

8.5. What drives sustainable Homeservices, what prevents them, and what to do to promote them?

There are a number of factors that can promote or hinder the offer of (sustainable) homeservices. These factors stem from legislation and regulation, customer demand/market, norms of the housing or homeservice industry, or are caused by the infrastructure. Sometimes they are interrelated, but for analytical reasons we discuss them one after another.

Throughout all countries legislation, regulation and political factors turned out as an important source of hindrance or incentive of the demand. Particularly initiatives that reduce the tax burden of household service provision, or subsidize these services in another way (e.g. governmental

employment policies) appear to be a significant promoting factor for homeservice use. On the other hand the same governmental control can be restricting the Homeservice provision. For instance trade licence regulations or particular restrictions to social housing organisations can prevent them from the Homeservice provision.

As to the customer demand or other market factors, aging population and the increase of single households are Europe-wide phenomena that increase the potential demand for certain Homeservices. Not only elderly, but also single professionals and couples where both spouses work are potential Homeservice clients. This potential is, however, counteracted by lack of information of homeservices among the potential users and, secondly, the fact that those in need of services are often not used to using them, or cannot afford them. To reach these potential customers, different strategies are called for. For those who could afford to pay for services, but for attitudinal reasons do not use them, strategies aiming at attitude change are called for. It is a psychological or promotional matter. On the other hand, for those who are in need of homeservices, but cannot afford them, strategies should aim at finding suitable financing structures.

Service use is a cultural phenomenon. This means that for different national contexts different strategies are required. For “do-it-yourself” countries like Finland or Austria, versus “use-services” countries like Portugal, different promotion strategies are called for. In “do-it-yourself” conditions, introducing relatively new sustainable homeservices and mediating their use would be a potential approach. A component of user’s own participation could perhaps also be crafted in the service. However, in countries where consumers already use services, a more lucrative approach could be improving the sustainability of already existing services.

There exist also lot of national differences regarding practices and norms of the housing industry that influence the Homeservice provision. These factors are often linked with national culture, tradition and historical development of the housing situation. In this study we examined one novel aspect, housing organizations as service providers or intermediaries. We observed that where large housing organizations exist, they might be good alternatives for homeservice supply. But why would they be interested in this role? Their incentive is better tenant satisfaction, which service offering brings along. Indirectly, tenant satisfaction forwards longer tenancies and decreases of vandalism – both of which result as cost savings for housing organizations. However, if there is a lot of private ownership and thereby condominium associations, then there is less change that housing organizations would be providers or mediators. In this case housing management companies or maintenance companies should be addressed. Their motivation, however, is the direct profit that selling extra service offers.

As the examples of good-practice sustainable homeservices show, motivation for provision and use of such services exists. However, the knowledge about homeservices, let alone the idea that well-designed homeservices could enhance sustainable development, is only at a sprouting stage. More must be done to promote this thinking. The strategies for different national contexts vary, as indicated above.

Despite the national differences, there are some European level actions called for. Firstly, throughout the six countries, services were considered too expensive. To address this barrier of demand, *indirect labour costs of low-paid service jobs should be reduced*. Secondly, it would be advisable to *harmonise and increase the support of social enterprises*, because they could play a considerably larger role in homeservice provision. They are an excellent vehicle for offering novel services, that are considered too risky by commercial enterprises as long as they are unknown in the market. For instance many car-sharing companies have grown out social enterprises, but today when the service model is more developed and known in the market, it is profitable business for commercial enterprises, too. From the sustainability perspective, social enterprises can be expected to offer more environmentally conscious services. As to social sustainability, they offer employment to people who would not otherwise be able to enter the job market. This, on the other hand, is economically beneficial because society saves money by not having to support unemployment, but rather with lesser financial support it gets employment activity and its benefits.

Thirdly, as one of the major problems is potential customers’ lack of information about homeservices and their providers, the EU could via its relevant structures actively support actors (intermediaries) that mediate services from several small providers (for examples see ELIAS electronic market place for homeservices in the annex of this report and http://www.buenosdiasbuenasnoches.com/). This would

offer a marketing channel to small service providers who seldom have financial possibilities to advertise their services, and on the other hand make it easy for citizens to get information about homeservices. The resulting increase in service use would mean more jobs, i.e. employment in the service sector. These intermediary models could also involve the feature that environmentally benign services are encouraged (e.g. cleaning with environmentally benign detergents, renovation with ecological materials, ecological gardening etc.).

In general, homeservice approach is a grassroot strategy, but realistic and potentially a strong means for enhancing sustainable development at daily lives of consumers. As the concept and approach of homeservices – let alone sustainable homeservices – are quite unknown for other than pioneering actors, information dissemination at many levels is called for. The first step should be introduction of the general concept of homeservices and the second step the idea of sustainable homeservices.

Further information on the project results in detail is available on the webpage www.sustainable-homeservices.com. This includes the online catalogue on good practice examples of services and buildings as well as the full text of the scientific final report.

9. Annex

9.1. City Descriptions

9.1.1. Vienna

Vienna is situated in the north-eastern part of Austria. It is at the same time capital of Austria and a federal state. Vienna has a total area of 415 km^2, of what nearly 50% green space. This green space is concentrated in the green belt: the Viennese woods and vineyards. The population is slightly growing, and indeed the whole Vienna region is enlarging in inhabitants (at the moment approximately 2,2 million people). About 20% of the Viennese population is older than 60 years. Within the Ring and between the Ring and the Gürtel, the majority of buildings are from the 19th century or even older. In this area most of the buildings belong to private owners. There are also many "Gemeindebauten" (owned by the municipality in the traditional working class areas). These are buildings from the 1920s-70s. Since then however, there is primarily renovation and maintenance of old buildings. Outside the Gürtel the situation varies a lot. In some areas there are mainly one-family houses with gardens. These are owned by the residents, have very high property value, and are in very rich neighbourhoods. Some districts have very old and rundown buildings that house mainly foreigners. Finally there are relatively new districts in the north, south, and south-east of Vienna, which is where the flat land is and city development took place. For 30 years there has been massive construction primarily from non-profit housing organizations.

In the housing market of Vienna one can distinguish three main actor groups. The first is the municipality, which owns the so-called "Gemeindebauten", large buildings and settlements dating from the twenties up till nowadays, where they provide rather small dwellings at rather low prices. The second actor group are non-profit and commercial housing organizations that build and provide dwellings for rent or for ownership mostly in the outer districts of Vienna. The third group can only be outlined vaguely; this is the vast number of private people owning the old building stock in Vienna, which is mostly located in the centre and in the inner districts of the city. Normally there are always several people owning one building, a fact that often does not ease decision finding and therefore any kind of changes or improvements in that type of houses are rather difficult. The third group also comprises not only owning of houses by inheritance, but also the many condominiums, that have been transformed from rented to owned apartments, which was favoured by law in the 70ties till the 90ties. Several people owning apartments in a house by legal obligation form an association of ownership that is responsible for managing the house. Most commonly, this task is outsourced to a facility manager (Hausverwalter).

9.1.2. Litschau

Litschau is situated in the northern part of Austria, a region called "Waldviertel", in the federal state of Lower Austria. It is a rather small town with only 2.500 inhabitants, including six little villages, which are also part of the community and are situated within a distance of about four kilometres to Litschau. There has been a significant loss of population to the town throughout the last ten years, but at the same time, a lot of people from Vienna made second home residences, mostly in small houses or dwellings. Most people in Litschau live in one-family houses. Only in the centre of the town and near to the lake, there are some multi dwelling houses. Approximately one third of them are old buildings from before World War II, the rest has been built in the last 20 years, some particularly for elderly people, others to offer second home residences to Viennese people. The major part of houses is owner occupied. Houses are either very old, dating from before 1919 (33%), or rather new, dating from after 1961 (45%). Litschau, like the whole district, suffers from a high unemployment rate. This is due to the disappearance of the local textile industry, which gave work especially to women. But, this situation might change, as the region has been rediscovered as a former centre of traditional handicrafts, alas younger people try to find some niches, where they can make a living. Some years ago, Litschau participated in the local agenda 21 programme. Within this, the secondary school was completely renovated, including all kinds of measures to make the building more energy efficient. In and around Litschau there is a significant number of "eco-farmers"

9.1.3. Berlin

Berlin is the German capital of Berlin, situated in the Northeast of the country and surrounded by the Land of Brandenburg. It is the biggest city in Germany – both by land (891 km^2) and population (3,888,431). 36 % of the total Berlin city area is covered by green. Nearly half of the Berlin total 1,822,000 households are single households, which is typical for big cities but a high rate compared to the German average of 35 %. The proportion of people working in the service sector corresponds approximately to the German average of about 58.3 %. The housing market of Berlin is marked by a high rate of public tenants' housing. Correspondingly, the property rate is relatively low (about 23 %) and multi-dwelling buildings constitute about 90 % of the total dwelling. Berlin tenants' housing mainly addresses to households with low income (e.g. 10.6 % of the tenants obtain housing aid). In 2001, the Berlin Senate determined 14 municipal housing companies that managed a stock of 365,000 dwelling units. So the Land of Berlin has an influence on about 20 to 22.5 % of the total dwelling. Another approximately 10% (180,000 dwelling units) are provided by housing cooperation's. The main problems of the housing sector are high vacancy rates (about 8.5 %) as well as a high number of tenants with low income. Due to the surplus of dwelling, Berlin housing organisations started offering home services as an instrument to bind their tenants and to gain new customer groups. Berlin early committed officially to sustainable development by signing the Charta of Berlin in 1992 and the Charta of Åalborg in 1994.

9.1.4. Kleinmachnow

Kleinmachnow belongs to the Brandenburg state district "Potsdam-Mittelmark" and borders directly on Berlin in the Southeast. Secluded during the GDR-era, Kleinmachnow became steadily a typical suburban garden city due to its proximity to the capital after the Reunification. More than half of the land is used for settlements and traffic as well as commercial, whereas agricultural land amounts to nearly 9 %. 33,5 % is covered by forests and 3,1 % by water (Landesumweltamt 2002). In 1990, Kleinmachnow population amounted to 11,565 inhabitants and is roughly hold steady during the following six years. Thenceforward, Kleinmachnow grew rapidly up to 16,507 inhabitants in 2001. Due to these strong sub urbanisation processes after the Reunification, the Kleinmachnow population grew by 47 % since 1992. As mostly families from Berlin and Bonn settled down in Kleinmachnow in the last ten years, the proportion of young people is relatively high (17.6% under 15 years in comparison to the German average of 15.7%). The structure of economy in Kleinmachnow is dominated by services. The housing market of Kleinmachnow is dominated by property. Most of the dwelling in Kleinmachnow (nearly 70 %) is single or double homes. Another 2 % of the dwelling is located in row houses and in 6 % so-called "city villas" with four to six dwelling units. The only municipal housing company, that covers social housing as well as the free market in Kleinmachnow and surroundings, mainly provides tenants' housing. Only the Augustinum as a private residence for elderly people has a broad service offer but only for their residents. The Kleinmachnow LA 21 was founded in 1997 on the basis of a municipal resolution.

9.1.5. Amsterdam

Amsterdam is the capital city of the Netherlands. With 735.328 inhabitants Amsterdam represents 4.6% of the total population of The Netherlands (16.105.285 inhabitants). Amsterdam is located in the west of the Netherlands in the highly populated north side of the "Deltametropool. In the last ten years the population of Amsterdam has grown with 3.1 %. In Amsterdam only 12.7% owns their dwelling. Most people (87.3%) live in renting dwellings. The buildings in Amsterdam are mostly multi dwelling buildings: 85%. Only 15% of the dwellings are 1 or 2 dwelling houses dwellings The 85% of multi dwelling buildings match with the history of Amsterdam, which is developed within walls. From the 19th century until the World War II most dwellings were build in 5 storages buildings in order to build as much dwellings as possible on the rare ground. Occasionally since the sixties there came buildings with more than 10 floors. The pressure on the housing market is so high, that the rate of vacancy in Amsterdam is almost 0%, except for some special circumstances. In 2002 the average number of applications on a free social dwelling was 118. For families it is hard to find a suitable house in Amsterdam. 56% of the households are single households in Amsterdam, whereas the national percentage is 34%. Since 2002 the economic tide is getting worse and the unemployment rate is rising. Some characteristic buildings in Amsterdam are presented below

9.1.6. Heemstede

Heemstede is a small town that is located near the coast in the Westside of the Netherlands. Heemstede was one of the destinations of the people. The small town is situated nearby Haarlem, which is the capital of the province North-Holland. Amsterdam is also located in this province on a distance of about 30 kilometres. Heemstede counts for 26.000 inhabitants. This number is decreasing. A reason for this is the ageing of the population and the limited space in Heemstede to build new houses. The number of people between 65 till is 80 years is 40% higher then the national average. The percentage of people above 80 years is even 100% higher as the national figure. There is a shortage of houses for starters on the housing market of Heemstede. Starters are forced to move out of Heemstede. Heemstede has a very nice surrounding. It is situated directly behind the sea and dunes and and is a popular environment for relatively rich people who want to live in a small town. This is a reason for the relative high percentage of owner occupied dwellings: with 63% this is much higher than the national average. Heemstede is also an old commuter town. The housing market of Heemstede consists mostly of single dwellings: 78%. Similar with all the other cities in the Randstad there is a high pressure on the housing market. It takes about 7 years to get a dwelling in Heemstede and the waiting time is still increasing every year. The percentage of single households is with 34.5% comparable with the national figure. The unemployment rate is 3.9%, slightly higher than the national average. Two typical houses of Heemstede are presented below.

9.1.7. Bilbao

Bilbao, with almost 400,000 inhabitants, is the industrial, economic, financial and commercial capital of the Basque Country. The area represents a quarter of the total population of the Autonomous Community and, as conurbation, constitutes the fifth most populated city in Spain, behind Madrid, Barcelona, Valencia and Seville. At European level, Bilbao holds rank 36, alongside cities such as Dublin, Liverpool and Florence. The city now faces the difficult challenge of transforming the industrial society inherited from the 19th century into a city of high-quality service industries. The Basque regional government started an ambitious initiative in the 1980s, trying to reverse decades of economic decline and environmental deterioration and to turn Bilbao into a 21st century city built around culture, tourism and technology. It is for the complex relationship between environmental hazards inherited from the past, social tensions derived from industrial decline and the proposed change in urban planning politics that Bilbao was selected for the Homeservices Project. The initial analysis of the city's environment showed that impacts derived from unsustainable growth in the (industrial) past were aggravated by the lack of environmental consciousness in the administration, companies and among citizens, so improvements in this field were taken on as part of the City's Strategic Plan.

9.1.8. Zarautz

Zarautz, with just over 20,000 permanent inhabitants, represents the other reality in the Basque Country: that of the small, coastal town largely dedicated to tourism and highly service-oriented. The original palaces and luxurious summer residences of the well-known and famous had to make room for residential housing blocks in a developing Zarautz, so that the village could turn into a modern urban centre with a high service level by the middle of the 20th century. Still dependent on tourism, Zarautz is suffering the environmental impacts of this activity, not only in terms of quick residential growth and accelerated construction, but also in terms of seasonal employment and traffic congestion, especially in the summer time, when the town's infrastructure becomes saturated due to the large number of summer residents with secondary homes in the town and short-term tourists. This is the reason why the town hall of Zarautz is one of the Basque municipalities that started implementing the Local Agenda 21 in 2001 with the intention of fostering the residents' participation in environmental and social issues. The housing market of Zarautz is also characterized by a high rate of owner-occupied dwellings. The Environmental Action Plan Local Agenda 21 proposes a series of overall objectives and guidelines for improvement.

9.1.9. Helsinki

Capital city Helsinki is located at the south cost of Finland, on a narrow peninsula. About 35% of Helsinki consists of open green spaces with almost 200 kilometres of shoreline. Nearly 560 000

inhabitants live in Helsinki and until recently Helsinki and the rest of the capital region has been the fastest growing urban area in Finland. The current population structure of Helsinki is one of the youngest (average age is 36,8 years) in Europe. However it is estimated that the population over 65 years of age will grow more rapidly than other urban areas in Europe. 40 % of the households in Helsinki were single person households and their number is rising.

There are 390,000 work places in Helsinki of which over 80 % are in the service sectors. The size of the dwellings is one of the defining factors at the housing market. Even though there is considerable need for smaller single or double room apartments, there is still a surplus of dwellings over the number of households. Around 50% of people own their own house or apartment in multi-dwelling buildings and rest is rental housing of which some 22% live in social housing. The dwelling stock is relatively new. Majority of the stock is less than 30 years old.

Helsinki has also been active in sustainability field. Helsinki City Board signed the Aalborg Charter - The Charter of European Cities and Towns towards Sustainability - in February 1995 and the city had have local agenda 21 programme for several years.

9.1.10. Kouvola

Town of Kouvola is located South–Eastern Finland, approximately 130 kilometres northeast from Helsinki. The town's origins are closely connected with the wood processing and paper industries that came to the region in the 1860s and 1870s. The town of Kouvola has itself has little over 31,000 inhabitants, but the Kouvola urban region has a population of 100,000 of which centre the town of Kouvola is. 75 % of the population gets its livelihood from the service industries. In year 2000 the population change in Kouvola was –1,2 %).

The situation of the housing market is quite similar to other municipalities located outside the urban growth centres. The price level of the houses and apartments in multi-dwelling buildings is somewhat lower compared to Helsinki or even the average prices in rest of the country. Also the rental level of both free market and social housing is considerable lower. The demand and the supply for housing is in balance so, that there is only some shortage of small single or double room apartments.

Together with European partners Kouvola has launched the Digital Democracy and Sustainable Information Society project SIS. The main target is to motivate people to participate in the local government decision-making. At the same time the goal is to increase their knowledge of the information society and their skills as e-citizens. Fields of environmental and welfare services are part of development projects for use of IT -technologies. Kouvola was one of the first Finnish cities to start active development of Local Agenda 21. Process has been ongoing since 1994.

9.1.11. Lisbon

Lisbon holds today an area of 84 km2, divided in 53 parishes. Its resident population is of 564.657, with a population density of 6.672 inhab./km2, the highest in the country. Between 1991 and 2001 it showed a decrease in population of 14,7%, due to a flow towards the nearby new areas in the suburbs. Besides the decrease in inhabitants, there is also a trend in ageing of the population. The borders of Lisbon municipality are those of the city limits. The municipality has 76% of its area dedicated to urbanism, 16% to green areas and the remaining 8% to other occupations. Lisbon is the country's main centre of finance, technology and culture. The service sector is the one which most contributes to the local economy. Following a pattern shown in many cities, in Lisbon a clear distinction can be made between the old, central area (where the age of the buildings ranges between 60 and 80 years old and sometimes even more) and a more recent periphery area, with buildings from the 1960's and onwards. In the 1990's the housing sector showed a significant increase, and the construction of new housing had an important share of housing acquisitions even within the perimeter of the city, in new neighbourhoods such as the Expo'98 area. In Lisbon, like in the rest of the country, there is a clear domination of the free market when it comes to the housing sector. Social housing is performed by municipalities and other public agencies, as well as by housing cooperatives, but this represents a small share of the overall situation. The percentage of rented dwellings in Lisbon (52%) is significantly higher than the country average but it is important to stress that such percentage refers to old renting contracts mainly. Nowadays it is not economically interesting, neither for the owner, nor for the tenant, to rent houses: As for the provision of home services, the situation of Lisbon is not atypical in Portugal

on what concerns the business organisation: such services are, in most of the cases, provided by the external supplier directly to the residentsThe municipality defined green areas, air pollution, noise, water pollution (Tagus estuary) and waste as priority areas for the Local Agenda 21 process, which started in 1996 with the signature of the Aalborg Chart and has been articulated with other strategic plans and programs for the city.

9.1.12. Torres Vedras

Torres Vedras is the largest municipality of Lisbon's district, located in its northern area and the figures of 2001 indicate a population of 16 461 inhabitants, a demographic density of 1 264,4 inhab/km2, 6.330 households and an average number of persons per household of 2,6. Torres Vedras showed an increase of population of 14,5% between 1991 and 2001, nearly three times higher than the national average. The estimated number of households and dwellings in the city is 6.330 and 8.324, respectively 94% of the population of Torres Vedras live and work in the municipality. Torres Vedras municipality is one of the main wine-growing areas of the country, being also important in the growing of vegetables and fruits. It is one the main meat producers in the country. It holds agri-food industry, ceramics and metallurgic. The city of Torres Vedras, which concentrates the majority of services, is located in a traditionally rural municipality, which is showing a significant change in the latest years: nowadays there are 247 small urban settlements around the city (with less than 100 inhabitants in most of the cases); in these urban areas 60% of the new houses are vacation or weekend houses of families from Lisbon. In the city itself the trend nowadays is to raise apartments buildings, mostly for sale and not for renting. Here the free market is the only option available as there is no social housing. Together with new areas, old streets exist, but there is a majority of young buildings (less than 15 years old), with a dominating typology of 3 floors. The large majority of those buildings combines residential and commercial use, since the ground floor is normally occupied with shops or cafes/restaurants. Like in Lisbon, home services are provided directly to the residents (in 70% of the cases, to the owners, as rented dwellings represents 30% of the situations only). Also like in Lisbon, the demand for sustainable home services is very small. The Municipality of Torres Vedras engaged in the Local Agenda 21 process, and the method followed is based on a participatory approach, through thematic workshops related to the most important sustainability issues.

9.2. Good practice services

9.2.1. Austria

ZEIT!RAUM – Child and teenager care

Service Areas: Care & Supervision, Leisure time activities

Description of the service
ZEIT!RAUM is a non-profit organisation that offers child and teenager care indoors and outdoors. Several times a week, employees of ZEIT!RAUM go to different locations in and around Vienna to supervise parks and playgrounds. This is often done in very populated parts of Vienna, where boredom of teenagers sometimes leads to vandalism and crime.
The services of ZEIT!RAUM are meant to increase recreational activities and quality of life, communication and peaceful conflict resolution, cultural diversity and intercultural education, equal opportunities and social justice, care for less privileged people, solidarity, development and maintenance of towns and city districts.

Sustainability effects
This service excels in the social dimension of sustainability, increasing quality of life**,** social justice**,** solidarity**,** and care for less privileged people**.** ZEIT!RAUM does not have a specific environmental profile, even though outdoor activities can increase environmental awareness. The services are not profitable nor cover costs, hence subsidies facilitate the existence and survival of ZEIT!RAUM. However, the services save a lot of costs from avoided vandalism and social tensions that would otherwise have to be borne by the city of Vienna and the neighbours.

R.U.S.Z – Repair and service centre

Service Areas: Care and Supervision, Repairs, Supply and Disposal.

Description of the service
R.U.S.Z is a non-profit organization that repairs or dismantles and disposes of a wide range of household appliances. These appliances are gathered from waste collection sites or are picked up or delivered by individuals. Usable parts from irreparable appliances are collected for repairing other appliances. Furthermore, hazardous substances are removed and appropriately disposed of. R.U.S.Z. repairs competitively, and gives a one year warranty on the appliances. Individual households can also rent or buy household appliances that R.U.S.Z. has fixed for competitive prices. R.U.S.Z. also offers other organisations the maintenance of their equipment and appliances. It also works together with Viennese evening schools, offering repair courses.

Sustainability effects
Along with reducing the amount of household appliances pilling up in landfills, R.U.S.Z also increases the lifespan of appliances. Most of R.U.S.Z.'s workforce are transitional employees who have been unemployed for many years. These individuals are not only reintegrated into the working world, but also gain invaluable qualifications such as technical and social skills. In terms of social effects, the most important aspect is the offers of repaired appliances at a low price catering to low-income individuals and families. R.U.S.Z.'s services can be regarded as macro-economically profitable. The investment the city of Vienna makes into setting up this project pays off in three years. On a microeconomic level, R.U.S.Z. is not profitable until it becomes more competitive and has a larger customer base.

Sozial Global – Social services by the municipality of Vienna

Service Areas: Care & Supervision, Mobility & Delivery

Description of the service
Sozial Global, non-profit organization, provides a range of different services at home, such as child-sitting, visiting and accompaniment service, nursing, medical care, apartment cleaning, ironing, shopping, running errands and meals on wheels, available from 6am to 8pm, seven days a week. The services are requested through a telephone call.
An interested customer must call the municipality of Vienna before using the service of Sozial Global. There is an agreement on the service demanded and on the cost to the customer, taking into account the customer's income. The municipality always pays the same rate to Sozial Global, which varies depending on the type of service (nursing will cost more than child sitting). If the customer pays the municipality less than what the municipality has to pay Sozial Global, the municipality covers the difference.

Sustainability effects
The services offered by Sozial Global significantly increase the well-being and quality of life for needy, elderly, which are helped to continue to live in their familiar surroundings, and long-time unemployed people, as Sozial Global gives long-time unemployed persons a chance to re-enter the workforce. From a microeconomic perspective, Sozial Global can its cover costs. From a macroeconomic perspective, Sozial global is beneficial to the economy, as it is a large employer, with 1200 employees, many of which are disadvantaged.

Hel-Wacht – Safety and Security

Service Areas: Care and Supervision, Mobility and Delivery, Safety and Security.

Description of the service
Hel-Wacht is a commercial provider that offers a range of services in the area of security and services at building level, as building care taker, concierge, key drop-off service, surveillance, cleaning services, gardening, security guard, and bodyguard. These services are provided from a central location in Vienna. The employees are trained for a wide range of skills, so that they are flexible and

can provide more than just one service, (e.g. someone who is employed to transport disabled people should also be able to run personal errands or act as a messenger.)
A call centre is available 24 hours a day. If it is required assistance outside of the scope of Helwacht's services, they immediately inform another organisation able to provide the necessary assistance.

Sustainability effects
This service excels in the social dimension of sustainability, because add comfort to residents and reduce crime and vandalism. The security-related products offered by Helwacht, such as alarm systems, are available for rent. Hence, for products like this, product lifetime is increased, while waste is reduced. From a microeconomic perspective, Helwacht can cover their costs.

MA 48 – Waste prevention activities of the municipality of Vienna

Service Areas: Counselling and Information, Supply and Disposal

Description of the service
MA 48 is a public organisation that collects and disposes of Vienna's solid waste and consults individuals and businesses on waste prevention and waste separation. Additional to these services, MA 48 runs a call centre "Garbage Telephone", and conducts projects to raise awareness on conscious consuming and wasting prevention. These include: publishing a regularly updated guide to repair, rental, and second-hand shops, going into schools to educate on waste matters, organising the "waste flea market" and the "waste party". The "waste party" is an annual event in one of Vienna's waste separation facilities. Vienna's residents are offered a first-hand experience of what happens to waste after it leaves their household in combination with interesting educational activities for children and adults. In terms of waste MA 48 has a monopoly in Vienna so every building that produces waste must use this service.

Sustainability effects
This service has an important positive effect on the environment, as it reduces the overall urban waste. Paper, glass, and metal can be recycled through the collection of separated waste. Non-recyclable materials are disposed of. The social effects the MA 48 service concerns the employment of disadvantaged workers with difficulties to get another jobs, and the increased knowledge and awareness among residents on waste recycling. From a micro-economic perspective, the service is not profitable, as the counselling is free of charge, and the waste pickup and disposal charge to the customer are below costs. Macro-economically however, the employment of disadvantaged people helps the city of Vienna, as they are now receiving productive work from people who might otherwise be on welfare.

"die Umweltberatung" – Environmental counselling

Service Areas: Counselling & Information

Description of the service
"die Umweltberatung" is a decentralised non-profit organisation that offers independent consulting on all environmental issues in and around the household, supports other educators with projects and research and informs and disseminates information in numerous publications and online. A large part of the work is done in cooperation with the national and district agencies. There are 14 information centres in Austria, offering primarily telephone consulting to all of Austria. The centres are open 28 hours a week.
Consulting for individuals is free of charge, whereas some of the consulting for businesses is charged. This helps the organisation to cover some of their costs, and continue providing free consulting to private households.

Sustainability effects
Environmental benefits are related to the dissemination of environmental knowledge within the population, with a change of attitude and behaviour regarding waste prevention, organic gardening, healthy nutrition, use of eco building materials, energy efficiency and use of biodegradable cleaning products.

In social terms, pilot projects require additional employees, where full-time positions are possible for long-time unemployed labour. On a microeconomic level, the counselling organisation is not profitable as it is mostly provided for free of charge. However, the macroeconomic effects in environmental and social terms had a very positive effect on the whole economy.

Biowichtl delivery of products of organic farming

Service Areas: Mobility & Delivery

Description of the service
Biowichtl is a commercial provider that offers and delivers a wide range of organic foods, directly from organic farmers or from co-operatives and cosmetics. The service is available on the Internet under www.biowichtl.at. Payment can be made directly to the deliveryman or with a debit payment. It is also possible to order via telephone. Austria's share of organic farming is about 10%, but the delivery to the costumers has been a problem for a long time.

Sustainability effects
Biowichtl has a direct on the environment, reducing emissions through delivery rather than consumers individually driving to the organic farms to pick up the food, as well as an indirect effect, due to the consumption of organic foods. This has a positive effect on the environment, as no chemicals are used. In social terms, residents have easy and convenient access to healthy organic foods and also local farmers are given a chance to sell their products at a "fair" price, helping them sustain themselves. On a microeconomic level, Biowichtl is a nearly cost efficient delivery service. As the turnover increases, the business will cover costs and generate profits. On a macroeconomic level Biowichtl brings great benefits to the regional. In addition, organic farming improves the environmental quality of the region and thus promotes tourism.

Denzeldrive – Carsharing

Service Areas: Mobility & Delivery

Description of the service
Denzeldrive offers vehicle mobility on call. A wide range of vehicles are available at over 180 public parking areas Austria wide. Another 18 Denzeldrive Centres are distributed through Austria for customer service. Cars can be rented for small trips, e.g. for shopping, or for longer trips, such as vacation. Reservations can be made online or over the telephone. A DENZELDRIVE-Card is necessary to rent the vehicle. There also is a gas card, with which the driver can pay for gasoline and be billed later. The onboard-computer records all relevant data, which is then sent to the Denzeldrive Centre.. The customer is charged once a month according to the time and kilometres driven. This cost includes comprehensive insurance coverage, tolls and gasoline. Denzeldrive claims it is cheaper to use Denzeldrive than owning a car, if one drives less than 20.000 kilometres a year.

Sustainability effects
The service has environmental benefits because carsharing avoid unnecessary trips and promotes the use of public transportation. Increased public transportation use leads to less materials consumption, oil consumption, less noise pollution, less accidents, and less demand for parking areas.

Helmuth Müller – Vehicle rental service for disabled people

Service Areas: Mobility & Delivery

Description of the service
Helmuth Müller is a taxi and car rental service for disabled people that only uses natural gas-powered cars. Both services are equipped with vehicles for transporting physically disabled people. Besides these two services, Helmuth Müller is also a wholesaler of reusable cotton diapers, and organic dog and cat food, which are delivered to retail stores with their natural gas-powered vehicles.

The taxi service is available by telephone. The rental vehicles are for transporting physically disabled people. These vehicles are rented without a driver. Helmuth Müller has a deal with the social insurance provider that covers the cost of renting these vehicles. The vehicles can only be rented in co-ordination with the health insurance, which means that only eligible disabled people can rent these vehicles.

Sustainability effects
In social terms, the service helps mobility of physically disabled people. In environmental terms using taxis or rented cars for of transportation instead of purchasing an own car reduces the number of cars produced and consequently materials consumption and waste reduction. Also, the use of natural gas-powered cars causes less harmful emissions than regular gasoline or diesel powered cars, which can prevent illness.

Oekostrom – Supply of renewable energy

Service Areas: Supply and Disposal

Description of the service
Oekostrom is the market leader for electricity produced from renewable resources in Austria. The provider brings together independent electricity producers, creates a sales system, and offers this service to the general public. The electricity comes from wind, water, geothermal, biomass and solar energy.
An interested customer can easily change to this energy provider by filling out a form online or on paper. The total amount of renewable energy that is demanded by Austria's inhabitants is then fed into the energy grid. The identical amount of conventional energy is reduced from the grid.

Sustainability effects
Oekostrom service has a positive effect on environment, as it reduces the amount of greenhouse gases (CO_2) produced by oil and coal generators and the risks related to nuclear power plants, as well as promoting electricity produced by local renewable resources. By purchasing energy for a "fair" price from regional energy producers, this service promotes regional one-person producers. Also, Oekostrom only provides "clean" energy, which has a positive effect on the health of people living near the energy plant. Renewable energy is now so common in Austria, that the cost of producing it compared to conventional energy is comparable. It is still more expensive to purchase renewable energy (17% more), but this will change with the growing number of renewable energy suppliers.

Hilfswerk Litschau – Assistance to elderly and needs people

Service Areas: Care & supervision, Mobility and Delivery, Safety and Security

Description of the service
With a team of specialised employees, Hilfswerk provides elderly, and needy people with homeservices to help them continue living in their home, and support for families in difficult situations. The services that Hilfswerk offers within the customers' homes is divided into five modules, which can be consumed separately: medical care, mobile physical and occupational therapy and logopedia, help around the home, meals on wheels, emergency telephone for safety and security.
For family support, Hilfswerk additionally employs family helpers, day moms, various tutors and psychologists. For meals on wheels, the food is cooked at a local restaurant and picked up by employees of Hilfswerk. Hilfswerk is a non-profit organisation that receives funding from the township Litschau.

Sustainability effects
There is a potential for optimisation of the service environmental profile, e.g. the vehicles required for many of the services could be powered by biodiesel or the food used for meals on wheels could be organic. In rural areas like Litschau, this is extremely important since nursing homes and clinical facilities are often very far away. Also, sometimes only short-term care is necessary and can be offered cheaper and easier in the home. From a macroeconomic perspective, Hilfswerk is very important as its philosophy is based on long-term sustainability as it provides long-term employment.

Hübl & Partner – Laundry service of the dwelling

Service Areas: Care & supervision

Description of the service
Hübl & Partner is a housing organization that provides apartment cleaning, mobile laundry and ironing service in a residential building on Attemsgasse. This service is co-ordinated out of a laundry centre on the ground floor of the building. For the laundry service it is possible for the resident to drop off their laundry in the laundry centre on the ground floor where washing and ironing are done. It is also possible that an employee does the resident's laundry in the resident's apartment. The apartment cleaning service, which includes ordinary cleaning services, window cleaning, vacuuming, washing, etc. can be ordered in the service centre, or via the building internal internet (intranet).

Sustainability effects
There are no direct environmental effects from these services. This could be changed if emphasis was put on using only organic cleaning agents by the cleaning and laundry service. There is no dry cleaner, which would require the use of hazardous chemicals. The social effect is that the service helps residents save time. Instead of cleaning their own apartment and clothes, employees of the HO can do it. The only economic benefit is that several new positions will be created. However, these are not secure and full-time, rather part-time and for students.

9.2.2. Germany

Residents' Meeting Points

Service Areas: Care& Supervision, Leisure time activities.

Description of the service
The Berlin cooperative bbg - Berliner Baugenossenschaft has always been active in motivating their members in socially organised self-help. Although also initiating regular mother-children-meetings or leisure activities for youths, the bbg predominantly provides ground floor premises for self-organised neighbourhood activities. So the housing co-operation established for example a common residents' meeting point as well as a children's playroom called "Playnest" in their big estate settlement "Ortolanweg". Consequently, local residents began to organise several regular get-togethers in these premises. The self-organised service offer spans from senior coffee parties or children activities to a young digital photographers club that gives young residents an understanding of new technologies.

Sustainability effects
Residents actively organize common activities to improve social networks and the quality of life in these areas. A study from the Berlin Technical University found out that the strong social network supported by common activities in the district "Ortolanweg" promotes sustainable consumers' behaviour. As residents know each other, they e.g. socially control their neighbours in separating their waste or organise common deliveries for organic vegetables. At social level, residents' meeting points and common activities predominantly help to strengthen neighbourhood networks, preventing youth vandalism and other consequences of an anonymous or family-unfriendly atmosphere. In economic terms, this can result in a better public image of the neighbourhood, which equally contributes to upgrade the value of real estate.

Energy contracting

Service Areas: Counselling & Information, Supply & Disposal

Description of the service

The partnership between the Berlin housing cooperative (Wohnungsbaugenossenschaft) "Bremer Höhe" eG and the Berlin Energy Agency (www.berliner-energieagentur.de) is a good practice of energy contracting. The service aims to reduce efficiently housing costs and emissions by integrated concepts for rational energy use. Providing a full service from counselling to the installation of heating facilities and constant cost management, energy contracting agencies offer an efficient lifecycle management to the housing organisation that effects sustained cost savings both for the resident and the housing organisation.
In general, energy contracting consists in an evaluation of the existing heating facilities and possible saving potentials by new contracts or techniques. Hereupon, the energy contractor intermediates between energy suppliers, producers of technical equipment and the housing organisation to negotiate good conditions for his customer. Finally, he manages all necessary construction measures and arranges legal frameworks to minimize current cost. In most cases, energy contracting allows such an enormous reduction of current heating costs that investments in eco-efficient techniques amortize soon. Moreover, residents get a counselling on construction measures and energy saving behaviour, as they have to assign to use exclusively the new facilities for heating or electricity.

Sustainability effects
Energy contracting is one of the most successful instruments to combine ecological and economical benefits in the housing sector. The combined heat and power units at the “Bremer Höhe” reduce CO_2 emissions by over 40 % (450 t/a). Energy contracting combined with an individual energy consulting promotes the residents’ awareness for environmental issues and for their contribution to reduce resource consumption. This can result in a corporate feeling concerning their neighbourhood. Residents at the “Bremer Höhe” pay about 0,67 €/m² a month for heating and warm water which is less than the Berlin average. So both residents and landlord benefit from energy contracting. Moreover, energy contracting secures high-qualified sustainable jobs for the provider as well as for the subcontractors.

Green League - Network of ecological service providers

Service Areas: Counselling & Information, Care & Supervision, Delivery

Description of the service
The Green League is a network of 29 member groups that offer social and ecologic services. Main fields of action are:

- **nutrition**, with a counselling service on organic nutrition via telephone or personal, in an organic market in the Berlin district Prenzlauer Berg. Moreover, they intermediate a subscription of organic vegetables that are delivered at home by the women’s cooperative Die Bäuerinnen – The Peasant Women (www.baeuerinnen.de);
- **counselling for civic initiatives** in the field of Local Agenda-21, nature conservation and protection of species. Accordingly, they help residents to protect and restore their natural environment e.g. by giving legal advice to initiatives that aim to preserve a biotope in their neighbourhood. Furthermore, they inform citizens on participation processes.
- **sustainable development of neighbourhoods**, giving advice on subjects such as ecological construction and renovation, rain water management, greening of backyards or domestic pollutants. Based on a situation analysis, they develop concepts and give advice on legal matters as well as possible subsidies. Another important activity of the Green Leagues is to protect urban biotopes as well as endangered urban species such as special birds or bats.

Sustainability effects
The Green League’s counselling on ecological housing have a positive effect on resource consumption caused by e.g. material or rainwater use. In addition, concentrating on local service providers and producers, it contributes to reduce emissions due to transport of goods and helps to preserve natural resources. The Green League strengthens small networks of local service providers in the field of organic agriculture, consultants on ecological housing or on civic initiatives.
The Green League predominantly supports non-profit initiatives and sustainable company organisations, like the women’s agricultural co-operative, promoting the participation of female employees in decision-making and having a stake in the cooperative profits.

GSW Tenants' Association

Service Areas: Counselling & Information, Care & Supervision, Leisure time activities, Mobility & Delivery.

Description of the service
The GSW Tenants' Association runs a support program for young people, elderly and handicapped through the participation of volunteers. Further goals of the association are consumer's counselling and support of professional training. The GSW Tenants Association program includes:

- Renting of guest apartments and community centres
- Organisation of day-trips and local events, e.g. information evenings on housing related subjects, computer courses, Christmas coffee parties etc.
- Intermediation of volunteer services such as mobile hairdressing, accompany service (e.g. for administrative visits), manicure etc.

Most services are organised by volunteers and therefore don not entail costs for residents with special needs.

Sustainability effects
As the GSW Tenant's Association pursues predominantly social goals, environmental effects are not relevant. Activities of the GSW Tenants' Association predominantly aim to strengthen neighbourhood relationships by organising common events and social help "from tenant to tenant". Concentrating on needy residents like frail elderly or handicapped, the Tenants' Association supports an integration of people that often have less social contacts than usual tenants and the services provided increase their comfort. Costs for residents are held to a minimum and often for free. Moreover, the Association tries to work out individual solutions e.g. when a person is not able to pay for a daytrip.

Debt Consulting

Service Areas: Counselling & Information, Care & Supervision

Description of the service
Financial losses due to rent arrears have risen constantly in the last years. As some tenants are only temporarily not able to pay their rent, e.g. because of short-term unemployment, housing companies do not profit on a long-term from simply enunciating a summary dismissal: On one hand, tenants usually do not pay their rent arrears after moving out and on the other hand, a social housing company is particularly dependent on residents with low income. Therefore, the Berlin social housing company GSW established the "Tenants Social Service" that provides a debts consulting to find sensitively individual solutions in cases of rent arrears. As personal distresses are a common cause for rent arrears, "Tenants' Social Service" social workers deal individually with each case intermediating care for mentally disordered residents, applying housing subsidies for needy people and arranging an instalment. Debts consulting is actually the most effective mean to reduce rent arrear losses as the "Tenants' Social Service employees" deal with the causes and do not just remove the symptoms.

Sustainability effects
The service is based on a total survey on the resident's income and expenses, including costs for resource and energy consumption, so it can promote an environment-friendly behaviour. In social terms, debts consulting can indirectly support to socially stabilise a house community. Moreover, by stabilising the tenant's situation, the social housing company follows its mission statement to care for residents with special needs. The "Tenants Social Service" has reduced rent arrears by about 10 % in 2001 and proved that debts consulting can effectively reduce rent arrears losses.

Neighbourhood Renewal Management

Service Areas: Counselling & Information, Care & Supervision, Leisure time activities.

Description of the service
The GSW takes part in neighbourhood renewal management by initiating construction measures to revaluate the local public space and a systematic social management in nine selected districts.

Therefore, the GSW coordinates own measures and organises so-called "neighbourhood conferences", a network for all local initiatives to compile a common development strategy. On basis of the neighbourhood conferences' results, GSW develops according services and construction measures. Essential goals of all neighbourhood renewal management initiatives are to support neighbourly relationships, e.g. by establishing professional conflict mediation, and to create special facilities and services for elderly, children and adolescents.

Sustainability effects
As most neighbourhood renewal activities aim to revaluate public green spaces, the local natural environment is often considerably restored. Neighbourhood renewal activities are characterized by strengthen neighbourly relationships, integrate young people, children and elderly as well as to improve the relationships between migrants and German residents, with positive effects on the local social cohesion. The service reduces costs resulting from vandalism, fluctuation and vacancy. Several employment projects directly turn to unemployed tenants to prevent them from further exclusion and indebtedness.

BIG STEPS – Employment Project

Service Areas: Counselling & Information, Care & Supervision.

Description of the service
The Berlin housing company GSW and the social association Jugendwohnen im Kiez e.V. have initiated a project called BIG STEPS with the aim of giving adolescents a professional perspective and to stabilize districts with special needs. The GSW established five so-called "service-stations" for the BIG STEPS project in selected neighbourhoods that represent local centres for youth's events and activities. In every service station, craftsmen and social workers coach eight youth to learn a trade by simultaneously revaluating the appearance of their neighbourhood. Activities of BIG STEPS participants include elimination of graffiti, cleaning jobs, construction works and renovation of GSW apartments. Moreover, they organise local events such as street ball-competitions or a "seniors breakfast".

Sustainability effects
Green spaces as well as public places are upgraded and therefore can be reused as recreation sites. The predominant goal of the BIG STEPS project is to give young people a professional perspective and prevent them from social exclusion. Furthermore, BIG STEPS supports integration and neighbourhood relationships. As most of the youths have a substandard education, a program like BIG STEPS is an important instrument to prepare a professional career in spite of disadvantageous preconditions.

Advisory Board on Utility Costs

Service Areas: Counselling & Information, Energy Supply

Description of the service
In 2000, the Berlin housing company WBG started a campaign to motivate their residents in saving utility costs by reducing their resource and energy consumption. After having modernised most of their 32,000 dwellings according to new energy-saving standards, the WBG Marzahn began to broadly inform their residents on potentials to save resource related costs in order to make the construction measures effective. Apart from educating 50 employees to so-called "Utility Cost Skilled Consultants", the housing company established an "Advisory Board on Utility Costs" of engaged tenants that analyse utility cost developments and inform other tenants on saving potentials. Thus, the WBG Marzahn faces up to a critical control of its management, but equally profits from an improved mutual trust on the part of its tenants.

Sustainability effects
Considerably savings of utility costs and resource consumption in the WBG's dwellings proved that the Advisory Board on Utility Costs reached its goal successfully. The tenants engagement to support the service contributes to strengthen neighbourly relationships and a community feeling. By disclosing the

company's utility cost management, WBG is promoting tenants participation in decisions and therefore supports the individual's empowerment.
Residents profit from this service by reducing their housing costs, as well as the company, which have a positive effect on the it's corporate As the Advisory Board on Utility Costs consists in volunteering tenants, it does not entail considerable financial investments.

Waste Sluice

Service Areas: Counselling & Information, Supply & Disposal

Description of the service
An electronic waste sluice is an intelligent waste bin that enables to price waste amounts individually. In 2000, the housing company WBG introduced waste sluices as part of a one-year pilot project that was initiated by the Berlin City. The project aimed to exchange usual residual dustbins by waste sluices that are controlled by a magnetic chip card distributed to the residents. This chip card registers every waste unit of 10 l that is put into the solar powered waste sluice and therefore enables an individual pricing according to the household waste amount. As recycling goods are not recorded, residents are motivated to use the waste recycling system.

Sustainability effects
In Germany, waste recycling is based on waste separation that distinguishes recycling of plastic and metal goods, paper, organic and residual waste. By introducing the waste sluice in Marzahn, the use of recyclable waste systems increased enormously and the total waste was reduced by nearly 50%. In social terms, using the waste sluice supports a certain control of neighbourly behaviour and can increase the awareness for a community feeling. A waste reduction of about 200 kg/a as reached in the Berlin Marzahn pilot project corresponds approximately savings of 40 €/a. So residents can directly save money by using the waste sluice.

24-h-care at the Augustinum Housing Foundation

Service Areas: Counselling & Information, Care & Supervision, Leisure Time Activities.

Description of the service
The Augustinum in Kleinmachnow is a residence for elderly people. It is part of the Augustinum group, a nationwide acting social service company. Living in one of the 269 Augustinum apartments is relatively expensive at a rate of about 53 €/m² plus a security of nearly 19.500€, but rents include fulltime services (e.g. daily meal, weekly apartment cleaning, swimming-pool, cultural events) and temporary services (medical care, laundry, optician, medicament service).
The house theatre, drawing and potter studios, music rooms and a library are free to use for leisure activities. Moreover, residents can participate in organised activities such as French courses or Bridge Clubs. In addition, residents can use the Health Centre on the premises with swimming pool, sauna and physical therapy offer. Most facilities e.g. hairdresser, supermarket, bank or medical services, are also open to external Kleinmachnow residents. Apart from that, the Augustinum offers some sophisticated services for special events that span from party organisation to renting of guest apartments or a home-sitting service.

Sustainability effects
As the Augustinum concentrates on social services and 24-h-care, their home service offer does not intend to have direct environmental impacts. Nevertheless, they attached importance on the natural leisure space by e.g. planting domestic plants or building up rain water ponds. Augustinum opens up possibilities for single seniors to live in a peer community that motivates to actively take part in group events. As a Christian housing foundation on a non-profit status, rents in the Augustinum residence are kept to a minimum. In spite of a considerable rent of 53 €, living in the Augustinum is relatively affordable and particularly favourable compared to a comparative free market service offer. Apart from that, the Augustinum is one of the biggest local employers in Kleinmachnow and therefore contributes to diversify the macro-economy.

9.2.3. Netherlands

Eco-Care gardening service

Service Areas: Counselling & Information, Care & Supervision

Description of the service
Eco-care is a small organisation that constructs and maintains gardens in an ecological way. Eco-care strives to a harmonious balance between human, animals and plants. The company develops natural gardens that need a limited effort of maintenance. The employees work with ecologically sound materials which means that they don't use pesticides nor artificial fertilizers. Furthermore by constructing the garden they try to re-use materials where possible. Eco-Care follows the newest developments in ecological gardening. The company likes to work with a personal approach. After an intensive personal interview, Eco-care makes a creative design for the garden that fits well with your personality. If the costumer prefer to do the gardening, Eco-care offers courses on ecological gardening in which advise is given on construction and maintenance of ecological gardens.

Sustainability effects
This service reuses materials to construct gardens and doesn't use any pesticides or artificial fertilizers. By giving courses on environmental friendly gardening the awareness of residents regarding ecological subjects will improve. There are no direct effects for the economy.

Eko-Direct

Service Areas: Counselling & Information, Mobility & Delivery

Description of the service
Eko-direct delivers eco-friendly groceries to home by bicycle. In Amsterdam three environmental friendly businesses (Eko-direct, CW-the Belly4 & Versnelling) joined in the Eco-Fast-Service. This service combines a grocery shop on internet with eco-friendly products and two delivery companies on bicycle. First it is necessary to order the eco-friendly groceries on the internet. On the website an extensive selection of eco-friendly groceries such as drinks, body care products, cleaning detergents and baby items are available. The selected items are retained in an order form. By clicking on the items it is possible to get extra information about the product, like the type of eco-label. Delivery is done by bicycle. Payment is done by weekly authorisation.

Sustainability effects
There is a positive effect on the environment due to the fact that the delivery is done by bicycle. This will reduce the use of a car to go to the shop and thereby reduce the amount of energy use and emissions. Furthermore ecological friendly food is produced without the use pesticides. Eating ecological food has a positive effect on health. The website has links with additional information which increases the residents' awareness about healthy food. Besides this, the delivery of products at home increase comfort. Eco-grocery shops make more use of regional products then ordinary shops. This stimulates the regional economy. However, the delivery of groceries is more expensive than shopping in an ordinary grocery shop.

Energy Box

Service Areas: Counselling & Information; Supply & Disposal

Description of the service
The energy box is provided by a non-profit organization in the city of Arnhem and contains energy saving products and tips for an environmental friendly way of living. The content aims to improve sustainability of lifestyles on the level of households. Residents of seven low-income districts in the city can order the energy box with energy saving products and environmental tips for free. The content of every box is dwelling-specific and can include, among other products, an energy-saving lamp, a water saving showerhead, a mailbox brush, weather strips and pipe isolations. Also included are more general tips in the field of energy saving in the dwelling and information about the environment.

Sustainability effects
The shift to energy saving products will reduce the amount of energy used by households and the water saving shower head will reduce the use of water and energy, with obvious environmental and economic benefits. Moreover, the information evenings, ecological tips in the box and website links inform the residents about environmental friendly living. The social effects of this service relates to the fact that it is directed to low-income groups and aims to improve their living situation. In addition, the information evenings are held in the neighbourhood which will bring residents of a district together and raise the social cohesion.

Info Caravan

Service Areas: Counselling & Information

Description of the service
The municipality of The Hague and a few housing organisations started an information and advice caravan. The goal is to improve the liveability in these neighbourhoods. Residents get information about the housing facilities (energy consumption and reduction), burglary prevention, language courses, local infrastructure, information on financing and subsidies for tenants, counselling on dept reduction and help in the search for a job. After this inventory follows a week of solution finding for the different problems. Every year an evaluation is been made and the collaborative institutions tune their strategy for the following year.

Sustainability effects
This service excels in the social dimension of sustainability: As a matter of fact, the housing organisation tries to help the socio-economically weaker part of the society by making access to information easier. Participation rates will be higher in comparison to the rates of a normal information desk. The service increases convenience of the residents since it makes the journey to an office unnecessary. Furthermore it saves the residents' time as that they don't have to travel to get information (with an associated economic gain for them). Because the caravan comes on a fixed day the sessions will serve as a kind of meeting point which will increase contacts between neighbours and the social cohesion of the neighbourhood.

The Healthy Environment House

Service Areas: Counselling & Information

Description of the service
The 'Healthy Environment House' is a model dwelling that provides examples and information on sustainable and allergen-free living, styling and repairing. The dwelling is situated in a recently planned neighbourhood that is still in development. Local real estate agents and housing organisations bring the Healthy Environment House to new residents' attention and offer them to pay a visit. Some examples of presented measures are: solar energy panels, a vegetation roof, a water saving toilet flush system, environmental friendly cleaning detergents, recycled diapers, saving lamps, a water saving washing machine and a water butt in the garden. Additionally, courses on sustainable and/or allergen-free living are given in the dwelling and garden of the Healthy Environment House. The Healthy Environment House is a project of the municipality of the city of Zoetermeer in cooperation with Housing cooperation Vidomes and is sponsored by some 30 organisations.

Sustainability effects
Visitors of the house will gain a greater conscience on environmental issues and get informed about sustainable living measures. The project has a direct benefit on health since it addresses allergen-free living and information is directed to persons with respiratory problems. Furthermore the project is directed to residents of the direct neighbourhood which can increase social cohesion. From an economic point of view, visitors that implement the energy saving measures will save money on the long term.

Nuon on-line energy and water saving tips

Service Areas: Counselling & Information

Description of the service
Nuon is a private energy production and distribution company. It offers a website with tips about the reduction of electricity, water, gas and heat consumption. The tips on energy saving measures are rated with stars (from * to ***): the more stars, the more savings. Some tips are more comprehensive and radical than others, therefore there is a classification in three categories: 'Do It Now': e.g. one hour before going to bed turn down the heating, 'Do It Yourself': e.g. isolate the pipes of the heating and hot water, 'Done By Others': e.g. isolate the roof of your house. Another element on the Nuon website is the monitoring of the energy and water consumption. Free of charge, the resident/end-user creates a personal energy website, using username and a password, which gives him/her the range of consumption for the specific situation and allows for monitoring progress. For instance, the gas consumption is put next to a prognosis for the user's specific situation, based on the actual temperature of that week. For the electricity and water consumption Nuon uses the same weekly distribution as over last year.

Sustainability effects
Through monitoring there can be a positive change in the motivation and awareness of the resident regarding energy and water consumption. This and the availability of many tips to reduce one's own consumption of these resources can have a positive influence on the use energy and water and bring economic savings. In addition this service can create more employment in the building renovation industry.

EPA tailor-made energy reduction advice

Service Areas: Counselling & Information

EPA (Energy Performance Advice) is a national governmental subsidy program. Owners of dwellings built before 1998 can apply for an EPA, starting by approaching an EPA adviser. The adviser will pay a short visit to the dwelling and report back which energy-saving measures are possible (for example, additional insulation or double-glazing) and cost-efficient. The advice is subsidized and includes the costs, energy savings, subsidies and return on investment related to the proposed measures.

Sustainability effects
The service is focused on the reduction of energy, which brings down levels of emissions, but has a potential negative environmental effect due to the increase in materials use (for example insulation materials). From a social point of view, the service has especially a positive effect on the resident's comfort, information and awareness. Besides the additional insight residents get on the situation of their dwelling regarding energy-use, for instance the double glazed windows will decrease the annoyance of noise; moreover the service saves the residents' time since the provider pays a visit at home. To be added that the implementation of the advice has a positive effect on employment: contractors, consultancy employees and building products are needed to implement the service. From an economic point of view, the implementation of the advice can be a big investment for the residents, but on the other hand the owners of the dwelling are in many cases already on the verge of remodelling their home, and they receive extra subsidy; and in the long term they save money on their energy bill.

ProPoints bonus system

Service Areas: Counselling & Information; Care & Supervision; Repairs; Mobility & Delivery

Description of the service
The housing organisation ProLiving offers so called ProPoints to their tenants, who pay their rent automatically and/or are active in tenant organisations. The points can be used to pay or get discounts on various services and products like renting a van, contracting a gardener or buying a card for the City Mobile service. ProPoints can also be spent in a number of shops.

Sustainability effects
Through the bonus points, this service stimulates consumption and this is negative from an environmental point of view. The major benefits rely on the social side (improvement of the dwellings, use of services from a health care provider, increased participation in tenant organisations by the users) and on the economic side (from the residents' point of view, since they get reductions on products and services; the housing organization doesn't get profit with this homeservice). Still from an economic perspective, the increase of consumption will have a positive effect on employment and the economy and it will create more opportunities for local service providers.

Removal van

Service Areas: Mobility & Delivery

Description of the service
The housing organisation 'De Woningstichting' provides their tenants the possibility to rent a cheaper removal van in order to move. If you move from or to a dwelling from "De Woningdienst" you can rent a removal van for a lower price. The previous resident or the new resident can buy a "moving coupon" and with this coupon he/she can rent a van by the removal company Ackerman at considerably lower price. Ackerman is an external supplier, a car-renting company and has a contract with the housing corporation 'De Woningstichting'.

Sustainability effects
This service has no direct effects on the environment, but increases the convenience of the tenants and saves them money. The "moving coupon" will also have a positive effect on the profitability of the providing company Ackerman.

Wielertaxi

Service Areas: Mobility & Delivery

Description of the service
The Wielertaxi is a bicycle cab that is driven by one chauffeur and can transport two persons. It is the modern version of the Asian rickshaw: a reclining cab with a fashionable design. People can halt the bicycle cab on the street or order it by telephone to pick them up. Besides carrying out the function of the traditional cab the bicycle cab is used for small tourist excursions. The tariff of the bicycle cab is cheaper than a normal cab with respect to short distances. Initiator Jeroen Gasseling has a cooperation with German firm Velotaxi and buys his bicycle cabs in Berlin. He rents the bikes for a day-tariff to the chauffeurs who can keep the earnings they make.

Sustainability effects
The environmental benefits of replacing cars by bicycles are well acknowledged: reduced emissions and fuel consumption. From a social point of view, people experience transportation by bike as fun and the contact with the chauffeur is usually more intensive then in a normal cab. And if not for the bicycle cab, the majority of the chauffeurs would be unemployed. Furthermore they do physical exercise while working.

Fortes Flavours

Service Areas: Leisure time activities

Description of the service
Paulo Fortes is a mobile cook who comes by bicycle, a big black old-timer with a luggage-carrier, and cooks at the clients' home. He works a lot with biological ingredients and prefers to inform his customers about healthy and ecological cooking. Beforehand the cook and the customer come to terms on the dinner cooked and the cook makes a tender without engagement. The cook does all the shopping, brings the ingredients to the customer's place and takes care of the preparation and presentation of the dinner. Paulo Fortes can be hired to cook for groups or individuals.

Sustainability effects
The environmental benefits are related with the fact that the cook travels by bicycle and uses ingredients from organic farming. From a social perspective, the service increases the residents' comfort and saves time since shopping and cooking become unnecessary. Besides that he will partake of a healthy dinner and enjoy the company of cook Paulo Fortes. As for economics, the costs for the provider are low, since he doesn't need an additional workplace or equipment. A negative economic aspect for the customer is that it's more expensive to book the cook then to cook yourself.

Walking Bus

Service Areas: Care & supervision

Description of the service
The Walking Bus is a communal form of school transport by feet. It comprises of two volunteers who act as 'driver and conductor' and accompany a line of 50 children on their journey to school, often with trolleys to carry books and bags. The route to school is pre-arranged, pupils are collected at nominated 'bus stops' on the way where their parents can leave them. The walking bus is an alternative to the traditional school bus and aims to be environmental friendly and good for the health.

Sustainability effects
The environmental gains relate again with the elimination of motorised transport, especially beneficial in rush-hours. Furthermore parents will make less short trips by car; this will have a positive effect on the car's lifetime and its maintenance. Last of all, fewer parking spaces are needed in front of the school. As for the social effects of the service, walking to school is a healthy physical exercise that also promotes the contact between the children. They can talk, get to know the neighbourhood of their classmates and learn to move in a group in public space. The parents can join if they want and participate in the social contact, but they can also opt for leaving their children with the group, which saves their time. In respect to equity, all children have the same way of transport and there will be no visible economic difference like there would with cars. And finally, there will be less noise in the neighbourhood since the amount of traffic is reduced.

2 MegaWatt – Renovation for energy efficiency

Service Areas: Supply & disposal

Description of the service
The 2 MegaWatt project renovates multi storages dwellings into energy efficient houses. This is a combined project of the energy supplier, three housing organisations and the local government. The multi storages dwellings in Schalkwijk, a neighbourhood of Haarlem, needed to be refurbished. The dwellings date back from the post war period and the heating system needed to be improved. Normally dwellings get a new, individually, heating system. However, after negotiations with various actors, the housing organisations decided to invest in a sustainable heating system. Along with the renovation of the dwelling the thermal isolation was improved too. The new heating system is functioning as central heating and as warmer for the tap water. On the roof of the buildings solar collectors are located. Since in the summer there will be more warm water produced than will be used, the remaining water is collected 110 metres beneath the ground in a well and pumped out when needed. After the warmth is used the water will be pumped back in the cold well.

Sustainability effects
The shift to solar collectors, together with better insulation, saves resources, diminishes emissions to the air and brings financial savings to the residents. In social terms, through a better isolation the comfort for the residents has improved. To be mentioned that the project has increased the awareness of sustainable energy of the residents: besides the shift to a renewable energy, along with this new system the people get an individually energy bill which makes them more aware of their energy use.

Bàh – Bicycle repair at home

Service Areas: Repairs

Description of the service
Bàh (Bandenplakken Aan Huis = Bicycle repair At Home) is a one person "company" of Dirk den Hamer who provides bicycle repair at home. He likes to repair bikes in his leisure time and provides his service in the city of Utrecht. There are three ways clients can contact Bàh: by phone, by filling in an application form on the website or by sending an email. Bàh can come in the evening or in the weekend to one's home to repair the bike. The company gives a three-month guaranty on mended tubes and if the tyre goes flat within three months, it will only charge the call out to mend the tyre. For other repairs the price will be set before hand.

Sustainability effects
The service has a positive effect on the environment, since the provider doesn't need space for a workshop. This also means a reduced investment and overhead costs for Bàh. The service provides comfort to the tenants as they don't have to go with their broken bike to a repair shop. Because the service is provided at home, it can be a learning experience for the client.

Apetito – Meal delivery

Service Areas: Care & Supervision. Mobility & Delivery

Description of the service
Apetito is one of the leading suppliers in Europe of frozen food and catering solutions. The service is meant for companies and personal use. One can choose from soups to deserts. Apetito also offers sodium-limited food, fat-limited food, food for diabetics and cholesterol-limited food. Apetito uses seasonal products and offers special meals in Christmas and Easter. The consumer orders food once a week and has two possibilities to order the service. Food can be ordered once a week (package with seven meals) or only when there is a need for a frozen meal. The price depends of the kind of dinner. The average price for a meal is € 5 and the delivery is free of charge. With the company SHARP Apetito developed two new kinds of microwaves (Microfix and Microlux). The customer only has to press the suitable code and the meal will be cooked in the right way. On every dinner pack you find the required code.

Sustainability effects
The service has a positive effect on health and comfort, for it has the possibility to order special "diabetic" meals and it saves time. The special microwave-system is user-friendly, especially for elderly people. In the long run the company will stay profitable, because many elderly people will make use of this service.

Domotics (Realive domotica)

Service Areas: Care & Supervision. Leisure Time Activities. Safety & Security. Supply & Disposal

Description of the service
Isolectra Group provides Realive, a modular domotica concept. One of the systems is Micros domotica. This system integrates lighting, operating of curtains and shutters, heating, audio and alarm.

- Safety: When you are not at home the Micros domotica system can simulate an appearing presence at home. Lights in different rooms will go on and off at different times; it appears if someone is watching television; curtains will close. When the alarm goes off, the system will put on all the lights inside and outside the house. In the kitchen a fire alarm is connected to the system. When there is a fire, the alarm sounds and the electricity is taken of the outlets in the kitchen.
- Lighting: From your bedroom you can with one push button put out all the lights in your home.
- Energy saving: The system can make the washing machine and dishwasher work at night rate. The management of the heating of the rooms is divided in different zones; each zone has its own temperature and can be controlled from the central panel in the living room. When

going to bed the system puts out all the lights and puts the heating in the night option. At vacation the heating is put in the antifreeze option.

Sustainability effects
The service has a high positive effect on the environment, because due to energy management less energy is used. A small negative aspect is due to the fact that more materials are used.
Safety and security of the residents improve. Also the comfort increases. Economically, there is a positive effect on employment, due to the increase of the demand of residents. The effect on the financial situation of the residents will be neutral. Due to domotics residents are able to stay longer in their own dwellings, but first they have to make an investment in the system. The company will have a good profitability, because domotica is seen as a promising new market.

Uitleenservice Thuiszorg Amsterdam – Lending of nursing requisites

Service Areas: Care & Supervision.

Description of the service
The Uiteenservice lends out nursing requisites to residents of the cities of Amsterdam and Diemen. Users are given an indication (usually by telephone) of the appropriate products for their situation. People can use a product for free for a maximum timespan of 26 weeks. The service is free for residents because it is financed out of the national social insurance.
If requested, the requisites are delivered at home and collected when not needed anymore. Examples of products are wheelchairs, adjustable beds and shoppers.
Besides the basic collection there are some specialized products that can only be requested by trained nurses. Products that don't satisfy the conditions anymore are not thrown away but are donated to developing countries. The 'Uitleenservice' is a department of the Amsterdam Thuiszorg, the central organization for care at home in the capital of the Netherlands. It is financed completely out of the national social insurance.

Sustainability effects
The service has a positive effect on the environment, since all products are reused and people don't need to buy the nursing requisites themselves. Products that don't serve anymore in the Dutch market are donated to development projects.
People that need care can stay independent and mobile thanks to the nursing requisites. Less people are interned in a nursing home or hospital, which is very costly.
Furthermore the products improve the working conditions of professional nurses, as they are user-friendly.
As the products improve the working conditions of nurses sick-rates will be lower. This means a cutback in health costs. As a consequence of the service a person in need of care at home doesn't have to buy nursing requisites him/herself and can loan them for free.

9.2.4. Spain

Abil – Construction and renovation

Service Areas: Counselling & Information, Care & Supervision.

Description of the service
The company combines different construction- and design-related professions and thus offers an integrated service in the field of construction and renovation of residential buildings. Their distinctive feature is the use of ecological and high-quality materials, which must comply with three basic criteria:
- They must be free of toxic substances and therefore beneficial to human health;
- The production of these materials must not be aggressive to the environment;
- Hydrocarbon consumption in transport must be minimal.

The company is specialized on ecological construction and renovation projects, characterized by the use of ecological materials, reduction of energy consumption and the reuse of materials whenever this is possible, the company uses mostly natural materials such as timber, inerts of bricklaying (plaster of Paris), low-impact plastics (polyethylene), isolating materials made up of recycled paper, natural fiber from flax and hemp which are not treated with pesticides, etc. The company also takes on "normal"

construction projects, but then tries to introduce improvements, suggesting the use of more ecological materials to the resident(s) / owner(s). Yet, in the coming years, Abil wants to specialize on ecological construction only.

Sustainability effects
Besides the positive effect of this service in environment, the company emerged as an employment initiative in one of Bilbao's most deprived neighborhoods, and they still work in close contact with Lan Ekintza, a further education initiative for the unemployed in Bilbao. Company growth has been stable and the perspectives for further development are excellent, as demand for this type of service continues to grow.

Surbisa – Renovation services

Service Areas: Counselling & Information, Care & Supervision.

Description of the service
The Urban Restoration Society of Bilbao Surbisa is a public service provider that manages subsidies for the renovation of dwellings or buildings situated in one if the three degraded areas in Bilbao: Casco Viejo, Bilbao La Vieja and Barrio Ferroviarios. The main objective is to solve structural problems, such as the degradation of buildings and dwellings, abandonment of neighbourhoods or the impoverishment and ageing of the population in Bilbao. Surbisa therefore carries out the following activities:

- Promotion of the private restoration of buildings, dwellings and commercial places
- Improvement of urban elements, infrastructures and free spaces
- Improvement of common facilities in the neighbourhoods
- Promotion of public housing
- Implementation of the Urban Renewal Plan

Sustainability effects
Inside the urban renewal area, the company is a currently applying for European subsidies in order to carry out renovation projects with environmentally friendly materials, which will then be passed on to companies and private citizens. The urban renewal projects also have beneficial impacts on the City's cultural heritage
The areas where Surbisa carries out its work have a complicated social structure. The population of the Old Town, (Bilbao la Vieja), for example, is mainly composed by immigrants, elderly people with low income, and new residents, most of them young couples.
Another beneficial aspect is the special program created by Surbisa for dwellings, which are severely degraded, with the objective of reaching a minimum living standard (basic equipment, and bathrooms, for example) for these residents. This problem affects mainly elderly persons, who often reject any kind of work in their dwelling, so that the intervention of the City Hall's social assistants becomes necessary. Surbisa's budget for subsidies was increased considerably and Surbisa started a series of new programs. The economic benefits for the clients are obvious in this sense, but there are some problems related to the project, which have caused conflicts with the associations of neighbors in the affected areas.

Txillarre – Delivery of organic farming products

Service Areas: Leisure Time Activities, Mobility & Delivery

Description of the service
Txillare is a small family-owned agricultural exploitation, which has started to market its production directly on the Internet. The delivery service also includes products from other near-by ecological farms, as well as ecological products from a different distribution service. Products are offered with prices and once the client has selected those he/she is interested in, the total price is displayed. The chosen products are then delivered to the client's home and are paid for by bank transfer at the end of the month.

Sustainability effects
The products offered are ecological as defined by EC Norm (CEE 2092/91), which guarantees that the production process, as well as the final product is free of chemical products and toxic residues, thus contributing to the conservation of the environment.
The service is provided by a small family-owned agricultural exploitation, which is very typical for the Basque Country. Creating direct commercialization chains helps these farmers to obtain greater margins and thus makes these small farms a little more profitable, giving the farmers a better chance to actually live off the farm's production instead of migrating to the surrounding towns and cities to find employment. By combining the distribution of own ecological products with those provided by a larger distribution chain, the farmer is able to offer a larger variety of products at a very low extra cost for the delivery service, without the necessity of storing large amounts of products themselves. By improving the farmer's margin and lowering the cost of ecological products, this high quality food will more easily find a market niche outside the large shopping centers and distribution chains. It is a small contribution to preventing the abandonment of rural areas and, at the same time, a form of marketing regional products.

Emaus – Collection, repair and sale of used products

Service Areas: Supply & Disposal

Description of the service
The Foundation is a non-profit organization, which is exclusively dedicated to helping people with problems of social integration The mission of Emaus is presently that of combining the collection, repair and sale of used products with initiatives for socially handicapped groups. The Emaus Group in Gipuzkoa, which took up its activity in the 1980ies, concentrated initially on the collection of waste paper, but ran into financial problems in 1992, when the prices for paper went down. After this crisis, its primary associative structure was redefined, dividing the social work, which is now taken care of by a Foundation, from the productive activities, which were organized in the form of different workers' cooperatives. This latter area, which started out with 15 employees in 1994, now employs about 37 people in Gipuzkoa, more than half of them long-term unemployed, who have passed some kind of support program for reintegration into working life.
Emaus runs a fleet of own trucks, which recover furniture, textiles, electric appliances, books and other products from households, then separates the waste for repair and sale, for one hand, and recycling or disposal, for the other. Used and repaired products are sold in own stores, either at the foundation's premises or in one of the 4 centric outlets in San Sebastian. All these stores are run by the productive part of the group.

Sustainability effects
74% of the household waste collected by Emaus can be reused directly, another 24% can be destined to recycling and only 2% goes into final deposit or treatment. Emaus offers commercial routes for these second-hand products, which are not available to the individual, so that many of the smaller products, which are not collected in separate containers, would otherwise end up among the general household waste. In this sense, Emaus contributes to raising the level of reuse and recycling in the municipalities and reduces the amount of waste sent to the incinerating facilities.
Emaus has now a sound economic basis, although its long-term development depends on pending legislation on recycling. The productive activities (waste collection and re-sale) generates an income of around €759,000(year 2002). During last year, no subsidies were received which shows some independence from the public administration. Additionally, around €230,000 of tax payments were generated. The service reduces the cost of collecting waste in the municipalities by 50% and adds up savings in the following areas:

· Less costs for textiles, furniture and electric and electronic appliances which have been recuperated;
· Less costs for deposit and treatment in landfills of textiles, furniture and electric and electronic appliances which have been reused;
· Reduction in public help such as IMI (Ingreso Minimo de Inserción – Minimum Insertion Income) or AES (Ayuda Emergencia Social – Social Emergency Help) not to be given to those who have already incorporated to the labor market;
· Less costs for other social expenses derived from public programs for people in an exclusion situation.

9.2.5. Finland

ADC, Art & Design City

Service Areas: Counselling & Information, Care & Supervision, Leisure Time Activities

Description of the service
ADC offers electronically information about the events in the area, and makes electronic newspaper targeted to the residents, students and workers of Arabianranta area.
ADC also has a service called e-caretaker. The concept entails that ADC makes available certain services for the residents of the area with reduced prices. ADC negotiates prices and makes sure that the service provider is reliable. These services are e.g. security, child-sitting, dog-walking, cleaning. As the residential buildings are new and the residents are in the phase of moving in, ADC also acts as a mediator for certain specific products like blinders and security items (extra locks and spy holes) that are needed by multiple residents.

Sustainability profile
Social: The services provided by ADC increase comfort, provides new communication channels toward decision-makers, and improve information and awareness of the residents. Via electronic discussion channel that is facilitated by a building moderator toward ADC (which is the coordinator of the development, events and the like of the Arabianranta area), the residents can take part in the decisions concerning the area. This is of particular importance, because the area is still under development. Consequently, many decisions can be influenced. The residents can also themselves bring up issues either via the moderator of their building or write directly to the Helsinki Virtual Village website.
The building intranet chat rooms and the area net site enable social contacts in the area.
Economic: ADC mediates commercially provided services with reduced prices to the residents. ADC takes a little in-between to cover its costs, residents get cheaper prices and service providers get more business. The concept brings about two kinds of economic benefits. First, transaction costs are lowered in terms of reduced costs of residents to search for information, and of service providers to provide information. Second, this means business for ADC and service providers. Job-matching concept helps people to find jobs.
Environmental: For the time being there are hardly any environmentally benign effects of ADC's services. There would be a potential for major electricity savings through remote control of building heating and lightning, made possible by the LON network of the Arabianranta area. However, as the builders have aimed at lowest possible per square meter sales price of apartments of the area, the necessary equipment have not been installed in the buildings.

Motiva Oy (Centre for Energy Efficiency) – Energy Expert service

Service Areas: Counselling & Information

Description of the service
Energy experts are tenants/residents who have been trained to be active in energy issues in the building they live. Energy experts monitor sudden changes in the energy/electricity/heating consumption (energy and water consumption data from the housing organization or from the energy company), they also have extranet service in their use for information and training material, give advise to other residents on energy efficiency and conservation issues. They also act as a residents contact person towards the housing organization and management company and vice versa.
Centre for Energy Efficiency (Motiva) co-ordinates both the energy expert training and further development of the concept. They have also extranet pages for experts and for trainers, and keep a list of the qualified trainers network. Trainers do the actual teaching and training. Motiva developed the expert concept together with social housing organization VVO, which has been the first organization introducing the concept and training experts. VVO has round 500 energy experts among their tenants and since 1994, Motiva has trained all together 3000 thousand energy experts in Finland.

Sustainability profile

Social: Energy expert activities offer a good way to make the residents better aware of the environmental and economic effects of their daily life. Experts disseminate information about the effects of energy consumption or other resource use in constructive way and give positive samples of how energy efficiency or recycling can save resources and have also economic benefits for the residents/tenants.
Energy expert concept increases especially the skills, training and awareness of the residents who become experts. Active experts consult other residents on reduction of energy and water. Expert activities have also been found to contribute positively to the social contacts among the residents, as well as between the energy experts.
Environmental & economic: Active energy expert can have a substantial effect on the energy and water consumption and costs. Reduced costs give housing organizations/condominium associations eases the pressure to increase rents or fees for resources and services, such as common laundry rooms The average increase in energy conservation in the buildings where there have been a active energy expert is 5 % in heating, 10 % in electricity consumption and 20 % in water usage.

Tripla Project

Service Areas: Counselling & Information, Leisure Time Activities

Description of the service
The project operates in the neighbourhood activity centre at Lehtomäki suburb in Kouvola. In the activity centre local residents can use computers and Internet connections to use public services or take care their banking errands. As a part of the project, a housing adviser works at the activity centre, in order to give advice to the tenants of the local government housing in social and economic issues of every day life. The centre works in close co-operation with the Kouvola town social services department and local government-housing organization.
Other aim of the centre is the help immigrants in their daily lives and to integrate into local community.

Sustainability profile
Socio-economic: Information is given to residents about local sustainable development. The aim of the project is to provide disadvantaged people possibilities to affect their own life and to give them changes to participate in decision-making. At the later stage the aim is to find ways to start local cooperatives that could offer home and other services at the Lehtomäki area.

Roihuvuoren kiinteistöt Oy

Service Areas: Counselling & Information, Leisure Time Activities, Safety & Security

Description of the service
Roihuvuoren kiinteistöt Oy (Roihuvuori Real Estate company), which is one of the 22 social housing organizations owned by the city of Helsinki, provides, via television, information to it's tenants concerning energy and water consumption, security issues, recycling and on going tenant and neighbourhood activities (tenants meetings, markets, parties, etc). Information is provided at building, neighbourhood and city district level. The company also has installed video cameras pointing to the courtyard playgrounds. Parents are able see in their TV –screen what is going on with children playing at the playground.
Technically the system is fairly simple. The information is sent from the office using modems and linked to the TV network. Then residents have only to tune their TV-set to show the channel. System is something like hotel-TV.

Sustainability profile
Social & environmental: Information concerning residents' daily life (energy and water consumption, waste generation and recycling, etc.) enables them to change every day routines into a more ecological direction. Easy access to information concerning tenants enables them to participate more in building and neighbourhood activities, thus creating enhanced sense of community.
The system is very easy to build up and tenants do not need new computers or other ICT appliances.
Economic: The service may save some money for the company because the building care takers can concentrate on their core duties.

IST Inter-national Security Technology – VIVAGO WristCare System

Service Areas: Care & Supervision.

Description of the service
VIVAGO WristCare System is an active personal health monitoring and alarm system combined with care service possibilities. VIVAGO WristCare is a security device, which monitors the user's well-being 24 hours a day. During the first four days of use, it studies the user's normal activity level by measuring movement and skin conductivity. If the VIVAGO WristCare system notices a significant change in the user's activity level, it automatically sends an alarm to the recipient. The user does not have to worry about the alarms: the wrist unit automatically sends information about changes even in cases when the user is not able to evaluate his/her own well-being and is not able to send a manual alarm.

Sustainability profile
Social: The WristCare system enables the elderly and chronically ill persons, for example, to live at home for longer than would otherwise be the case. The system also makes home care more efficient and improves the activities of sheltered accommodation (assisted living arrangements) and hospitals.
Environmental (minor): This system also helps to reduce to some amount the environmental impacts of transportation, through decreasing unnecessary traffic, such checking false alarms, etc.
Economic: The Vivago system has enabled the IST Inter-national Security Technology expand its operations and hire more employees.

Maunula-apu (Maunula help) Multiple homeservices

Service Areas: Care & Supervision, Mobility & Delivery, Supply & Disposal.

Description of the service
Maunula-apu (Maunula Help), a company owned by the local residents association, provides variety of homeservices for the residents in Maunula city district in Helsinki. Services include cleaning, window cleaning, personal assistance, small repairs and compost services for condominium associations and housing organisations. Services can be ordered from one contact number.
The Compost service for condominium associations and housing organisations is operated in cooperation with customers. Housing organisation acquires composts. Maunula Help takes care of the composts and all related activities. Residents take care for organising the bio-waste collection from households, raking leafs, etc. Residents can use the composted soil for improvement of the common green areas at the yard, for their own flowers, etc.

Sustainability profile
Environmental: Maunula Help works at local level, operating the compost together with the residents and taking care of the secondary composting.
This service decreases traffic and emissions compared to centralised compost system, as the composting process is operated locally within the city district with no need of transport to central industrial composting facilities. Repair services help to maintain old instead of buying new.
Socio-economic: Maunula Help provides work opportunities for unemployed, thus promoting employment and reducing social exclusion. As it is planned and operated in co-operation with the residents, it increases training and skills of people both living in Maunula and working for Maunula Help. The service may help residents to save some waste management fees and the compost soil can be used for improving their own courtyards and green areas without extra costs.

TSS Institute (Work Efficiency Institute) – ELIAS Internet market place for homeservices

Service Areas: Care& Supervision, Leisure time activities, Repairs.

Description of the service

Elias is an Internet-marketplace for providers and customers of home services. Service is free for people who are looking for services and for the companies that advertise their services in ELIAS. Services offered through the internet service include among others: Cleaning, gardening, small repairs, food services, health care services, errand services, walking assistance, other services (hairdressers, etc.). At the moment ELIAS functions at the Southern Finland, offering contact information for more than 100 service providers.
Service is technically quite simple. The users choose the service area they are looking for. After that a new page opens where there are links to the information page/sheet of each company providing services. The site also offer some advice how to take care of the taxation and other fiscal matters related to the use of home services, gives a standard form of a service agreement between parties (buyer and provider). The service is partially funded by EU and practical work is done and coordinated by TTS-Institute (Work Efficiency Institute).

Sustainability profile
Environmental: Employees of the companies who wish to be listed at ELIAS have to go through a basic training concerning eco-efficiency of service production before they can be listed at the Internet service. After the compulsory training it is possible to take volunteer 'two star' training on service quality and provision. The third, three-star certification can be obtained if the service provider obtains vocational qualification/degree from a certified school.
Through this training, companies and employees gain improved skills to use recyclable and recycled materials in repairs, to pay attention to energy use and to use less hazardous substances in cleaning materials.
Social: ELIAS makes it easier to find reliable home services that are needed in every day life and information on tax deductions and contract models for using Homeservices. Thus, the service contributes to the social dimensions of sustainability (social equity, comfort and convenience, information and awareness).
Economic: It also gives small companies a possibility to offer their service straight to the customers. These companies have fewer possibilities to market their services. This way, the ELIAS service creates new business opportunities and helps to secure existing jobs and is likely to create new ones.

VVO – Benefit Points

Service Areas: Leisure time activities.

Description of the service
Housing organisation VVO offers so called benefit points to the residents committee (part of participatory administration in the rental housing in Finland) when the residents want to, on regular basis, take care of such maintenance and small repair tasks that, otherwise, would have to be done by a commercial service provider. These services include, for example, raking of the common yard, small repairs, taking care of building compost, etc. Residents will get half of the cost savings generated for their own use, such as common tools, swings for the kids, trips, etc.

Sustainability profile
Socio-economic: This service increases the social contacts, by providing possibilities for cooperation among residents. It has a positive effect on the financial situation of the residents, by giving chances to earn money for common good / all residents. Perhaps there is less need to raise rents because of less outsourced maintenance services.

City Car Club – Car sharing

Service Areas: Mobility & Delivery.

Description of the service
The City Car Club (CCC) is a car-sharing organization. Members can specify the type of car needed, the most suitable pick-up location, and for how long does she or he need the car. CCC has over 60 pick-up points around the metropolitan Helsinki, in order cars to be located as near as possible to

members' home or office. Reservations can be made either by phone or by the internet. The reservation can range from one hour to two week summer holiday. Besides the 13 euro fixed monthly fee, charging is based on length of the reservation and distance driven. Cars of CCC can be locked up and opened by a mobile phone. Therefore the usual questions of key exchange on pick up and returns are not a problem. The car keys are kept in the car.

Sustainability profile
Environmental: Car sharing cuts down on environmental impacts. A study on CCC shows that approximately 80 % of the private club members have previously had a car of their own. Therefore it can be argued that car sharing diminishes the amount of cars and short trips that can be done, for example, by bicycle or by using public transportation.
The motivation for the car sharing is two-fold. First, individuals who only have periodic demand for car use can substantially reduce their fixed costs by sharing their car with others in a similar need. In a sense, car-sharing organizations close a gap in the modes of passenger transport (public transport, bus and rental vehicles).
Economic: Car sharing works best and is at its most economical if a person does not need a car on a daily basis and drives less than 10.000 km's annually. In future, CCC internet pages should contain a simple form that, in a few minutes, allows comparing the costs of CCC services *vs.* private car ownership. CCC is also a new business and has created new jobs.

HELY & City of Helsinki Social Services – Shopping bag pilot service

Service Areas: Mobility & Delivery.

Description of the service
Shopping bag pilot service (Kauppakassi –palvelu) is provided in the city districts of Kontula and Mellunmäki in Helsinki. Normal practice has been that the department of social services in Helsinki provides the shopping service for elderly people that cannot properly do their own grocery shopping and are still living in their own apartment. In the pilot project, the city social services department purchases the service from a non-profit organisation (HELY) with feasible price. Shopping is done by electric car and for several elderly people for the same time, so there is less transportation than earlier.

Sustainability profile
Social: This service increases the social cohesion and sense of community at neighbourhoods. All the shopping is concentrated on local shops, so it helps to maintain nearby services at the neighbourhood, thus making it easier for people without car to do their daily shopping.
Through the service, elderly users of the service who have difficulties to leave their apartment have also more social contacts. The home service staff of the city social services has also more time for their actual work at the customers' homes. Service has also proven to be more economically viable compared to the earlier practice, where social services provided the service itself.
Environmental: As for the delivery is used an electric car, there are no direct emissions at all. Unnecessary traffic is also avoided by using local shops – less traffic, less energy use. This way the service also has some positive effect on environmental impacts caused by traffic. Hely, the actual provider of the service has been able to maintain jobs with this project.

T&T social enterprise – Recycling of electric household and office equipment

Service Areas: Supply & Disposal.

Description of the service
The service consists on collecting electronic household and office equipment waste and repairing it for sale or recycling it for industrial use. The collection is done by both pick-ups and reception in their facilities. Repaired appliances are sold in T&T's "recycling shop" for households. Dismantled materials are sold to industries for the production purposes. T&T also recycle batteries, furniture, etc. Employees of the company are long-term unemployed, immigrant, disadvantaged and disabled people. Facilities include a dismantling facility and second hand store.

T&T is also planning working together with a local government housing company – Kiinteistö Oy Maunulan asunnot (Maunula apartments) – and local non-governmental organisation called Maunula-apu (Maunula-Help). Together they have a pilot project for collecting electronic appliances and scrap metal within the building premises.
First aim of T&T is to promote sustainable development by prolonging the life cycle of the electronic appliances. Second aim is to create job opportunities and make re-entering to the work market easier for disadvantaged groups mentioned above. Third goal is to help immigrants integrate to the Finnish work culture and create contacts between them and the local people.

Sustainability profile
Environmental: The service reduces substantially the amount of electronic household and office appliances waste.
Social: It provides jobs for disabled people, immigrants and long-term unemployed and also enhances the working skills of the employed people, giving them better possibilities to employ themselves at the open work markets. Language training is organised for immigrants giving them generally better possibilities to live in the Finnish society and get employed. Also the working teams are organised by mixing Finns and foreigners (over 16 nationalities at the moment).
Economic: It creates new job opportunities for people who have been unemployed or might have other difficulties to get jobs from commercial business sector. At the moment, the electronic equipment recycling project is partially funded by the EU and the City of Helsinki. However, when the WEEE (Directive on waste of electronic and electrical equipment) directive becomes fully enforced, it is expected to be economically self-sufficient.

9.2.6. Portugal

Teleflora – consulting on gardening and plants

Service Areas: Counselling & Information, Care & Supervision.

Description of the service
This service provides consulting services on gardening with environmental concerns in the construction and maintenance of green areas. The integrated management system (quality, health and safety and environment) certification process, concluded in 2004, has pushed forward this example of gardening service.

Sustainability effects
The new service will lead to a reduction of the environmental impact of the company's activity, by:

- promoting the use of biological fertilizers (e.g. nitrogen-fixing-bacterium solution),
- reducing waste, by composting green waste and reusing it as fertilizer,
- reducing chemical fertilizers and pesticides,
- using natural pest control products,
- reducing of water consumption,
- reducing packaging waste and giving it an adequate deposition.

Good practices in handling pesticides and fertilizers will lead to an improvement of workers safety and health. On the other hand, long term employment of disabled people and social excluded people is a current practice within the company.
Composting of green waste and further use as fertilizer will reduce costs related with fertilizers consumption within the company.

LPN – Leisure and training activities

Service Areas: Counselling & Information, Leisure time activities.

Description of the service
LPN, one of three main Portuguese environmental NGO's and the first created in the Iberian Peninsula in 1948, periodically organizes several leisure activities, as thematic field trips, debates and workshops, not only for their associates, but for the general public.

These activities give people the opportunity of visiting places of natural interest and discussing environmental related themes important to the Portuguese present reality, always aiming at raising the awareness about environmental questions.
Some activities, like the weekly debates, are free, but the majority are paid. Usually non-associates have to pay some more than associates.
Interested people are kept informed on the planned activities by receiving the periodical mailing (only to associates) or by accessing the LPN website.

Sustainability effects
One of the major effects of the services results in a larger environmental awareness in general and on the preservation of green spaces and natural habitats in particular.
As a major effect, the service increases social contacts of the participants and also helps to promote the critic opinion of participants, thus enabling them to raise their public participation. Furthermore, as a NGO, LPN facilitates communication with decision-makers and thus improves empowerment of participants.
The service also creates a few part-time jobs (direction board advisers).

SIBS – access to several services with a magnetic banking card

Service Areas: Counselling & Information.

Description of the service
With the use of a card with a secret code users have access to a wide variety of services.
About 8750 ATMs, working 24 hours per day, are available to bank customers, processing an average of 50 million operations per month. The Automatic Payment system at shops has presently 128000 terminals functioning and near 35 million operations of monthly payments.
This banking system guarantees high safety levels to both private and institutional clients.
Some of the services offered are:

- cash withdrawals;
- interbanking transfers, changing PIN, cheque books request;
- enquiries of accounts balance, accounts statement, ATM transactions, personal banking number;
- payments of services (water, energy, telephone, insurances, Via Verde, …) and shoppings, payments to public administration (social security, taxes, …);
- credit "rechargement" of mobile phones;
- buying of train tickets, stage show tickets.

Sustainability effects
The service has an important effect on energy use, due to the reduction of transportation and associated polluting emissions, as well as on the space needed, because it reduces the need of bank agencies/ infraestructures of commercial and public service providers. Other positive effects are related with the reduction of paper use and associated waste.
Increase in comfort is the most important effect of the service, while it has a negative effect on security (more risk of assalt), social contacts and empowerment, due to the reduction of contacts between the client and the bank/ commercial and public service providers employees, which reduces the chances of influence the management.
The service has improved the profitability of the company, which is also related with profitability of the region, due to the improvement of system efficiency. However, the service has a major negative effect on employment, due to the reduction of working places.

Casa Aberta – Adaptation of houses of people with reduced mobility

Service Areas: Care& Supervision.

Description of the service
In order to fight the problem of social exclusion of handicapped due to reduced mobility, the Lisbon Municipality promotes the "Open House Program" in collaboration with the "Portuguese league of

disabled people with reduced mobility" (APDM) and the "Portuguese association of brain paralysis (APPC).
The Program's main objective is to provide more autonomy to handicapped people with mobility problems and, thus, improve their quality of life.
The Program aims at eliminating architectonical barriers at the homes of people with reduced mobility, through adaptation works and/or installation of in-house technical aids and also of the accesses to public way.
It is meant both for municipal building residents and for private-owned building residents.
Types of interventions:

- ramps construction
- redefinition of the lay-out of the bathroom ceramics
- construction of adequate douche areas
- placing of protector materials on doors and door-posts
- building of parking places for wheeling chairs
- placing of elevating platforms and chairs at stairs
- modifications on kitchens to allow better mobility
- widening of doors
- placing of electric wall sockets, cut-outs and faucets adapted to facilitate its use
- placing of non-slippery floors.

Sustainability effects
The "Open House Program" is a service which improves equity between people: every Lisbon resident with reduced mobility can apply to the Open House program. It enables these citizens to have more equal opportunities in terms of access to culture, employment, etc, minimizing the social exclusion that these people are subjected to. When adapting homes to the specific special physical situation of residents, the "Open House program" helps to reduce the risk of injuries. By facilitating mobility inside the home and at its accesses to the exterior, this service saves time and highly increases the convenience not only of the reduced mobility people but also for their companions, highly promoting the opportunity of communication between disabled residents and society. It really permits disabled people with reduced mobility to have more autonomy, to get out of their homes and participate more freely in society life.
The service contributes to secure the jobs of people involved in its organization but, above all, it enables or facilitates disabled people on getting a job.
In the major number of cases, without this funded service, people simply wouldn't be able to support the costs of adapting their homes.

Banco de Tempo – Swap shop of services

Service Areas: Care & Supervision, Leisure Time Activities

Description of the service
"Banco do tempo" works as follows: any investor willing to give one hour of his/her time to perform a group of services, receives back one hour to use in his/her own benefit. *Exchange by exchange. One hour per one hour.*
Some examples of services shared in "Banco de Tempo" are:
Children accompaniment: taking care of children, taking to / ringing from school, helping on homework, playing;
Recreational activities: riding bicycle, walking, playing cards, tennis, chess, animating groups, playing music, tourist guide, animating parties;
Domestic help: washing the car, the dishes, shopping, going to the post office, to the pharmacy, paying bills, dusting, ironing;
Pets and plants: gardening, caring for animals/plants on holidays, helping to give bath to pets;
Bricolage: small repairs, works on carpentry and electricity;
Making company: accompanying to the doctor, talking about a certain subject, strall around, telling stories, loud reading, accompanying to shows, cinema, exhibitions;
Cooking: cooking a special dish, cooking meals to be frozen;
Needlework: stitching works, embroideries, cross-point;
Lessons: teaching how to study, how to relax, lessons of gardening, informatic, foreign languages, music, painting, cooking, dancing;

Secretariat and bureaucracy: texts processing, texts correcting, filling of documents, of taxes;
Colaboration with "Banco de Tempo": giving support to bureaucratic activities of the agency, helping on the organization of social gatherings.

Sustainability effects
Being a social support network, Banco de Tempo contributes to:

- support the family and the conciliation between professional life and familiar life,
- build a culture of solidarity,
- promote the sense of community, the socialization, the collaboration between generations, the social integration and the gathering of neighbours,
- promote the construction of more human social relations,
- value time and the care for others.

As this service favours and promotes the delivery of services, it can potentially reduce the number of needed products and, thus, the environmental impacts related to their life cycle.
As delivered services are not paid with money but exchanged by equal number of hours of other services, this system allows that people who financially wouldn't be able to access to certain services, can now exchange those needed services by others they can provide.

Loja do Condomínio – Condominium management

Service Areas: Care & Supervision.

Description of the service
"Loja do Condomínio" is a company specialized on condominium management, which proposes to ease residents' life by assuming all tasks related to administrating residential buildings.
The idea is to concentrate on a single structure all services inherent to the condominium management and administration, saving the owners the trouble of solving everyday problems. Associated to this service there is an innovative software, developed specifically with the purpose of automatically executing administrative tasks, which turns the process faster, more efficient and less costly.
The innovative aspect of this service is that all the information about condominium management activities is available by internet, through a website for each building where information about condominium meetings, payments, etc is available for the residents.

Sustainability effects
The service highly contributes for saving time and increases comfort for residents, as most contacts with the company can be made at home by internet and practically all management and administration work of the condominium is the company's responsibility.
The service provides all sorts of information related with condominium management on the website, improving information and awareness of residents. As almost all comunication between the company and residents, including payments, can happen via internet, there is a reduction on company' staff travels between condominiums and the office.
The business has been growing fast – one year after it was created there are already 25 open stores through the country and 4 more getting ready to open doors. This certainly has a positive impact on employment.

9.3. Good practice buildings

In terms of provision of services and construction measures within the residential building, 16 good practice buildings were collected in the six participating countries in order to illustrate how the services can be best arranged and delivered to the residents.

9.3.1. Austria

Herrenhauspark Döbling
Herrenhauspark Döbling is a building complex situated in the outer district of Vienna. It was built in such a way that leaves enough space between the dwellings for gardens and greens. Besides that, there is a common garden with a children's playground and a swimming pool in summer. The Herrenhauspark is surrounded by shops, public transportation, and the living area is nice and quiet.
The Management Centre is available 7 days a week and for emergencies a 24-hours-hot line is installed. The residents are mostly international and the management centre provides all kinds of services from organising opera tickets to helping find one's way in a foreign city, like help in renewing a drivers license, to more common services like apartment cleaning, gardening, and maintenance advise.
As far as the suppliers are concerned, ig-immobilien and the Management Centre aim at lasting, amicable business relations that offer satisfaction and profit for both sides and are constantly reviewed to ensure punctuality, market prices and professional services with innovative solutions. ig-immobilien and the Management Centre attach great importance to environment-friendly ideas, which begin at the planning stage of every project and extend through to the materials and consumables they use. They pass on this same philosophy not only to the suppliers but also to the clients and customers.

Hanging Gardens
The building is situated in the outer district of Vienna. It provides 101 2-4 room dwellings. Although there is no special philosophy behind the building, the architecture incorporates nature. Common rooms act as a platform for communication and socially organised self-help. This building was considered a good practice building because of its common areas, the service centre, and the building care taker, all of which promote Homeservices. A laundry room, a clothes drying room, separate rooms for bicycles and baby strollers, a playground, the entire roof as a garden, an internet café, and a presentation hall are offered to all residents. These areas increase communication between residents and can promote socially organised self-help.
A space for a service centre has been included. This service centre will be run by a subsidiary of BUWOG, primarily with long-time unemployed workers. Apartment cleaning and child-sitting are two services that will be offered. Next to these two, BUWOG will temporarily offer other services to test for their acceptance among residents. If they are successful they will be kept after the trial period.
The service centre is managed by the building care taker, who is the contact person for residents and who will be onsite during regular working hours. The contact person is the most demanded service by residents of BUWOG buildings. Outside regular working hours, a hotline can be called for information or to report problems.

Wienzeile
The building is situated at Rechte Wienzeile 19, in the centre of Vienna and provides 10 dwellings. It's owned and managed by a condominium association of relatives and friends.
The special philosophy behind the building is the social integration of the residents and therefore many services are provided either via the condominium association or via socially organised self help. Separate rooms for bicycles, wine, and wood are made available. Specially cleaned and energised water (Granderwasser) is provided to all residents. The residents organise common dinners, one of the residents cuts other residents' hair, and house parties and house flea markets are organised. The cleaning lady who cleans the staircase also works in most dwellings and both offices. The two offices in the house act as service centres (key drop off, parcel delivery, messenger centre). It is also common that external service providers are organised by the condominium association, like Biowichtl, an organic food delivery service, or Ökostrom, which provides renewable energy to most dwellings in the building.

Harlacherweg
The Harlacherweg 2, a building of the Gemeinnützige Siedlungs- und Bauaktiengesellschaft called Gesiba (a non-profit settlement and building corporation), was built in Vienna by the famous Viennese architect Harry Glück. In 1974 the first residents moved into the building. The twin building consists of two equal and adjacent houses and each of the two houses has an approximately 14 metre long out door swimming pool on the roof. Between the houses is a park including a little playground for children. The building also has bicycle and stroller parking areas and each dwelling has a balcony.
This building was considered a good practice building because of the services provided by the management and its common facilities. The management is responsible for maintenance, rent collection, cleaning and new developments. The house has a management centre (the so called Hausbesorgerzentrum) with highest technical standard, which facilitates the residents to do the damage reports or to ask for information or help needed etc. Apart from the services mentioned above, the employees of the management centre make sure that the swimming pool, the parking facilities in the cellar, and the elevator functions 24 hours a day. Beyond that, the house has common rooms such as laundry rooms and a sauna. Small repairs are accomplished by the employees of the management centre. They also check regularly whether everything is lit and clean. Nevertheless, it is particularly important for the residents to find somebody present to turn to if they have a problem. The focus of the management centre is maintenance and security. By taking care of several buildings, the service is actually cheaper than the old “Hausbesorger” whose main duty was to clean the staircase.

Attemsgasse
The building is situated in Vienna, in the outer district and provides 138 sunlight filled apartments ranging from 45 to 190 m². The building was finished in spring 2003. It is located a few minutes from the UN and Vienna International Centre, where the international population is very high. It is also located directly by the U1, the subway line that goes downtown; it takes ten minutes to get to the centre of the city by subway. The clientele of this self-funded building are well-off international.
This building is considered a good practice building because of the wide range of Homeservices that are offered to its residents and its outstanding environmental performance.
The building has a garage with 186 places for the residents, several bicycle storage and stroller storage rooms. There is also plenty of playing area for children and a large wellness area, with pool, gym, sauna, and massage. The ground floor is reserved for commercial purposes, like a dancing school, restaurants, and area for service providers. An apartment cleaning and mobile laundry and ironing service is co-ordinated out of the laundry centre on the ground floor. The first floor, which has 1,340 m², is reserved for offices. The residential dwellings are on the higher floors.
Besides these services that increase residents’ comfort and social contacts, the building scores highly on its environmental performance due to its reuse of energy. Even though the building has a heated pool, residents pay particularly low heating bills, because the warm waste water is reused to heat the pool.

Autofreie Mustersiedlung
The building is situated in Vienna, in the outer district, in a car-free residential area and it provides 140 dwellings.
The constructor chose to use the space and money usually required for parking areas to create a wide range of common facilities including green areas, a gym, a playroom for children, a bicycle workshop, a sauna, and several others and this is the main reason for considering the building a good practice building because of the wide range of common facilities offered to its residents.
The supply of such common areas gives residents the opportunity to use facilities that usually require a car or public transportation to get to, while also being a social platform for residents. The large areas of green, including playgrounds, grass areas, and gardening plots, increasing the environmental profile of this residential area. During the planning stage, future residents gave input on what rooms they wanted and how they wanted them. Since the building was built in 1999, these common rooms have become very popular. They are completely independently managed by the residents, and are regularly used. There are regular residential parties in the courtyard. The parties, along with all the other meeting places are also a platform for organising self-help-activities. Finally, the easy access to a gym, sauna, and fields for sports is a factor to increase resident’s health if they make use of it.
This way, the need for a car is drastically reduced. At times however, it is necessary to use a vehicle. For these times, four carsharing cars are made available in co-operation with Denzeldrive Carsharing (also surveyed in this project).

Friedrich Engels Hof
The building is situated in Vienna, in the outer district and provides 140 dwellings. It was build between 1930 -1933 and was refurbished and modernised in 1997.
This building is considered a good practice building because of its environmental performance. During modernization, special care was given to the area of water use, reuse, and waste. Two wells that were abandoned decades ago were revived. They now supply every toilet in the building, and also the watering of the green areas. The other speciality of the building is that there are seepage areas that collect the rain water. This hinders the rainwater from flooding the green areas and the walkways.

9.3.2. Germany

Bremer Höhe
The building is located in Prenzlauer Berg, Central district and provides 520 dwellings, 220 of those, co-operative member/residents.
The housing block of the “Bremer Höhe” is considered a good practice building due to its broad service offer of social and ecological services that are economically optimised to save costs both for the co-operative and residents. Apart from 16 senior adapted, barrier-free apartments with common rooms, the housing block provides many meeting points such as a barbecue terrace, a playground or a garden lounge. Moreover, the co-operative promotes socially organised self-help in organising festivities and common initiatives to save additional housing costs by e.g. common garden care. The energy concept of the co-operate buildings is based on an energy-contracting that is based on energy-efficient block power and heat plants on the roof-top to save costs for the residents as well. The “Bremer Höhe” provides discounts for organic food delivery and a barter for household devices. In addition, the co-operative plans to establish a “competence exchange” to intermediate services “from resident to resident” as well as a local concierge to act as a central contact person and offer all relevant home services demanded by the residents.
Furthermore, the Berlin housing co-operative “Bremer Höhe” commits to social goals such as a special engagement for families, needy and senior residents, supporting neighbourly communication e.g. by common building facilities or common activities. Moreover, the co-operative aims to employ local residents, predominantly co-operative members.

Greifswalder Straße
The building is located in Prenzlauer Berg, Central district and provides 4305 dwellings for 9000 residents. It is a typical prefabricated GDR-settlement and is marked by high storey-buildings and extensive open spaces as well as a lack of local infrastructure.
In 1993, local residents founded the non-profit association “pro agora” in order to improve their living conditions and to stabilize their neighbourhood. In cooperation with other local actors, pro agora initiated a residents’ consulting and participation office called “Stadtinsel” as well as a model project to naturalise the buildings’ surfaces with the Joint European Project – Environmental Protection of the Humboldt University. Moreover, they created several "playing landscapes” and revaluated day-care-centre leisure spaces by natural redesign.
Furthermore, pro agora is active in supporting organic food supply in their neighbourhood. They for example cooperate with an organic catering provider and the food cooperation “Rosmarin” to intermediate between residents and service providers. In addition, pro agora supports local day-care-centres to change from usual to exclusively organic nutrition without having additional expenses and offer training courses on healthy nutrition in the local neighbourhood centre .
Apart from that, the association initiated the project “Aqua-Bio-Solar” to redesign a schools’ leisure spaces according to ecological aspects by participating the students on layout and realization.

9.3.3. Netherlands

GWL–Terrein
The building is located in Amsterdam, 2 km from the city centre and provides 600 dwellings. In 2000 the 2 architects responsible for the design of the GWL-terrein the Merkelbach award, an award for new innovative architecture in Amsterdam.
The GWL-terrein is considered a good practice building because of the Homeservices provided, its common facilities and its environmental performance.

A caretaker is available for 40 hours a week and has an on-site office where a lot of information is available. The caretaker looks after the communal places and reports and solves problems. He/she can address residents' questions or complaints and supplies them with various home-services ranging from carts for moving stuff to picnic tables. Inhabitants without a private garden can rent a communal garden where they can do some gardening and grow fruits and vegetables. The 'Auto-date' system provides on-site rental cars for residents.
Also, the building offers a central waste disposal system and recycling containers for paper and glass, a central combined heat and power plant supplies electricity and heat to the apartments, some units have access to a central rainwater retention system that is connected to a second grid. The rainwater is used for flushing toilets. The highest buildings on the site have an extensive green roof. Within the neighbourhood, basic retail facilities, a restaurant and some offices are available.
Furthermore, The combination of private gardens and communal gardens strengthens the social fabric of the neighbourhood and creates a feeling of shared responsibility, thereby improving security and living conditions.

9.3.4. Spain

Ondratz-gain
The Ondratz-gain complex is located in Zarautz, right at the beach and provides 32 dwellings distributed through 3 different buildings (2 with 4 floors and 16 dwellings/apartments and the other one with 8 floors and 32 dwellings/apartments). The useful space in the dwellings oscillates between 90 and 120 m2. The average household size is estimated in 3 persons. The full occupation of the building takes place in the summer time, since most dwellings are second residences. About half of the dwellings are vacant during most of the year and approximately one third are rented out during the summer months.
The Ondratz-gain complex is considered a good practice building because of its common areas which, according to its management, are better developed than in most buildings, while at the same time being typical in all other aspects.
The building disposes of gardening and irrigation services at least once a month, as well as personnel in charge of cleaning the entrance area, stairs, etc. The butane gas is delivered in this zone also on a weekly basis.
The garages have access from the street with automatic or manual door. They can also be accessed by elevator from the inside of the building. Each dwelling disposes of a storage room of about 15 square meters, located in the basement. There is a common space where clothes can be tended for drying.
In the exterior, next to the garden area, there are benches, a small running track and a play yard for children. The building is equipped with several ramps, which facilitate access for handicapped people.

9.3.5. Finland

Arabianranta
Arabianranta (or Helsinki Virtual Village) is a pilot area by the seaside some 4 km from the city centre of Helsinki and provides home for 6000 residents, 4000 jobs and 6000 students.
Arabianranta is considered a good practice building because of the variety of services provided by "Art and Design City Helsinki Oy" (ADC) to the residents of the area, making use of its outstanding ICT infrastructure. The areal network in Arabianranta is the fastest and most modern in Finland. The speed of data transfer in backbone network is as much as 1 Gbps.
There is a neighbourhood-wide LAN&WAN area network that connects all residential and other buildings. All apartment buildings of the area have an internal house net site, with chat possibility. Each apartment building also has a resident moderator for the electronic discussion who channels discussion between ADC and residents of the respective building.
ADC makes available certain services for the residents of the area with reduced prices. It negotiates prices and makes sure that the service provider is reliable. These services are e.g. security, child sitting, dog walking, and cleaning. As the residential buildings are new and the residents are in the phase of moving in, ADC also acts as a mediator for certain specific things like blinders and security items (extra locks and spy holes) are needed by multiple residents. Also a job-matching service is provided for the residents and local companies.

Auringonkukka
The condominium is located in Helsinki city district and provides 65 dwellings in 2 different buildings.
The condominium is considered a good practice building because of its environmental performance and common facilities. Several ideas of ecological and low energy housing have guided the design and construction of this multi-dwelling building. Solar energy is used for heating the water. Premises are located so that the daylight can be used best for passive energy heating. All the balconies are on the south side of the building and equipped with sliding glass walls. Balconies and porches are used as a protective zone.
Besides the solar heating, different energy efficiency technologies, such as reuse of heat from the air, common sauna facilities instead of sauna in every apartment, are used in the two buildings. For a building with 31 apartments there are four saunas. Two of them have 'fixed' reservations and two of them can be reserved on demand. This way the residents can have the same comfort as using a sauna in their own apartment with substantially less energy consumption or possible damages caused by dampness.
Attention was paid also to the flexibility of the apartments. Residents have also several common activity rooms for their enjoyment and a small garden for each apartment.

9.3.6. Portugal

Parque dos Príncipes
The building is located in Lisbon city centre, at Telheiras neighbourhood and provides 80 apartments with 3-5 room. Its target clientele are medium to high social classes, with a high service demand and the building is managed by a private condominium management company.
The building is considered a good practice building because of its common areas and facilities such as concierge, gym-fitness studio, and room that can be used for local social events. Special features of the building are related with safety, like evacuation lightning, fire alarm, technical surveillance, emergency generator, video surveillance at building entrance with display at the apartment, alarm systems for gas and smoke and emergency telephone in elevators for rescue 24h. Every resident has been provided with an information binder on the apartment, containing equipment instructions and infrastructures technical information.

Parque das Nações
The building is located in Lisbon, in the new Expo 98 neighbourhood, a former degraded industrial and commercial area, recuperated for the universal exposition in 98. Its target clientele are medium to high social classes, with a high service demand and the building is managed by a private condominium management company.
The building is considered a good practice building because of its common facilities, environmental performance and services provided.
The all neighbourhood has as a philosophy of good maintenance, open green areas, leisure time activities (cultural events and expositions, oceanarium, etc) and a special emphasis in waste collection. The waste collection is performed by building waste pipe, with separate days for different type of wastes, an innovative service in Portugal. The building has a waste collection area with separate containers for recycling. Other innovative service found in this building is the operation of a central hot water supply and warm water is billed by unit consumed.

Torre Verde
The building is also situated in the new Expo 98 neighbourhood and provides 41 bio-climatic apartments distributed over 12 storeys over a total area of 7 200m2 with five different size typologies, ranging from two to four bedrooms apartments. Torre Verde was awarded a European Commission grant within the THERMIE' 96 programme and the prize "Urbanism and Environment Award" in 97 by "Revista Imobiliária".
The building is considered a good practice building because of its environmental performance, social services provided and its common facilities.
Its architecture technique (external blinds, window orientation, overshadowing, thermal insulation, double glazing, trombe wall, green roof, thermal solar panels and central natural gas boiler) improves the energetic profile of the building, reducing the consumption of conventional energies in 80% and thus reducing CO2 emissions. Also, the building makes use of natural ventilation and in its construction, materials were chosen taking into account environmental criteria.

Regarding social aspects, the residents of Torre Verde were involved in the design and construction of the building and are also very active in its day to day management. The building is also prepared for people with reduced mobility.
Concerning common areas, the building has a condominium meeting room, a garden with over 500 m2 on the first floor and a deck on the tenth floor with a view over Parque das Nações and Tagus river estuary.
In Torre Verde, special concepts were also implemented such as:

- SOHO – Small Office – Home Office, designed in order to have a flexible space for work;
- Flexible balconies that can be used as a continuous space of the living room;
- Connection between the kitchen and the living room, which enables the combination between meal cooking and get together.

9.4. Residents Survey

The residents' perspective was assessed by means of a questionnaire developed in order to understand which services the residents already use and the market potential for new Homeservices. The questionnaire was divided in three parts:

Part A – General description

The objective of this part was to characterize the interviewed residents, namely the composition of the household, type of dwelling and neighbourhood and also what type of criteria are important for the residents when choosing products or services.

Part B – Services

The objective of this part of the questionnaire was to evaluate the residents interest in the Homeservices described in each service area of the so-called "Long List of Services". It was designed in order to evaluate which kind of services the residents already use, how these services are delivered and which measures are necessary to improve them.

Part C – What Homeservices would you like to have?

This part was dedicated to the evaluation of the market potential for new Homeservices.

In chapter 5 some results of this study were already presented. In this section the results of the analysis per service category and per city and town will be discussed.

9.4.1. Analysis per service category

Figures 9.1. to 9.7 summarize the results of the reported services in all cities and towns, per service category. The most distinctive features that pop up are:

- On what concerns frequency of use: reported services from categories Counselling & Information, Care & Supervision and Repairs are mostly used less frequently than monthly; those from categories Mobility & Delivery, Safety & Security and Supply & Disposal are used daily; services from Leisure Time Activities are mainly used weekly.
- For the question related to how did respondents get to know about the service, advertisement was dominant in categories Counselling & Information and Repairs; the service was simply visible in the majority of reported services of categories Leisure Time Activities, Mobility & Delivery, Safety & Security and Supply & Disposal; in the case of Care & Supervision, the three possible answers "neighbours and friends", "advertisement" and "visible" are of importance.
- As for the type of organization that provides the indicated services, in Care & Supervision and Repairs it is mostly a commercial provider; for Leisure Time Activities and Supply & Disposal public organizations dominate and in the case of Counselling & Information and Safety & Security the answers are distributed amongst public organizations and commercial providers (and HO in the case of Safety & Security). As for Mobility & Delivery, in cities mentioned services are supplied

mostly by commercial providers, whereas in towns public suppliers and HO are equally of importance.

- In the cases of Counselling & Information and Leisure Time Activities reported services are mostly for free, in Care & Supervision, Repairs and Supply & Disposal it is otherwise; again for Mobility & Delivery it depends whether or not one is in a city (mostly paid) or in a town (mostly free). As for Safety & Security, there is a mix of paid and free services that were indicated by the respondents.
- On what concerns willingness of respondents to pay (or to pay more) for an improved service, there was a consensus for all service categories: no.

B1			**Cities** (288 services)	**Towns** (108 services)
	Frequency of use	Less frequently than monthly than monthly	71.8%	64.2%
	Know about the service through…	Advertisement	50.7%	62.9%
	Supplier	Public organization	34.9%	37.5%
		Commercial	31.8%	35.6%
	Cost of service	Free	79.9%	87.9%
	Willing to pay for a better service?	No	83.9%	95.3%

Figure 9. 1 Dominant characteristics of the mentioned services from category Counselling & Information

B2			**Cities** (346 services)	**Towns** (158 services)
	Frequency of use	Less frequently than monthly	32.1%	40.8%
		Weekly	30.6%	38.9%
	Know about	Neighbours and friends	31.5%	22,8%
	the service	Advertisement	32.6%	20,9%
	through…	Visible	34.3%	59.7%
	Supplier	Commercial	56%	46.9%
	Cost of service	Paid	91.3%	80%
	Willing to pay for a better service?	No	84%	83%

Figure 9. 2 Dominant characteristics of the mentioned services from category Care & Supervision

B3			**Cities** (209 services)	**Towns** (86 services)
	Frequency of use	Weekly	46.5%	51.7%
	Know about the service through…	Visible	58.8%	71.4%
	Supplier	Public organization	48.4%	50%
	Cost of service	Free	54.5%	67.9%
	Willing to pay for a better service?	No	77.7%	84.5%

Figure 9. 3 Dominant characteristics of the mentioned services from category Leisure Time Activities

B4			**Cities** (171 services)	**Towns** (87 services)
	Frequency of use	Less frequently than monthly	94.2%	97.7%
	Know about the service through…	Advertisement	50.3%	42.7%
	Supplier	Commercial	66.7%	68.2%
	Cost of service	Paid	75.4%	77.9%
	Willing to pay for a better service?	No	83.6%	92.8%

Figure 9. 4 Dominant characteristics of the mentioned services from category Repairs

B5			**Cities** (234 services)	**Towns** (114 services)
	Frequency of use	Daily	39.7%	59.6%
		Less frequently than monthly	27.8%	
	Know about the service through…	Visible	56.1%	80%
	Supplier	Public organization	26.5%	35.8%
		Commercial	57.7%	22.9%
		Housing organization		26.6%
	Cost of service	Paid	79.5%	
		Free		66.7%
	Willing to pay for a better service?	No	84%	94,5%

Figure 9. 5 Dominant characteristics of the mentioned services from category Mobility & Delivery

B6			**Cities** (134 services)	**Towns** (86 services)
	Frequency of use	Daily	68.5%	72.3%
	Know about the service through…	Visible	57.3%	71.3%
	Supplier	Public organization	34.9%	36.7%
		Commercial	35.4%	19%
		Housing organization	34.5%	34,5%
	Cost of service	Paid	53.3%	37,3%
		Free	46.7%	62.7%
	Willing to pay for a better service?	No	86.1%	90.4%

Figure 9. 6 Dominant characteristics of the mentioned services from category Safety & Security

B7			**Cities** (314 services)	**Towns** (136 services)
	Frequency of use	Daily	59%	70.1%
	Know about the service through…	Visible	54.7%	72.6%
	Supplier	Public organization	54.3%	56.3%
		Commercial	35.7%	30.8%
	Cost of service	Paid	76.3%	60.4%
	Willing to pay for a better service?	No	89.2%	91.9%

Figure 9. 7 Dominant characteristics of the mentioned services from category Supply & Disposal

9.4.2. Analysis per city and town

Austria

Vienna

Out of the 285 services mentioned in Vienna, approximately one third falls in Supply & Disposal category and another third in category Care & Supervision (figure 9.8.). In Care & Supervision, services as janitor, supply of cable, satellite and internet and cleaning service are to be noted as most mentioned. As for category Supply & Disposal, the most relevant services are energy supply in general and waste disposal in general. The service blackboard – information board of facility manager from Counselling & Information is also to be mentioned.

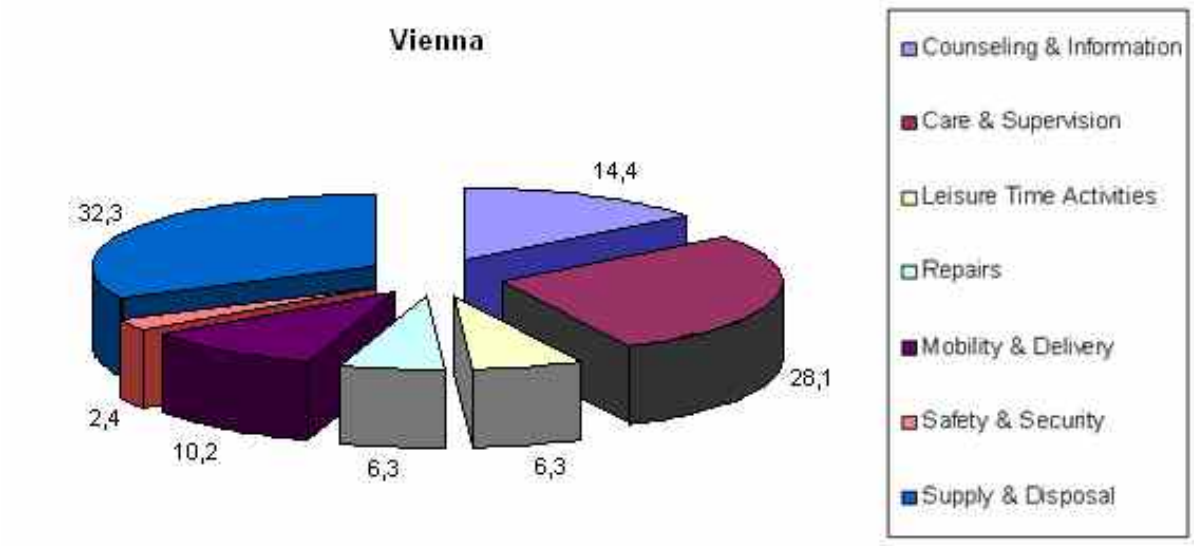


Figure 9. 8 Services mentioned in Vienna residents' survey, per category

In this city, the relative majority of stated services is used daily (37,5%) or weekly (32,2%), is known by the respondents because it is visible (52,5%), followed by advertisement (25,5%), is supplied by a commercial provider (42,1%) and is paid (78,8%). Interviewees not willing to pay/pay more for improved services represent 78,8%.

Litschau

In Litschau, 52 services where mentioned in total. The most prominent categories are again Supply & Disposal and Mobility & Delivery (figure 9.9.). Isolated services of relative relevance (despite the low number of responses in this town) are chimney cleaning from Care & Supervision and the above mentioned energy supply in general and waste disposal in general from Supply & Disposal.

The services are mostly used daily (43,5%) or less frequently than monthly (34,8%), were known through advertisement (34,8%) and are supplied by commercial providers (78,7%). The large majority is paid (90%) and the few respondents that answered the question on willingness to pay for improved services said no.

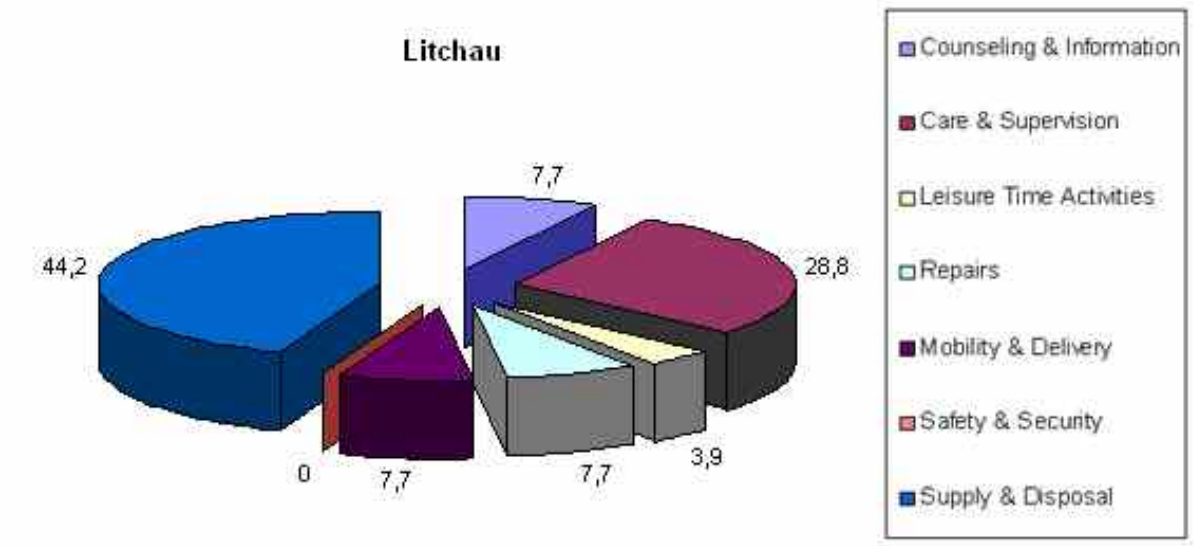


Figure 9. 9 Services mentioned in Litschau residents' survey, per category

Netherlands

Amsterdam

The choice of services in Amsterdam (471 in total) was fairly divided amongst the categories (figure 9.10.), with a relative majority in categories Counselling & Information, Supply & Disposal and Care & Supervision. Noticeable services in terms of frequency were cleaning service, co-ordinated repair service, parking area for cars and specially the service separate days for collection of old furniture, etc. and hazardous waste.

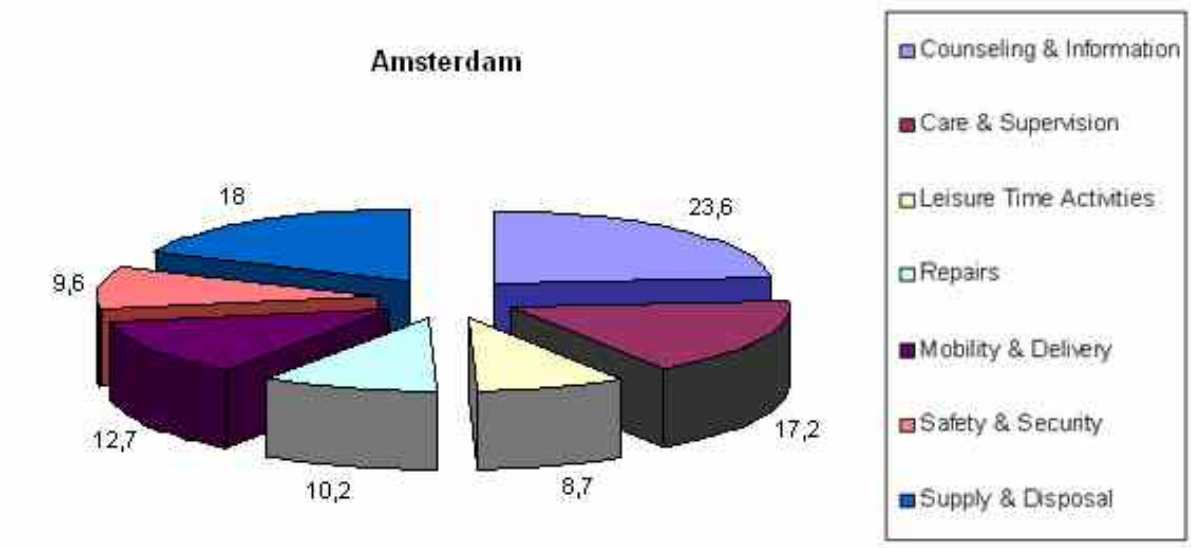


Figure 9.10 Services mentioned in Amsterdam residents' survey, per category

Most of the services are used less frequently than monthly (45,7%), were known through advertisement (51,6%) and are provided by HO (37%) or public organisations (37,9%). A slight majority are for free (52,9%) and only 12% on respondents would be willing to pay if they were improved.

Heemstede

In the Dutch town Heemstede the 213 services are also well distributed amongst the 7 service categories (figure 9.11.), with a slight dominance of category Care & Supervision and with Leisure Time Activities lagging behind. To be mentioned the following more mentioned services: janitor, cleaning service and repair service that consults at the dwelling.

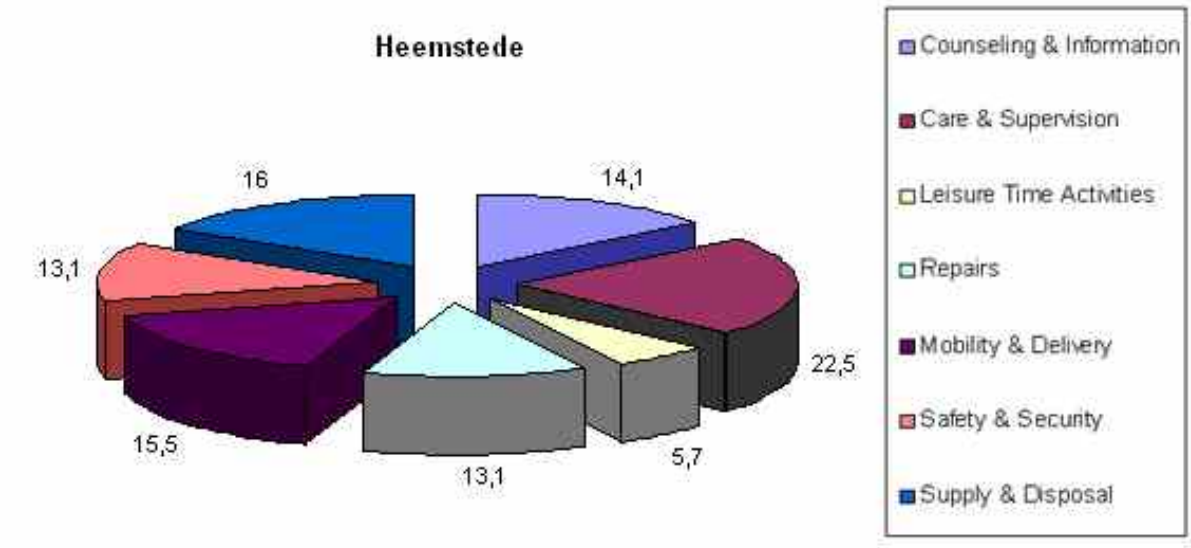


Figure 9.11 Services mentioned in Heemstede residents' survey, per category

As for the characteristics of the services indicated in Heemstede, they are used less frequently than monthly (52,6%) or daily (30%), are visible (67%) and are provided by a HO (70,1%). Like in

Amsterdam, a slight majority is for free (53,3%). In 99,1% of the cases, residents would not pay (pay more) for an improved service.

Finland

Helsinki

As mentioned before, the number of services indicated by the respondents in Finland is low. Out of the 67 mentioned in Helsinki, nearly half belong to category Leisure Time Activities, which is a quite unusual situation in this survey (figure 9.12.). The most preferred service, precisely from Leisure Time Activities, was organisation of residents' meetings.

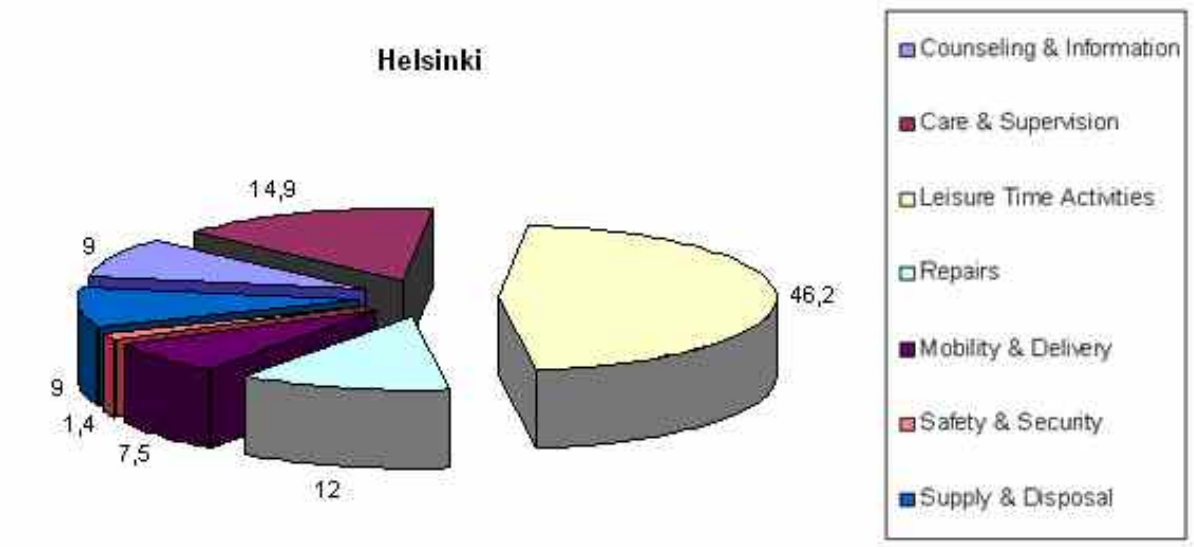


Figure 9.12 Services mentioned in Helsinki residents' survey, per category

The frequencies in this city are difficult to interpret for two reasons:

- Firstly, the number of missing answers is very high for nearly all the questions;
- Secondly, although questions like "who provides the services" or "how did you get to know about the service" are not necessarily mutually exclusive, it is uncommon that very high percentages are awarded to the several options of a question. In the first case, housing organisations were indicated as supplying 96% of the services, condominium associations 70,6%, commercial providers 61,5%, public organizations 85,7%, non profit organizations 68,8% and other organisations 50%. It seems that, for a given service, respondents indicated the types of organizations that can deliver the service, rather then who is actually supplying the service that they use. As for the question "how did you get to know about the service", 62,9% was through neighbours and friends, 68,6% through advertisement and 26,3% visible.

Most of the services are used less frequently than monthly (56,9%) or weekly (23,1%), free services are dominant (66,2%) and a very small percentage of residents would pay/pay more for an improved service (11%).

Kouvola

In the town of Kouvola, which accounted for nearly as many services as Helsinki (60) the pattern of preferences is different from the capital (figure 9.13.). Leisure Time Activities still shows a dominance that was not observed in the other countries, but the favourite category is now Care & Supervision. Supply & Disposal equals Leisure Time Activities in percentage of services in this town.

The most used services are: building care taker and waste disposal in general, followed by common laundry room and prevention of fear room.

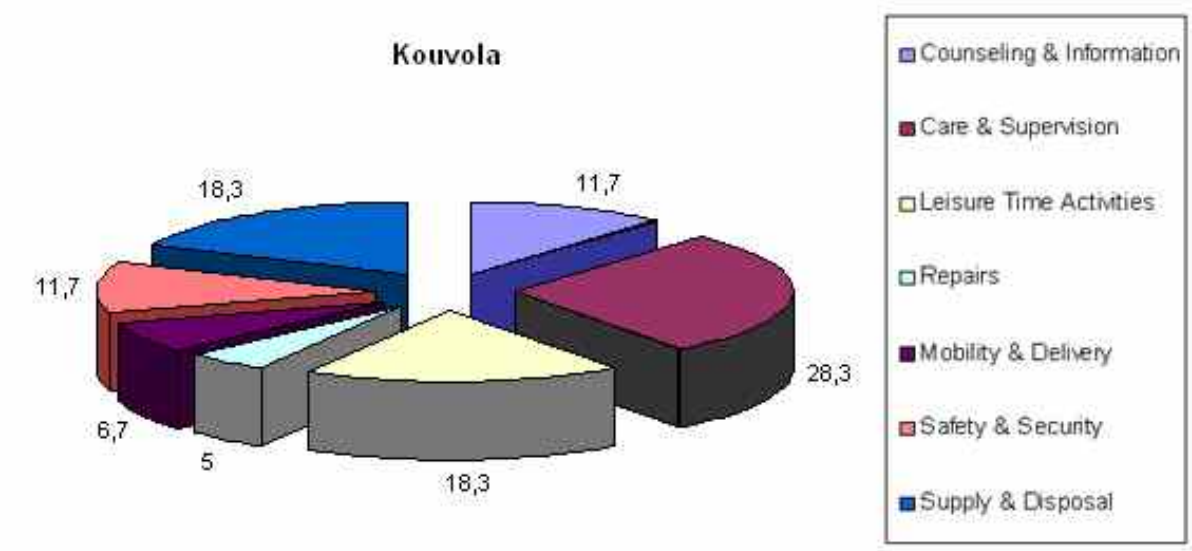


Figure 9.13 Services mentioned in Kouvola residents' survey, per category

Again, there is a high number of missing answers in relation to the mentioned services. Nevertheless, the frequency of use is divided by less frequently than monthly (38,6%) and daily (35,1%). The vehicles for the residents to know about the service (neighbours or friends, advertisement and/or visible) were given close, and high percentages: 57,1%, 62,5% and 57,9% respectively. As for the choice of service providers, the number of responses is very low, but public organizations stands out in the responses. Most of the reported services are free (74,5%) and the percentage of respondents not willing to pay is 77,8.

Spain

Bilbao

Category Repairs is the most mentioned in the Bilbao interviews (figure 9.14.). This is a peculiar situation, as Repairs is not very important in the other cities. With a small difference of 3% Care & Supervision follows. As for isolated services, the most referred ones were: maintenance of heating, water supply and electricity from Care & Supervision, coordinated repair services and household appliances repair service from Repairs and shopping delivery from Mobility & Delivery.

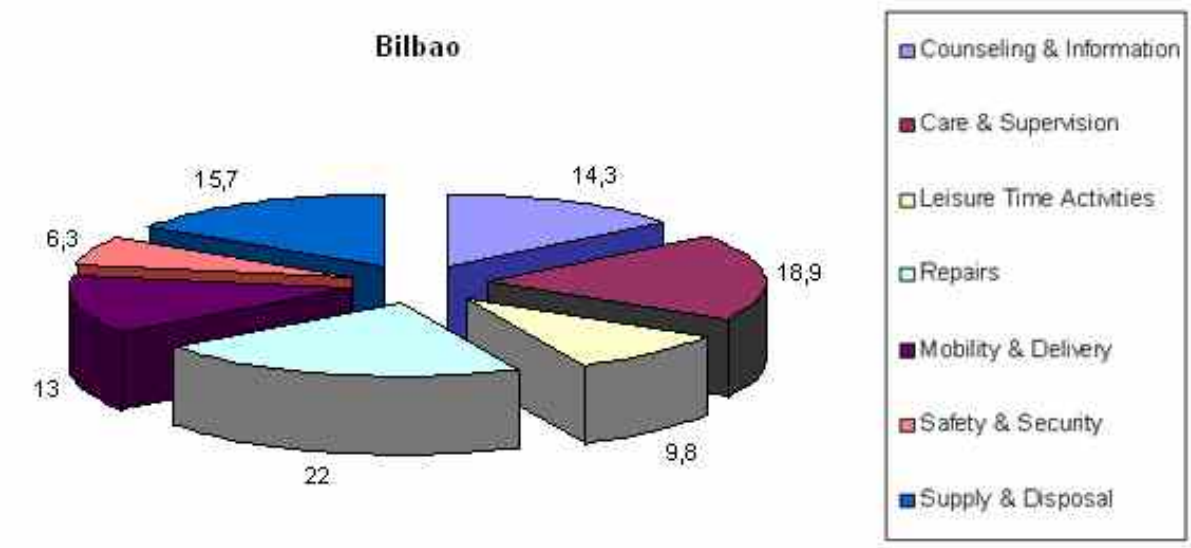


Figure 9.14 Services mentioned in Bilbao residents' survey, per category

As for frequency of use, again the most mentioned category was less frequently than monthly (60,5%). Respondents knew about the service because they were visible (44,8%) and in most of the cases the services supplier is a commercial organization (48,6%). An overwhelming majority of services is paid (90%) and respondents not willing to pay (pay more) for improved services represent (81,7%).

Zarautz

In Zarautz no service category really distinguishes in terms of percentage of mentioned services (figure 9.15.). Even so, Care & Supervision has the highest share and Safety & Security shows the lowest. Most used services, again with a relatively low weight in the overall count, are: gardening and cleaning service from Care & Supervision, preventive inspections and household appliances repair services from Repairs and parking area for bicycle and parking area for cars from Mobility & Delivery.

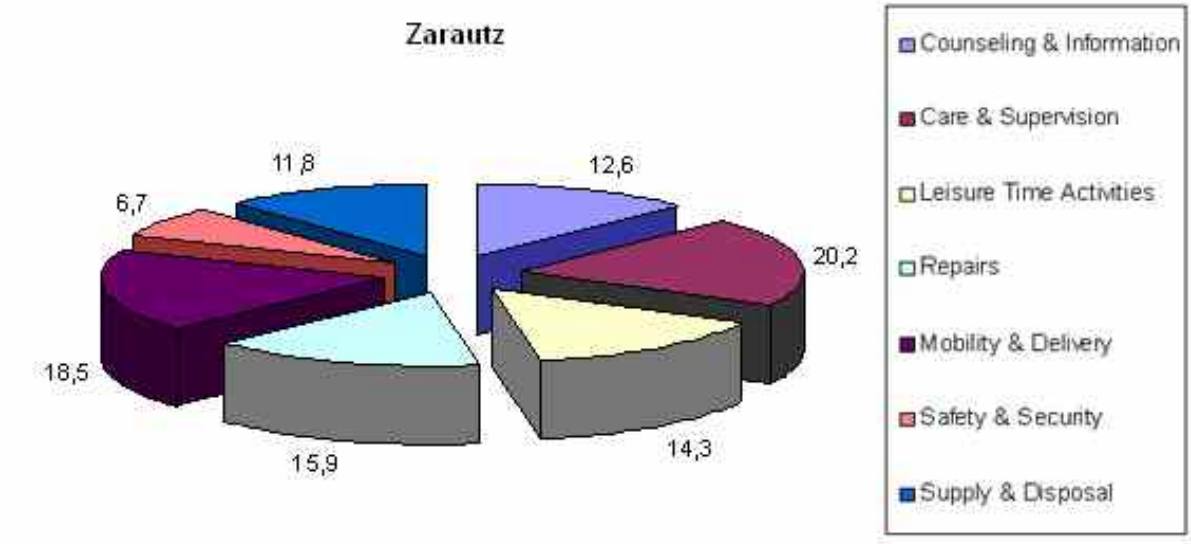


Figure 9.15 Services mentioned in Zarautz residents' survey, per category

"Less frequently than monthly" was the most mentioned frequency category (38,8%), followed by "daily" (28,9%). In most of the cases services were "visible" (61,3%) and this is how users got to know about them. Commercial providers dominate the percentage of suppliers (42%) in Zarautz interviews.

The majority of mentioned services are paid (68,1%) although in a lower percentage than in Bilbao, and willingness to pay/pay more for improved services is again very low: 10,9%.

Portugal

Lisbon

In the Portuguese capital the choice of services is very distributed in the different categories (figure 9.16.). The three more important ones, that account for over 40% of the services mentioned, are Care & Supervision, Mobility & Delivery and Counselling & Information. The least represented category is Safety & Security. The prominent services in terms of frequency of responses are:

- information on local infrastructure, from Counselling & Information
- supply of cable, satellite and internet and maid from Care & Supervision
- open green area and gym-fitness studio from Leisure Time Activities
- household appliance repair service from Repairs
- parking area for cars, meals on wheels and connection to public transport from Mobility & Delivery

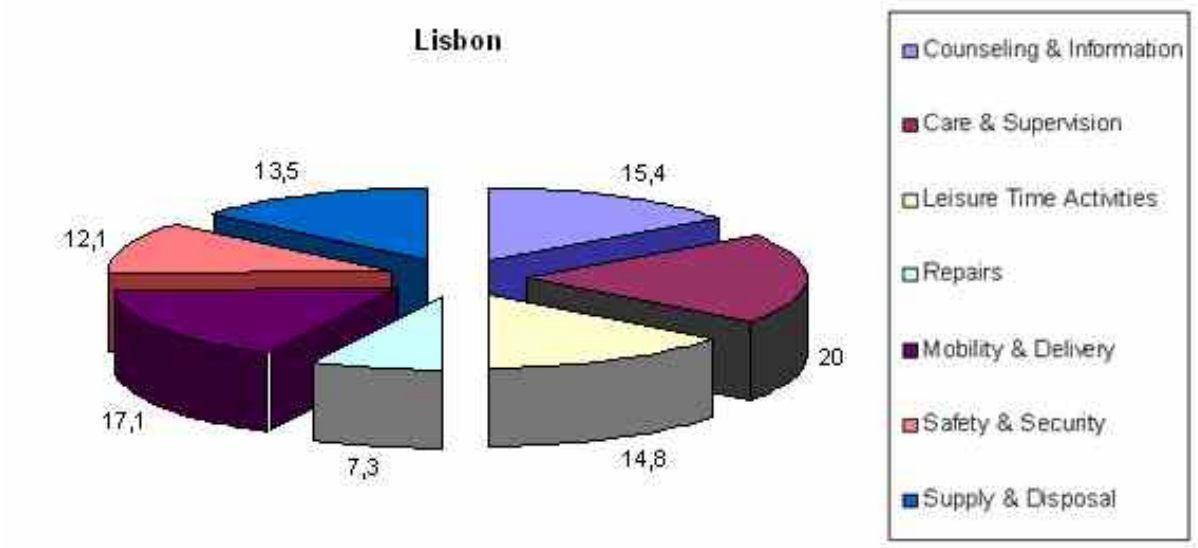


Figure 9.16 Services mentioned in Lisbon residents' survey, per category

Most of the services are used daily (35,8%) or less frequently than monthly (34,1%). In a relative majority of cases respondents knew about the services because they were visible (44,3%); the next option was advertisement (36,7%). The most common providers were commercial businesses (58,4%), followed by public organizations (32,2%). Most of the services are paid (65,5%) and respondents are, in a large majority of cases, not willing to pay for improved services (81%).

Torres Vedras

In this small city, the mentioned services are, again, very distributed (figure 9.17.). The distinctive case is that of Repairs, with a relatively lower number of services. To be highlighted:

- parking are for cars from Mobility & Delivery
- surveillance) from Safety & Security

energy supply in general from Supply & Disposal.

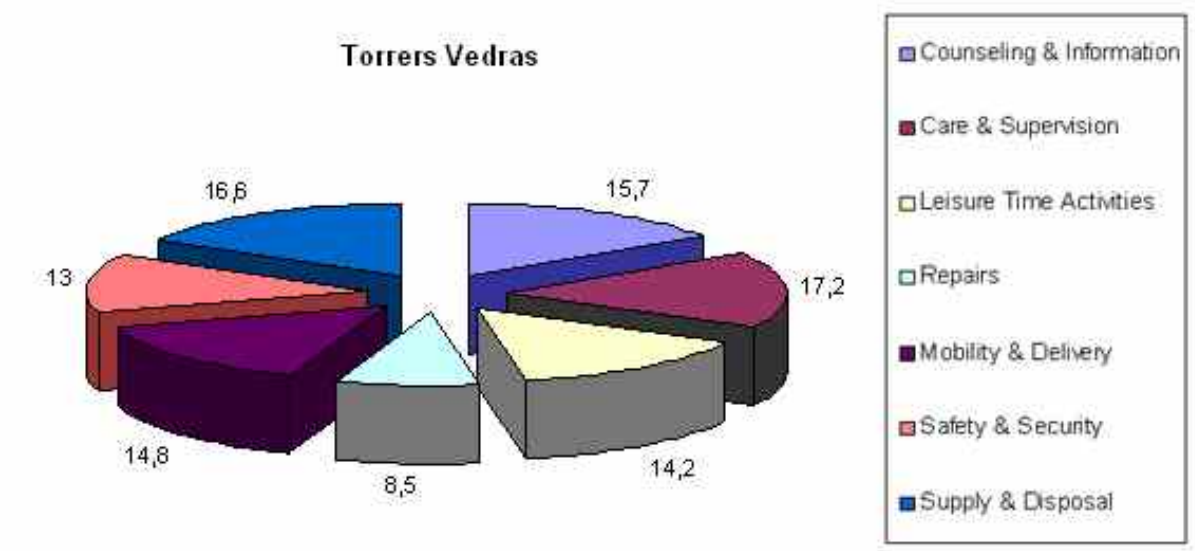


Figure 9.17 Services mentioned in Torres Vedras residents' survey, per category

The features of the services indicated in Torres Vedras are very similar to those of Lisbon: in most of the cases residents knew about the service because it was visible (56,1%). As for the service suppliers, in most of the cases they are public organizations (50,9%) or commercial providers (41,8%). A difference from the Lisbon situation is that here a slight majority of mentioned services are free of charge (55,3%). The willingness to pay for improved services is very low (86,4% of negative answers).

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9.6. Long List of Homeservices

Service	Description
1. Counselling & Information	
1.1. Environment & Energy	
Counselling on waste prevention and separation	
Counselling on changing to renewable energy source	Existing housing stock should be inspected for the possibility of adding solar panels, biomass, or distant heating.
Counselling on energy consumption and reduction	
Counselling on energy use of household appliances	
Counselling on environmentally friendly cleaning detergent	A continuous information sheet of environmentally friendly cleaning detergents should be posted.
Counselling on gardening and plants	Counselling on plants in the apartment and balcony by a gardening expert.
Counselling on ecological building materials and use in interior design	Ecological building materials should be used in interior design and architecture.
Counselling on apartment decoration and comfort	The demands and needs of residents should be incorporated in designing new apartments, e.g. Space distribution, furniture, number of power outlets.
Counselling on technical aspects of apartment	
Information binder on apartment	Binder containing information on apartment, contracts, surrounding facilities, technical information, garbage collection areas, ecological building materials, addresses of the social services in the surroundings, important district information, etc. Is given to new resident.
Black board - Information board of facility manager	The black board with information from the management and authorities should be placed next to mailboxes or in elevator.
White board - Information board of residents	The white board for general news for private residents and externals organisations should be next to the black board. Information on the white board about a private ironing and laundry service that comes to the dwelling or picks up and delivers. Information on the white board about a private delivery service for foods, medication, etc.
Information on the building infrastructure	heating room, cellar, water pipes, fuse box, etc.
Information on local infrastructure	pharmacy, pubs, schools, playground
Evacuation plan	Contains building layout with emergency exits
Changing apartments	Help residents move from one apartment to the other
Counselling on environment in general	
Counselling on healthy nutrition	
Counselling on agriculture	
Counselling on organic foods	
1.2. Social Aspects	

Counselling on social issues	(family problems, employment problems, etc)
Mediation	
Participation in designing common facility	Residents have the right to decide on the set up of common facilities (furnishing, equipment, etc.)
Organise a Fung Shui Counselling event	
Change layout of dwelling	Option for tenant to change the layout of their dwelling, e.g. add, move or remove dividing walls.
Counselling for elderly people	Help elderly stay in their apartment
Counselling on appropriate living condition for the elderly	Anything to make living easier for the elderly (no steps, security handles, emergency telephone)
Counselling on safety	Childproof power outlets, windows and safety doors.
Counselling on security	
Information in foreign languages	Information board is/are multilingual
Counselling on living / living area / neighbourhood renewal	
1.3. Financial	
Information on financing and subsidies for owners	
Information on financing and subsidies for tenants	
Information on utility costs	
Information on costs of additional functions and infrastructure	
Counselling on debt reduction	
Counselling on energy subsidies	
2. Care & Supervision	
2.1. Building	
Emergency service	For technical breakdowns, lock outs,
Helpdesk	It may be a call centre, service centre, help desk, etc.
Gardening	Services related to gardens, the surrounding, roofs gardens, etc. - The gardens can be rented, owned or shared by the resident.
Janitor	Personally known cleaning or maintenance person
Building care taker	Maintenance person or organisation who regularly comes to building. The person or persons can vary, anonymous service.
Concierge	receptionist, receives packages, security check, but remains in the building.
Provide space for commercial activities	The rooms on the ground floor should be reserved for services that are for the residents, such as a doctors office, stores, workshops, kindergartens, offices, etc.
Supply of Cable, Satellite, and Internet	
Cleaning service	of building
Ecological cleaning service	of building
Condominium management	Organising resident meetings, also maintenance, and general administrative tasks.
Fumigating	Pest control
Technical care taker	
Information centre of facility management	

Building adapted for use by elderly, strollers, and wheelchairs	No obstacles for elderly, strollers, and wheelchairs, from the elevator in the garage every single dwelling. Building needs elevator with more than 2 storeys.
2.2. Apartment	
Maintenance of heating, water supply, and electricity	The apartment can be rented or owned by the resident. In some countries maintenance of technical supplies of the apartment is the duty of the resident but real estate companies can provide this service.
Annually scheduled maintenance	Once a year the heating and sanitation facilities of the apartment should be serviced.
Apartment cleaning	
Home-Sitting	Plant tending, Air out, Fill up refrigerator during vacation
Maid - male or female	General household duties (cleaning, ironing, cooking, child care).
Flexible enlargement or reduction of apartment size in accordance with changing living situation	
Apartment adapted for use by elderly and handicapped	stepless access, etc.
Apartment renovation	Renovation, repair, refurbishment, etc.
Chimney cleaning	
Provision of household appliances	
2.3. Person	
Medical care at home	
Health support at home (physiotherapy, geriatric assistance, assistance to people laying in bed)	
24 hour care	At an apartment specialised for elderly and handicapped that is under 24 hour care by various care givers (nurse, therapists, etc)
Nurse in home - mobile nurse	
Supervision of playground	
Provide a family member	e.g. rent-a-granny, rent-a-daddy, etc.
Day mom for children	If agreed by residents, and a room is available, a day care mom could be hired to look after children.
Child-sitting	Occasional child care
Continuous care taking of disabled people	e.g. handicapped, alcoholic,
Diaper wash and delivery	Cotton pampers are being collected washed and delivered.
Mobile laundry service (pickup and delivery, or washing in the apartment)	
Common laundry room	Contracting model for laundry room: the contractor supplies as many machines as are demanded. Each apartment receives one rechargeable electronic card. The laundry room should be on the ground floor, easily accessible, and without stairs. Large machines for large amounts of laundry. Lockable rooms next to the laundry room that can be used by residents. 24 hour access to laundry room. Therefore sound insulation is important. The light in the laundry room should have touch and movement sensors so that it is always lit when someone is present.
Specialised cleaning	Sofas, carpets and curtains cleaning at home
Mobile clothing repair and tailor service	(pickup and delivery or at home)

Tutoring in home	
Personal care service	Hairdressing, cosmetics, massage, pedi/ manicure, etc.
Visiting service	
Remember service for taking medication	
Accompaniment service	e.g. going to the doctor, official matters, taking walks, etc.
Health centre	
Emergency tool rental	
Room with dryers, lockable	
2.4. Pets & Plants	
Walking pets	
Pet transport	
Pet care	Animal care during vacation in the apartment
Vet at home	
Mobile pet washing and shearing	
Flower storage area	Storage area for flowers in the corridor during winter time
3. Leisure Time Activities	
3.1. Sport	
Court for playing ball	e.g. basketball, street soccer
Sport hall	
Sport field	
Facilities for sports	e.g. climbing wall, Skater, mountain bike
Open green area (field for recreation and sports)	
Gym - Fitness studio	
Area to ride bicycle	The courtyard should contain a bicycle riding area, preferably with road markings as an educational tool.
Swimming pool	
Sauna	
Massage room	
Place to swap toys and sporting equipment	
Sport equipment rental service	Available in the area, but not at the dwelling.
Sporting equipment rental service at the dwelling	
3.2. Social Aspects	
Common room that can be rented	Offer several common rooms that can be used by residents as they please, e.g. For meetings, hobbies, language or dancing classes, etc. The common room should be able to be rented on a temporary basis to external service providers.
Youth centre	For recreation (indoor or outdoor) - 7-18
Rooms that are rented out to groups or individuals on a long-term basis	e.g. music room, hobby room, for social organisations, etc
Rooms that can be used for local or social events	e.g. for parties, for elderly bridge players
Guest apartments	no private accommodation organisation (hotel)
Playroom for children	The playroom should be situated on ground level and should be visible from a central place, e.g. Court yard, through large windows.
Common courtyard	Quiet, car-free courtyard with tables, benches, pond, fountain.
Playground	Sandbox, swing, climbing jungle, etc for small children.

Organising field trips	
Support for social initiatives and groups	Guarantee of financial help and material supply for associations, NPOs, schools, or other resident interest groups with social initiatives
Non-profit organisation of residents (interest groups of residents)	
Gardens provided to residents	e.g. permanent rent
Garden and terraces on demand	e.g. provide garden for one night. (barbecues)
Leisure time activities for the elderly	
Leisure time activities for children and teenagers	
Common space for gardening	Community garden
Playing yard	
Hostel for guests	
Public toilets	in the garage and on the roof terrace
3.3. Culture & Communication	
Information through ICT	Network for house intranet, internet, building satelite, building telephone, also used for house TV, emergency call system, electronic locking system, etc.
Website for residents with chatroom and mailing list	Locate information on the management homepage on news, disruptions, yearly calendar, operating costs, etc.
Resident homepage	Homepage for residents on building server
Parties and get-togethers for residents	Organised parties for residents by housing organisation (Christmas party, etc.)
Housing organisation newspaper	The housing organisation provides newspaper to its residents only.
resident newspaper	from the residents
Markets	e.g. Christmas, flea market.
Organisation of parties for children	
Organisation of residents' meetings	
Communal kitchen	
3.4. Food Services & Catering	
Catering	e.g. food, drinks for parties, with service.
Residents Coffeeshop	Private Café organised by residents for themselves only
Cook on demand	
Rental service for party accessories	(benches, grill, dishes, dishwashers, etc)
Weekly market	provide vegetables, fruit, etc.
Event organisation at home	event including e.g. clowns
Organic food catering directly from farmers	
Organic market	
Separate wine cellar	
4. Repairs	
Co-ordinated repair service that consults at the dwelling	I can call the facility manager or the service provider to tell him something broke down (whatever); he organises the rest. E.g. water, gas, electricity, pipe, sewage repair
Preventive inspections	A person makes monthly inspections of the building and apartment, but does not necessarily repair.
Workshop room for repairs	
Tool rental with home delivery	Central tool rental by janitor or facility manager.
Bicycle repair service that comes to the dwelling	On call

Spring bicycle service	A bicycle repair service that comes around once a year in spring to maintain the residents' bicycles.
Household appliance repair service that comes to the dwelling	Including the knife sharpener
SMS service connecting appliance with repair service	
Repair service with hotline, pickup and delivery	
Repair service that consults at the dwelling	
Tool rental with home delivery	
Mobile knife sharpener	
Home delivery by shoemaker	
Intermediary between service provider and customers	
5. Mobility & Delivery	
5.1. Vehicle rental & Sharing	
Carsharing	In Austria, the facility manager provides the parking lots for the Carsharing company. In Germany they actually engage in the business themselves.
Car rental	
Bicycle rental	
Carpooling	Between residents
Transportation of disabled / ill people	
5.2. Parking Areas	
Parking area for bicycle	Every apartment has two bicycle parking areas available.
Bicycle storage room	The bicycle storage room should be as close as possible to a public bike path or street without obstacles. The electric door or gate of the storage room should be activated from the inside vie floor touch sensor, and the dwelling key from the outside. The path between storage room and public bike path or streets should have street markings. There should be lockers that use dwelling keys for bicycle accessories. The light in the storage room should have touch and movement sensors so that it is always lit when someone is present. The bicycle storage room should be on the ground floor with view from the courtyard through a glass wall or large window.The area outside the storage room should have a training course for beginners. Only bicycles are allowed to be stored in the storage room. There should be a bicycle pump on a chain in the storage room.
Parking area for special use (car-sharing, etc)	The car sharing parking spots should be close to the elevator.
Parking area for public city bike	
Parking area for strollers	A parking area right next to the apartment to hold strollers. The door should be wide enough to enter and exit with stroller.
Parking area for taxis	
Parking area for cars (outside or garage)	Every apartment has two car parking areas available.
Storage room for strollers	
Sensor-driected lighting in garage	The light in the garage should have touch and movement sensors so that it is always lit when someone is present.
5.3. Delivery	

Shopping delivery	Information on organic foods (amount, delivery times, prices, etc.) should be posted on the white board, or sent out via email or fax. An order can be made by telephone, fax or email.
Provide room for food delivery	A room should be provided for the delivery of organic foods
Meals on wheels	
Drive-up possibility for security service and delivery service	
Delivery service that delivers without recipient being present (Dropoff box, room)	
Delivery order sent through refrigerator	
Medication delivery	
Messenger service	
Messenger service on bicycle	
Delivery of environmentally friends products	e.g. organic foods
Running personal errands	e.g. going shopping, going to post office, dropping things off, delivering things, etc.
5.4. Other Logistics	
Connection to public transport	e.g. direct supply of transport logistics
Sale of public transport tickets	
Apartment exchange	Swapping of apartments, e.g. for holidays.
Movers (for changing apartments)	People who carry your belongings, and organise the exchange.
6. Safety & Security	
6.1. Building	
Surveillance	Surveillance by person (exterior or interior)
Evacuation lighting	Lighting in the apartment that allows resident to find the entrance door (in case of fire and smoke)
Fire alarm	
Prevention of "fear rooms" (24 hour lighting)	A fear room is a place where people don't want to go because it is dark, isolated, and possibly dangerous. For the sake of prevention of vandalism, these rooms can be prevented by construction measures and lighting.
Technical surveillance	Building surveillance via movement sensor, and or, camera
Emergency generator	
Video surveillance at building entrance with display in the apartment	
Playground surveillance via camera with display for the parents	
6.2. Apartment	
Video surveillance of the apartment for security purposes	Surveillance or control of the dwelling while unoccupied
Alarm systems for rent	
Key drop-off service	Key can be left a the porter or other person to be picked up by whoever is designated to pick it up.
6.3. Persons	
Emergency telephone for the elderly (Germany: emergency amulet)	
Security guard	Security person who patrols the grounds and provides information
Separate walk and bike paths	
Body guard	can also act as an apartment care taker

Emergency telephone in general	
Emergency telephone including the rescue of people	
Emergency telephone in elevators for rescue 24 hours	Includes psychological help for the trapped people
7. Supply & Disposal	
7.1. Energy Supply	
Energy efficient houses	For new buildings: planning for energy efficient houses with optimised thermal insulation and air circulation system.
Energy efficient appliances	Install water saving appliances and energy saving lamps.
Use of renewable energy	
Energy management and accounting	Optimisation of energy use and costs, accounting, distribution to residents. Energy accounting should be implemented. Either automatic or manual recording, and the results should be posted on the black board. The heating and energy contracts should be monitored regularly. Buildings with dwellings with separate heating units should be inspected for the possibility of installing central heating. Central heating facilities should be outsourced to a contractor who is interested in an efficient facility. The results of testing the potential savings through contracting should be passed on to residents to increase acceptance. With new buildings: mandatory energy pass from the first time of use.
Home Automation / Domotics	e.g. Temperature control with remote access.
Energy saving by using heat from waste water	
Energy supply in general	
Energy supply with renewable energy	
Energy supply by a district heating power plant	
Separate wood cellar	
7.2. Water Supply	
Recording water usage per dwelling (meter reading)	Individual recording of water usage by apartment.
Billing cold water by unit consumed	
Billing warm water by unit consumed	e.g. for district heating
Separate meter for watering of green space	
Operation of a potable water processing plant	
Operation of a central hot water supply	
Well	
Fountain	
Rainwater collector and storage	Well and rainwater collection system for pond and garden watering.
Organic processing plant for grey water (only bath and kitchen, no sewage)	
7.3. Waste Disposal	
Billing trash bag by unit consumed	
Responsible person for the building waste management	

Waste collection area for separate containers for recycling	There should be a separate area or small room for the waste containers in the apartment that is connected to a ventilation system. Four identical containers for paper, glass, plastic and other. These should easily be taken to the common waste room and be emptied and cleaned. The entrance to the waste collection room should be close to the main entrance of the building, and should be large enough to fit all garbage containers. A small fire proof waste paper container next to the mailboxes. The closest distance to dispose. A permanent guide to recycling should be posted on the waste room's door.
Separate days for collection of old furniture, etc, and hazardous waste	
Building waste pipe	
Waste disposal in general	
Place for garage sales	
Organising an annual garage sale	

9.7. Sustainability Evaluation Tool

1. Description of the method for evaluation of the environmental indicators

The goal of the method is to describe the sustainability of a homeservices. The method applies relative indicators. That means that they indicate a move towards a positive (or negative) direction, e.g. a reduction in waste or an increase in employment.

For a relative method the point of reference is an important element. For our method it can be called the 'status quo', the 'current situation' or the 'do nothing base line scenario'. This pointed has got the number 0 in the scoring line.

A development in the positive direction is scored with:
1: a significant positive change
2: a big positive change

A development in the negative direction is scored with:
-1: a significant negative change
-2: a big negative change

The complete service has to be assessed including all activities and products that are needed.

2. The evaluation method for the sustainability indicators

ENVIRONMENT

1. Materials use
In order to assess the effects of the service regarding materials use, consider the following questions:

1.1 What is the effect of the service in the quantity of materials used?
1.2 What is the effect of the service in the hazardousness of the materials used?
1.3 What is the effect of the service in shifting from non-renewable to renewable materials?
1.4 What is the effect of the service in promoting the use of recyclable/recycled materials?

The effect of the service on materials use

Worsens the situation regarding materials	-2	-1	0	1	2	NA	Improves the situation regarding materials

Rationale for the evaluation, taking into account the above questions:

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2. Energy use

2.1 What is the effect of the service in the quantity of energy used (including passengers and freight transport)?
2.2 What is the effect in shifting from non-renewable to renewable energy?
2.3 What is the effect of the service in the use of more energy efficient passengers and freight transport modes?

The effect of the service on energy use

Worsens the situation regarding energy	-2	-1	0	1	2	NA	Improves the situation regarding energy

Rationale for the evaluation, taking into account the above questions:

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3. Water use

3.1 What is the effect of the service in the quantity of water used?
3.2 What is the effect of the service in the use of grey (reused)/rain water?

The effect of the service on water use

	-2	-1	0	1	2	NA	
Worsens the situation regarding water use							Improves the situation regarding water use

Rationale for the evaluation, taking into account the above questions:

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4. Waste and emissions

4.1. What is the effect of the service in the quantity of waste generated?
4.2. What is the effect of the service in the hazardousness of the waste generated?
4.3. What is the effect of the service in the quantity of air emissions?
4.4. What is the effect of the service in the characteristics of air emissions, including from passengers and freight transport (e.g. CFCs, GEG, acid rain, smog, VOCs, etc)?
4.5. What is the effect of the service in the quantity of water emissions?
4.6. What is the effect of the service in the characteristics of water emissions?

The effect of the service on waste and emissions

	-2	-1	0	1	2	NA	
7.2.5.1 Worsens the situation regarding waste and emissions							Improves the situation regarding waste and emissions

Rationale for the evaluation, taking into account the above questions:

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5. Space use

5.1 What is the effect of the service in the amount of space use?
5.2 What is the effect of the service in the amount of constructed space?
5.3 What is the effect of the service in the quality of the green spaces and natural habitats?

The effect of the service on space use

	-2	-1	0	1	2	NA	
Worsens the situation regarding space use							Improves the situation regarding space use

Rationale for the evaluation, taking into account the above questions:

SOCIAL

1. Equity:
The effect of the service on the equity

- Does the service improve equality between people?
- Does the service promote fair trade?
- Does the service reduce social exclusion?
- Does the service promote employment of the disadvantaged?

	-2	-1	0	1	2	NA[1]	
Reduce equity							Increase equity

Rationale for the evaluation, taking into account the above questions:

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2. Health:
The effect of the service on health is

- Does the service promote (mental and physical) illness prevention and/or treatment?

	-2	-1	0	1	2	NA	
Worsens health							Improves health

Rationale for the evaluation, taking into account the above questions:

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3. Safety and security
The effect of the service on safety and security is

- Does the service have potential to reduce crime?
- Does the service have potential to reduce vandalism?
- Does the service have potential to reduce the risk of injuries?

	-2	-1	0	1	2	NA	
Less personal safety & security							More personal safety & security

Rationale for the evaluation, taking into account the above questions:

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4. Comfort
The effect of the service on comfort is

- Does the service reduce annoyance: noise, odour and/or pollution?
- Does the service help to save time?
- Does the service increase convenience and/or luxury of the residents?

	-2	-1	0	1	2	NA	
7.2.5.2 Less comfort							More comfort

Rationale for the evaluation, taking into account the above questions:

5.Social contacts
The effect the service has on social contacts

- Does the service promote social self-help: e.g. barter shops and swap internet sites?
- Does the service promote communication (e.g. between the neighbours, residents and HO)?
- Does the service improve neighbourhood atmosphere?

	-2	-1	0	1	2	NA	
Less contacts							More contacts

Rationale for the evaluation, taking into account the above questions:

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6. Empowerment

The effect of the service on residents' ability to influence decision making that effects them

- Does the service increase opportunities of participation?
- Does the service provide new channels to residents toward decision-makers (e.g. electronic ones)?

	-2	-1	0	1	2	NA	
Less ability to influence							More ability to influence

Rationale for the evaluation, taking into account the above questions:

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7. Information and awareness

The effect of the service on knowledge, awareness or skills

- Does the service increase training, awareness and skills of the residents?

	-2	-1	0	1	2	NA	
Less knowledge							More knowledge

Rationale for the evaluation, taking into account the above questions:

ECONOMY

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1. Employment

- Does the service create new jobs?
- Does the service secure existing jobs?
- Does the service reduce long term unemployment?
- What kind of employment (part-time/full time/long term contracts/seasonal work) does the service promote?

The effect of the service on employment (or maintaining existing jobs, if they were endangered)

	-2	-1	0	1	2	NA	
Less employment							More employment

Rationale for the evaluation, taking into account the above questions:

---

2. Financial situation of the residents

The effect of the service on financial situation of the residents (in relation to the existing way to fulfil a specific need)

- Does the service help residents save money?
- Does the service create more income for the residents?
- Debt/tax reduction?
- Social tariffs/funding?

	-2	-1	0	1	2	NA	
Less money							More money

Rationale for the evaluation, taking into account the above questions:

---

3. Regional Products and Services
The effect of the service on regional economy

- Diversification of services supply?
- More opportunities for local producers and service providers?
- Marketing of regional products?

	-2	-1	0	1	2	NA	
Less regional products and services							More regional products and services

Rationale for the evaluation, taking into account the above questions:

4. Profitability

- Is the service profitable in the short and/or long term?
- Does it create losses?
- Is the service directly or indirectly funded?
- Is it profitable due to the re-organisation of the service provision or because of better client relationships?
- Does the economic efficiency of the whole service system improve?

	-2	-1	0	1	2	NA	
Losses							Profit

Rationale for the evaluation, taking into account the above questions:

Sustainability Profile

7.2.5.2.1 Enviroment	7.2.5.2.2 Social	7.2.5.2.3 Economics
1 Material use	6 Equity	13 Employment
2 Energy use	7 Health	14 Financial situation of residents
3 Water use	8 Safety and Security	15 Regional products and services
4 Waste and Emissions	9 Comfort	16 Profitability of the service
5 Space use	10 Social contacts	
	11 Empowerment	
	12 Information and Awareness	
Total	*Total*	*Total*
Average	*Average*	*Average*

The *Total* is the sum of the numbers above without (NA). 0 means not relevant. NA means not available. The *Average* is the total divided by the number of indicators without those nominated (NA).