

Summary Report - Re-use Framework Conditions Central Europe

of the Central Europe project

CERREC

Central Europe Repair & Re-use Centres and Networks

Work Package 3 – Output 3.1.2. for Central Europe

31.07.2012



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1 CONTENT

1	Content.....	2
2	Introduction	4
3	Legislation.....	5
3.1	Implementation of the Directive 2008/98/EC (WFD) in the national legislation	5
3.2	Main points of the implementation of the WFD	5
3.3	Other relevant decisions or strategies for the implementation of repair and re-use centres and networks.....	6
3.4	Conclusions on the legal framework	7
4	Environment	8
4.1	Estimation on the distribution of the concerned categories.....	8
4.2	Weight and tendencies of the WCPs	9
4.3	Waste management structures in CE countries from the project's point of view	9
4.3.1	Actors and roles.....	10
4.3.2	Waste types and their problems	12
4.3.3	Operation.....	12
4.3.4	Owner of the wastes	13
4.3.5	Financing of the waste management.....	13
4.3.6	Contracting schemes	14
4.4	Conclusions on the waste management structures in CE countries.....	14
5	Socio-Economy.....	15
5.1	The actual and historical unemployment rate	15
5.2	Consistence of unemployed people in 2010	16
5.3	The actual average salaries in PP countries	16
5.4	The actual average unemployment benefit for unemployed people in PP countries	17
5.5	Existing and planned programmes for employment of unemployed people	18
5.6	The most disadvantaged areas by unemployment rate in the PP countries	19
5.7	Conclusions on socio-economy	19
6	Education.....	20
7	State of the art	21
7.1	Management organisations in CE countries for re-use activities	22
7.2	Existing repair and refurbishing companies and re-use shops	22
7.3	Conclusion on the existing structures and companies	23
7.4	Available know-how in the field of repair and re-use	24
7.5	Current infrastructure of the re-use network	24
7.6	Quality standards, guidelines.....	24
7.7	Distribution of the repaired products.....	25
8	Public Awareness.....	27
8.1	Public awareness relevancy	27
8.2	Public relations work (PR) on the goals of the revised WFD or re-use.....	28
8.3	Green Public Procurement activities	28
8.4	Public willingness to donate re-usable goods to re-use centres.....	28
8.5	Acceptance of using second hand goods.....	29
8.6	Conclusions of general public awareness and reputation on second hand goods and products	29
9	Economic and financial conditions and market potential	29
9.1	Product categories, demand and supply.....	29
9.2	Economic studies or analyses concerning the market share and potentials of the second-hand products.....	31
9.3	Ratios and ways of selling used products.....	32
9.4	Estimations on market potentials.....	33
9.5	Intentions to set up a network for re-use activities.....	34

9.6	Conclusions on financial conditions and market interests for the establishment of repair and re-use centres and networks.....	35
10	Final conclusion	36
11	References.....	37
12	List of abbreviations	38

2 INTRODUCTION

“Article 11

1. Member states shall take measures, as appropriate, to promote the re-use of products and preparing for re-use activities, notably by encouraging the establishment and support of re-use and repair networks, the use of economic instruments, procurement criteria, quantitative objectives or other measures.”

(2008/98/EC - Waste Framework Directive)

“Almost all respondents give a disappointing overview regarding the situation [of re-use] in their MS. At the moment re-use data at EU level is not available. Although for some countries there is a long-standing tradition of a “second hand market” that operates in parallel to the normal market, there is no monitoring tool available at the moment and no action at a European level anticipated.”

(Throwing away the chance to improve waste policy?, European Environmental Bureau, 2012.)

As a part of the CERREC project, the WP3 deals with the stakeholder participation. This also includes the surveying of the national backgrounds and actual situations concerning re-use in the participating countries. As a deliverable of this subtask, every project partner compiled a report on the topic for their national situation. Based on these reports a summary had been extracted and concluded by the Bay Zoltán Nonprofit Ltd.

This document focuses on the following issues of re-use in the Central European countries:

1. Legislation background
2. Environmental issues
3. Socio-Economic considerations
4. Educational questions
5. State of the art
6. Public awareness
7. Economical, financial conditions and market potential of re-use

All topics are discussed in detail in the following chapters.

3 LEGISLATION

The focus of this chapter lies on the actual situation of the implementation of the related Directive and other rules and legal regulations. Besides the national strategy papers and documents directly dealing with the re-use, joint activities had also been collected.

3.1 Implementation of the Directive 2008/98/EC (WFD) in the national legislation

The implementation of the Directive is not yet finished in all Member States. Austria and Italy had already finished their transposition tasks. Hungary, Poland and Slovakia are still working on the legislations. The EU Commission asks EU Court to impose financial penalties on the three Member States due to the delay in fulfilling their tasks (Reference: IP/12/422 Date: 26/04/2012 <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/422&format=HTML&aged=0&language=EN&guiLanguage=en>).

Where no legislation is ready yet, the proposals changed many times. The ministries responsible for environment are in charge of the preparatory work.

The status of the implementation is summarised below (Table 1.):

Table 1. Status of the WFD implementation in PP countries

PL	Implementation in progress; will be implemented until end of 2012
HU	Implementation in progress; will be implemented until summer
SK	Not implemented in national legislation
AT	Implemented in national legislation
IT	Implemented in national, regional and local legislation and regulations
DE	Implemented in national legislation
CZ	Implemented in national legislation

3.2 Main points of the implementation of the WFD

Legislative techniques: The principles of the WFD and other waste management targets are usually implemented through national and regional laws and waste management plans. Usually a state law is the national legal foundation for all aspects of waste management, while regional laws and plans are to further regulate the waste management activities and to define waste collection fees. In most of the CERREC countries the implementation is in progress and the proposals change significantly from version to version.

General principles: The key principles are usually like adoption of EU legal terminology, waste hierarchy in five stages, avoiding waste generation, saving resources, avoiding landfill, etc. The German legislation adds the issues of reduction of bureaucracy and efficient surveillance, which is a key point but usually not addressed indirectly. Although waste legislation structures differ significantly, the issues addressed by the CERREC project appears in all approaches.

Re-use approach: Some legislation approaches indicates that public administrative bodies should enhance the development of certified repair- and re-use networks, like in Poland and Hungary, but the development and operation of such network is not described in detail. For example the definition and

principle for “*preparing for re-use*” appears in the Hungarian proposal according to the new 5 steps waste hierarchy within the EU Waste Framework Directive. The phrase of “*re-use network*” explicitly appears, but the proposal only declares that the development of this network must be promoted by legal, economical and technical tools and by quantitative aims and conditions. Another example is Italy where the re-use is quoted as one of the ways to minimize the final amount of disposal. The public administration has to promote activities to develop the re-use. Within these activities have been foreseen specific measures like centres and networks accredited to repair and re-use products. Educative measures are as well mentioned. The same article foresees that the Ministry of Environment will have the competence to produce decree to define operative ways to develop the re-use (it is quoted also the production of a list of products to be object of re-use). While the initial legal conditions implementing re-use requirements of WFD were given by amendment from July 2010, nowadays these requirements are filling the basic definition of „re-use“ and „preparation for re-use“ in the Czech Republic, nowadays, the Czech Republic national legislation of waste management actively support mostly three groups of waste management operations – recovery, disposal and other operations of waste management.

Others already have detailed tasks and plans for re-use like in Austria. In Austria re-use is one of the five major action fields respectively bundles of measures in the Waste Prevention Program 2011. The main goals of the bundle “re-use” are implementation of regional re-use networks and quality assurance. The main support for reaching those goals should be provided by public actors such as the federal states or waste management associations, for which a set of supporting measures has been designed. Those measures are, on one hand, related to promotion of re-use outside of the waste regime (waste prevention), and on the other hand to promotion of preparation for re-use. The latter measures are divided in three core bundles of measures which are designed to support extensive integration and economic consolidation of the re-use sector, market penetration by re-used products and improvements in quality of re-use products and services. Besides this more than half of the state waste management plans and concepts in Austria include repair and re-use issues in their proposed strategies. Among the plans and concepts that already include repair and re-use issues, it can be observed that documents with a publishing date during/after the implementation of the WFD have more extensive and detailed strategies on those issues.

Financing in legislation: While some countries (e.g. Slovakia) have recycling funds to finance waste management, in others (e.g. Hungary) the recycling fund was converted into a tax based system where the government handles the funds as part of the state budget and delivers funds for waste management.

3.3 Other relevant decisions or strategies for the implementation of repair and re-use centres and networks

While most of the CERREC countries have no other relevant documents and intentions Italy and Austria have additional provisions too. Some legislation initiatives address significant issues that have to be considered on CE level as well.

All repair and re-use centres and networks which are recognized as waste management enterprises under Austrian law are required to annually report their waste balances. This law obliges all repair and re-use centres and networks to implement a waste flow recording system. This obligation is introduced in the corresponding Austrian law (Abfallbilanzverordnung). Similar legislation exists in Hungary and other countries that oblige companies for record keeping.

Repair and re-use centres and networks have to comply with at least the minimal standards for collection, storage and treatment of the WCPs (waste considered products) processed by them. In addition to possible additional efforts created through the ordinance, there are also benefits for repair/re-use initiatives through requirements for collection, storage and transport of wastes, which have to be done in a way that does not endanger the re-usability of waste considered products. Therefore, the quality and/or availability of re-usable products will be increased.

Repair and re-use centres and networks whose field of commerce includes waste electrical and electronic equipment draw a substantial portion of their legal framework, obligations and limitations from a regulation, which includes procedural forms for collection, storage and treatment of WEEE and complete coverage on requirements for the implementation of a collection system, which is a very important point for those repair/re-use initiatives that either want to use their own collection system or have to do so out of lack of any external collection systems. As this regulation is in accordance with the EU Directive on waste of electric and electronic appliances most CE countries have similar approaches to such activities.

Besides this the Emilia Romagna region has an environmental action plan with approved and funded projects for minimizing waste production, carbon emissions and increasing waste separation. Changes in the laws to emphasize the role of centres and networks for repair and re-use are also foreseen among the future activities.

3.4 Conclusions on the legal framework

The legal framework for repair and re-use centres are considered in the CERREC member states as indicated in the below (Table 2.)

Table 2. Legal framework in PP countries for reuse network activities

PP Country	Legal framework is		
	beneficial	neutral	obstructive
PL		x	
HU		x	
SK		x	
AT	x		
IT	x		
DE		x	
CZ		x	

The legal framework in some CERREC countries tends to be neutral for re-use. In Slovakia considering the absence of legislation which supports re-use, a clear statement cannot be made. The legislative situation thus seems to be neutral. In Poland presently the legal changes and transposing the Directive to the Polish law are generating possibilities and basis for creating the re-use and repair nets, but currently no measures have been taken. In Hungary the transposing of the WFD into national legislation is in progress. The law on wastes currently in force has no focus on re-use. Thus regulations are neutral for re-use at this phase. Although the new law will foster re-use (as seen in the drafts) clear quantitative targets will be missed, as EU regulations avoided setting up such targets. In spite of this even fostering re-use will be beneficial, as several initiatives for re-use will emerge from the situation. Besides, indirect motivation is present in the Draft. The German legal framework is considered as neutral, but with a rather obstructive tendency. There is no support in the legal framework forcing the local authorities and municipalities to invest in re-use and recycling.

In other countries like Italy and Austria the legal system for re-use is rated as beneficial by the project partners. Both on national and on local level, the existing laws and guidelines are useful instruments to start a structured work towards the re-use of products in Italy. Probably new laws and local regulations will be needed but the existing ones are currently enough to begin the work as foreseen by the CERREC project. The Austrian legal framework can be regarded as beneficial for the establishment of repair and re-use centres and networks, based on the complete coverage and implementation of a separate waste collection system and the implementation of the ideas of waste prevention through repair and re-use in

the relevant legal documents both on the federal and state/regional level. On an organisational level, in addition to the federal and regional general waste management laws and the specialised laws, repair and re-use is integrated in public authority strategies through the federal and state waste management plans. Besides this, Austrian experts warn that the framework can be obstructive to small and very small initiatives. The multitude of obligations and requirements often prove to be a difficult task for small companies because of the required efforts. The legislation supports the bigger re-use companies.

As a result of the investigation no CE countries have obstructive legislative framework on re-use centres and networks. Although final legislation is still to come in several CERREC countries, the legislation will support re-use activities. Main problems that re-use companies will face belong to the administration and financial group of issues.

4 ENVIRONMENT

One of the main goals of the project is preserving the environment. According to this aim, it is substantial to reveal the source of the object of the project activity itself. So there is a high need for information on **WCP (waste considered products)** categories: where they emerge, what their ratios and their total amounts are. Besides this the actual waste management systems in CE countries were also investigated from the project's point of view.

4.1 Estimation on the distribution of the concerned categories

Unfortunately there is no organisation to maintain a register or any statistics on waste considered products (WCPs). Thus estimations were made to determine the product distribution in the categories set up for the methodology of investigation. The results for the CERREC countries are summarised in the below (Table 3.).

Table 3. PP countries estimations on the distribution of different product categories within the WCP

Product category	Ratio in the total amount of concerned WCP [%]						
	PL	HU	SK	AT	IT	DE	CZ
Electric/electronic appliances	22,4	14	99,99	0	17,02	0	32
o Large household appliances	8,5	9,6	60,3	15-20	15,05	n/a	12
o Small household appliances	2,6	0,85	8,5	10-20	1,94	n/a	6
o IT and telecom equipment	1,7	1,2	15,9	2-20	n/a	n/a	6
o Consumer equipment	9,1	2,28	12,4	5-20	0,03	n/a	8
o Electrical / electronic tools	0,5	0,05	2,7	2-20	n/a	n/a	-
o Toys/leisure/sports equipment	0	0,02	0,19	4-20	n/a	n/a	-
Non electric driven household appliances	6,7	7,98	n/a	4-5	41,76	n/a	4
Furniture	17,1	34	0,008	10-35	n/a	n/a	20
Toys / sport / leisure equipment	15,3	0,02	n/a	5-15	n/a	n/a	4
Garments and textiles	1	12	0,002	15-20	41,22	n/a	12
Furnishing equipment	26,5	11	n/a	10-15	n/a	n/a	12
Other	11	21	n/a	3-5	0	n/a	16
Total:	100	100	100	-	100	-	100

As seen the data is quite diverse from country to country. In spite estimation was made based on these to get a fixed data for the distribution. The result is summarised below (Table 4.):

Table 4. Summarised distribution of product categories within the WCP

Product category	%
Electric/electronic appliances	18
Non electric driven household appliances	7
Furniture	25
Toys / sport / leisure equipment	10
Garments and textiles	10
Furnishing equipment	15
Other	15
Total:	100

4.2 Weight and tendencies of the WCPs

Usually there is a lack of data on the amount of waste considered products (WCPs). The only way to get data was the estimation of CERREC partners on their countries. The partners used their own methods to estimate based on the data available in the corresponding countries. The results of estimations are summarised as follows (Table 5.):

Table 5. Estimated total weights of the WCP in PP countries

	PL	HU	SK	AT	IT	DE	CZ
ALL WCPs (t) [Country data]	208 000	117 335	n/a	359 834	n/a	16 197 000	n/a
Re-usable WCPs (t) [Country data]	31 000	n/a	n/a	24 809	n/a	n/a	n/a
ALL WCPs (t) [Regional data]	-	-	-	-	11 441	-	-

The increase in these amounts is likely as it is influenced by lobbying, initiatives and actions with the goal of awareness raising undertaken by the concerned actors and projects like CERREC. Besides this the amount of used items transported across the border is likely to decrease because of changes in the organisation of the bulky waste collection in Austria, Germany and The Netherlands (less kerb-side collection, more “bring to waste collection centres” systems).

4.3 Waste management structures in CE countries from the project’s point of view

Waste management structures in the CERREC countries – and in the EU – are usually organised on more levels. Several actors are involved in the structure according to the type and source of wastes. The main actors are

- *authorities* (involved on state, regional, local levels);
- *producers* that have responsibilities according to the extended producer responsibility principle;
- *compliance schemes* (producer responsibility organisations) that take over responsibilities from producers on waste management issues;
- *waste management companies* that treat the wastes as contracted by authorities, producers, compliance schemes;
- and *households*.

The roles of the aforementioned actors are summarised as follows:

4.3.1 Actors and roles

Authorities

Ministries (responsible for environment/employment/economy): The Ministries responsible for environment usually compile legislation, national waste management plans; report on the evaluation of the national waste management plan towards the government and the EU. (Remark: in some countries (e.g. Hungary), special agencies are responsible for such reporting and planning activities.)

Considering re-use issues the ministries for employment and economy have influence as well. Usually there is no direct support for re-use initiatives, although according to the Article 29. of WFD and Annex IV (16) it is allowed. But they support measures for employment (for long time unemployed, lower educated or handicapped people). As re-use is considered as a feasible solution for employment of such people ministries of employment have a role in the issue. The waste is a significant resource for industry that has to be managed. Re-use is not only an additional field of activity for waste management but can result in a significant resource saving for the economy as well. This activity can be a basis for industry development in the waste management branch of economy. Thus ministries for economy have some influence on this as well.

Regional and national environmental inspectorates: They are responsible for environmental inspections of treatment and disposal facilities, control and reporting on the management of wastes.

Municipalities: Their main tasks are organising the waste management system, collection of waste taxes and payment for collection and treatment. The municipalities are obliged to introduce a suitable waste collection system. They may construct and operate waste treatment facilities by themselves or in municipal cooperatives. Municipalities should comply with the targets for recycling and recovery as well as the diversion from landfilling. The municipalities often contract by tender for fulfilling their waste management tasks.

Agencies: In Hungary a governmental agency is responsible for organising the waste management on a national level. This agency is compiling the national waste management plan for several waste types (MSW, WEEE, tyres, batteries, etc.). They not only plan, but co-ordinate the waste management activities as well. Their responsibility covers fulfilment of waste collection and treatment targets, the financing and monitoring. They act as an authority for management of wastes covered by the product fee system.

Producers: The role of producers in the waste management is a special issue. For some waste streams the European legislation addresses the producer of the product that the waste is originated from as responsible. Such waste streams are packaging, batteries, WEEE, etc. As WEEE is one of the main streams for re-use the producers became a significant player in the re-use issue. Besides this the Directive on WEEE management addresses re-use as an obligation for producers. However producers themselves rarely act as waste managers. Usually compliance schemes are contracted to co-ordinate the producer's waste management activities.

Compliance schemes: The collection and treatment of special wastes (WEEE, packaging waste, etc.) is the responsibility of the companies putting them into the market. They have combined themselves in several producer responsibility organisations (compliance schemes). These should ensure to reach the targets for recycling and recovery of WEEE and packing waste. They organise the collection and treatment the wastes mainly from the households. In some countries centralised compliance schemes exist (Hungary), where the State has stewardship over the management of such wastes.

The compliance schemes for WEEE have high responsibility for re-use, as the Directive on the management of WEEE addresses the re-use issue as one obligation for producers. Refurbishment centres can be set up based on the collection and treatment system managed by these schemes.

Waste management companies: They apply for tenders for either the collection or the collection and treatment of municipal waste. They may also construct and operate waste treatment facilities. They are paid by the municipalities. The waste management companies also co-operate with compliance schemes for collection and treatment of special wastes like WEEE, etc. Bulky waste collection is the responsibility of public service providers. It is common to have such a collection on an annual basis. In some settlements the bulky waste collection is done twice a year, or rarely on a call centre basis, on demand.

Considering re-use issues these companies can act as a source for WCPs and operator of re-use centres as well. The possibilities for re-use corners in waste yards are being investigated at some waste management companies. These initiatives can serve as a start-up for re-use activities for most of the waste management companies.

Recycling fund: Recycling funds are non-state special purpose organisations (like in Slovakia). They finance the waste treatment of used batteries and accumulators, waste oils, used pneumatic tyres, multi-layer combined materials, electronic devices, plastics, paper, glass, vehicles and metal packaging.

The Recycling Fund income resources consist of (source: <http://www.recfond.sk>):

- Donations and contributions of national and foreign legal entities and natural persons,
- Incomes from agreed penalties,
- Rates coming from credits supplied by the Recycling fund,
- Incomes from the return and withdraw of financial means of the Recycling fund, which were used in a way that is against the regulations,
- Profits from the property of the Recycling fund,
- Rates from the financial means of the Recycling fund kept in banks,
- Other resources if stipulated by a special law.

Use of the financial resources of the Recycling Fund

Compliant with the purpose of waste management, the financial resources of the Recycling Fund may be used to

- settle investment and operating costs necessary to provide for the waste collection and appreciation and processing of end-of life vehicles,
- settle financial contributions paid out,
- settle costs related to Recycling Fund administration, including operation of the Recycling Fund Secretariat,
- settle costs for collecting of packing waste and for its appreciation or recycling,
- promotion of waste appreciation,
- providing of information systems, which support waste appreciation,
- support aimed at identification and application of new waste appreciation technologies.

Households: Households are key players of the waste management activities. Besides this they are a complex and difficult target group because of their heterogeneity (motivation is hard). The households are obliged to collect their waste and submit to the authorised waste operator having a legal contract with the local municipality for public service. In case of special wastes (like WEEE) submitting it to a specialised collection point is an obligation. Considering re-use the households have another main task besides submitting the waste to a collection: to submit the product in a way that re-use activities are not hindered by the damages caused by the transportation. This additional task is a crucial basis of re-use activities. Motivation for the general public (individuals) towards fulfilling their tasks is a key point for enabling re-use activities.

4.3.2 Waste types and their problems

The waste management structures available (and relevant for re-use) usually focus on the waste likely to occur in households.

The solid waste in general usually contains bulky wastes that can be involved into the re-use system. The waste from electric and electronic appliances (WEEE) is another main waste stream to be involved. These waste streams are handled by the municipal service providers and/or the special waste collector systems.

The problems occur when the long use phase of products result in an obsolete product in the bulky waste, which is unsuitable for re-use even if in a good condition (Figure 1.). This situation is a main point of re-use. Technically long use of products is environmentally sound if the impact of use is not as high as the impact of production. But the long use effect hinders the possibility for re-use as the product gets into the waste stream too late to be re-used. It is often out of fashion or the functional conditions are already missing (e.g. standards changed in case of a TV set). This situation usually occurs in the parts of CE with lower income.



Figure 1. Obsolete products in the waste stream in Hungary

4.3.3 Operation

Regarding operation the main stream for re-use in the waste management structure is the bulky waste collection. Usually the bulky waste by household can be brought to special collecting points or bulky waste can be collected directly from households.

Collection centres: There is a difference in CERREC countries regarding the obligation to have fixed collection points for bulky waste. For example: while there is an obligation to have such sites in Poland, there is no such obligation in Hungary. (Since most of these centres in Poland will be newly constructed, it gives an excellent opportunity to consider the themes re-use and repair as well.) The availability of bulky waste collection sites differ from country to country and even from one municipality to another. In the Province of Rimini there are 14 collection centres (Centri di raccolta) which take products from the whole province and even from outside. In Hungary such collection points (waste yards) are rare and only available in the bigger cities. In the collection centres only the residents may deposit their waste, and this service is free of charge.

Re-use corners (used product corners): As part of the development process towards re-use action plans foster the set up of re-use corners in waste collection sites. A re-use corner could be included in the

planning of new waste collection centres (WCC). According to the action plans used items in a good shape and suitable for re-use could be bought for a small fee or could be sent for preparing for re-use from such a place. In Poland, currently many waste management plans contain plans for the construction of WCC's. Experiences in Austria have shown that including a used item corner in existing WCC's may be difficult because of restricted space.

Collection points for special wastes: For special wastes (like WEEE) compliance schemes operate collection points (like in Hungary). These points are available in supermarkets, malls, etc. Besides this waste yards also accept WEEE.

Collection: Bulky waste collection is the responsibility of public service providers. It is usual to have such a collection on an annual basis. In some settlements the bulky waste collection is done twice a year, or rarely on a call centre basis, on demand. The collection is done usually with simple vans, but in some cases press and even rotopress machines are used. These techniques are not valid for waste re-use because of the damage they cause, but effective for low cost collection.

Preparation for re-use: These activities are usually done outside the waste management system, done by specialised companies. No preparing for re-use activities were currently identified directly at waste management companies.

Treatment, recovery and disposal: In most of CE countries the waste management involves the separation, recovery and disposal steps according to the EU prerequisites for waste handling. These activities are well developed and widespread throughout Europe. They are important for municipal waste management, but mainly indifferent for re-use, thus will not be investigated in detail.

4.3.4 Owner of the wastes

In case of re-use the ownership of waste can be a significant issue. This issue raises when bulky waste collection is organised for households or when companies want to dispose the items not used any more. In the case of the private households, the waste owner is usually the municipality at the bulky waste collection, who is being paid by the households for waste removal and is legally obliged to collect the household wastes. The waste management company is the legal entity that can make the decision on preparing for re-use or disposal. In some countries (e.g. Hungary) concerns were raised by the stakeholders whether this decision has clear legal background. Stakeholders indicated problems on recovering products from waste state to become products again for re-use.

For commercial wastes, the owner of the waste is the company who has the right to decide about the further destiny of the items. They have the right to give it to charity or for waste treatment. In case of charity the waste status is avoided. In case of waste treatment the waste handler can do preparation for re-use to achieve product status.

4.3.5 Financing of the waste management

Financing of the waste management is always a key issue as it influences the quality level of collection and treatment. The rules are simple, the higher the quality the higher the costs. The financial background for waste collection and treatment is set up in more ways.

Waste fees for citizens and companies: waste fees usually differ by waste types as follows:

- MSW: For municipal solid wastes the costs are born through tax like systems operated usually by the local authorities. Fees are related to the method of public service, the quantity and quality of the treated waste. They should cover the costs of the maintenance and necessary investments for sustainability and recultivation.
- Special wastes (WEEE, packaging, etc.): For special wastes the fees for treatment and handling should be born by the producers. Producers charge their waste management expenses on the products. Waste management is usually financed through a compliance

scheme or clearing house. In some cases the producers directly contract waste management companies.

Product fee taxes: In some cases (like Hungary) the waste management costs are born through a tax based system, where the producers are the taxpayers and a clearinghouse like state agency (National Waste Management Agency) manages the financial background of waste collection and treatment. The Agency is working through the public finance system (state budget). This system is applied for several product types like electronics, tyres, etc.

Incomes of sale: Waste management companies have incomes from the sale of wastes. This amount becomes the part of the company's budget and is a direct income.

4.3.6 Contracting schemes

Contracting schemes usually differ for waste types. The main contracting schemes for MSW and special wastes are indicated below:

However waste collection and treatment are the responsibility of the municipalities in most cases, there was a system in Poland for waste management where companies directly contracted to households for waste collection. This system resulted that the municipalities had little influence on the waste management system in the settlement. According to a new law – came into force in 2011 – this system had been changed. Now municipalities are in charge of the waste management in Poland as well.

It is usual in the CE countries that municipalities put waste management out to tender and make contract with private waste management companies. Eventually a municipal company can take part in the tender.

Although it is not usual, new legislation drafts forbid municipalities contracting with privately owned waste management companies. Joint ownership for privates is allowed but the majority owner should be the municipality. This legislation will enter force in 2014 according to plans.

Compliance schemes for special waste do contracting on B2B basis, directly with waste collectors and treatment facilities.

4.4 Conclusions on the waste management structures in CE countries

The CERREC partners characterised the waste management structures in their countries as follows (Table 6.):

Table 6. Summary on conclusions of waste management structures

PP Country	waste management structure is		
	beneficial	neutral	obstructive
PL	x		
HU	x		
SK		x	
AT	x		
IT	x		
DE		x	
CZ		x	

Most of the CERREC partners identified the waste management structures as beneficial for re-use. It is highly important to recognise that the German partner – who has long experience in such activities – characterised the German system as neutral, not as beneficial. The main barrier of the German system is the lack of obligation of investments into re-use and recycling for local authorities. This can be a big

barrier for most of the CERREC countries too. The system is judged as neutral in Slovakia too as the present legal framework does not provide adequately for this field, and authorities do not give systematic attention to it. But the state administration does not obstruct these activities at present if any appears. In the Czech Republic the system is not considered as beneficial as there is no support for establishment of repair and re-use centres and networks.

The other partners stated their system as beneficial. In Poland, the previous dominance of waste management companies are to be changed as local governments will be in charge of the managing. However re-use targets are missing, the overall situation seems beneficial. The waste management structures in Hungary are in a change as new law on waste management will be introduced. The new legislation is planned to include re-use as a main priority, but the main points are not yet fixed. In Italy the waste management structures are developed enough for such activities. Besides this there is a lack of connection between the waste management companies and the social cooperative organisations that have experience on the field of re-use. In Austria the waste management structures are on high level. A three level structure of waste management authorities enables future repair and re-use centres and networks to efficiently choose their level of engagement. However the ownership of wastes differs in case of commercial and household wastes, thus negotiations with companies and municipalities and contracted waste managers are necessary.

5 SOCIO-ECONOMY

Due to the economic crisis in the past years, the collection of the related data was supposed to be important to estimate the social relevancy of the project aims and to conclude the strength and weakness of the socio-economic boundaries of the analysed region or country.

5.1 The actual and historical unemployment rate

Summarizing the data of the project partner countries, it can be seen that the economical crisis instantly affected all countries.

Table 7. Annual unemployment rates in PP countries in the past 5 years

Year	2006	2007	2008	2009	2010	Average
AT	4,70%	4,40%	3,80%	4,80%	4,40%	4,42%
IT	4,20%	4,50%	5,50%	7,60%	7,80%	5,92%
CZ	7,70%	6,00%	6,00%	9,20%	9,60%	7,70%
DE	10,30%	8,70%	7,50%	7,80%	8,40%	8,54%
HU	7,50%	7,40%	7,80%	10,00%	11,20%	8,78%
PL	13,90%	9,60%	7,10%	8,20%	9,60%	9,68%
SK	13,40%	11,10%	9,50%	12,00%	14,40%	12,08%

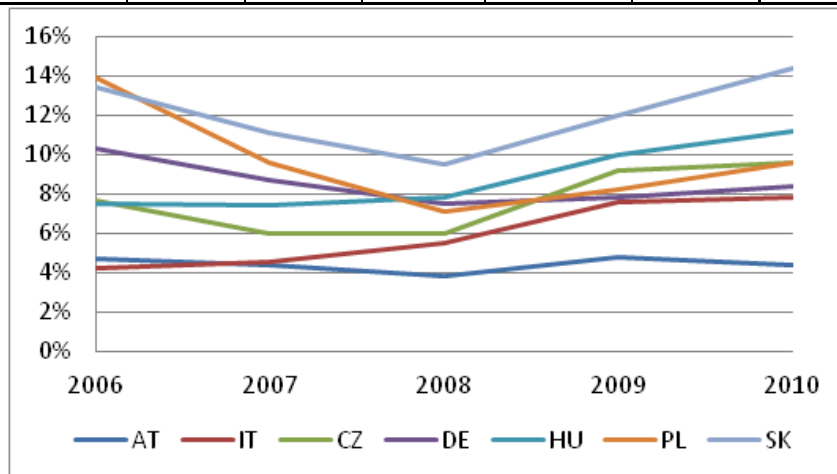


Figure 2. Annual unemployment rate in PP countries in the past 5 years

Considering the aforementioned data (Table 7. , Figure 2.) it can be seen, that the formal communist countries have the highest unemployment rates: even the German rate is relevant due to the lower development of the formal communist Eastern part (for further reference see topic 5.6).

This facts show that new workplaces (new industrial branch based on re-use) possibly induced by the project’s aims have relevant potential from unemployment point of view. Of course, the other socio-economic factors have influence on the potential as well. They are introduced below.

5.2 Consistence of unemployed people in 2010

The feedback of PP countries shows a wide scope on interpreting the question. In many cases it is caused by the different methods for gathering and registering data, resulting in incomparable outputs. Hence the objective comparison of the answers is not possible, only general statements can be made.

Two relevant conclusions can be observed by the reports: the highest unemployment rate is usually typical among the younger generation and the less qualified people. This phenomenon can be considered to be beneficial from the view of project aims, due to two reasons: on one hand, the adaptability of the young people and their susceptibility for the new jobs/activities. On the other hand, due to the activities within a re-use and repair network low educated people can be employed predominantly.

The general, well-known convention is also noticeable, namely that the educational level and the unemployment rate are diametrically opposed.

5.3 The actual average salaries in PP countries

Development and maintenance of a repair and re-use network needs – among technical, operational, social - a valid and reasonable financial feasibility. It is also a fact that the costs of operation depend on its actual economic and infrastructural environment. One of these input factors is the average salary in each PP countries. This factor itself is not eligible to conduct such a feasibility study though, as this is out of the scope of the project. However it may serve to make some preliminary conclusions on a socially reasonable payment to the employees working in a repair and re-use network. This induced the evaluation to compare the actual average gross salaries in the PP countries (Figure 3.).

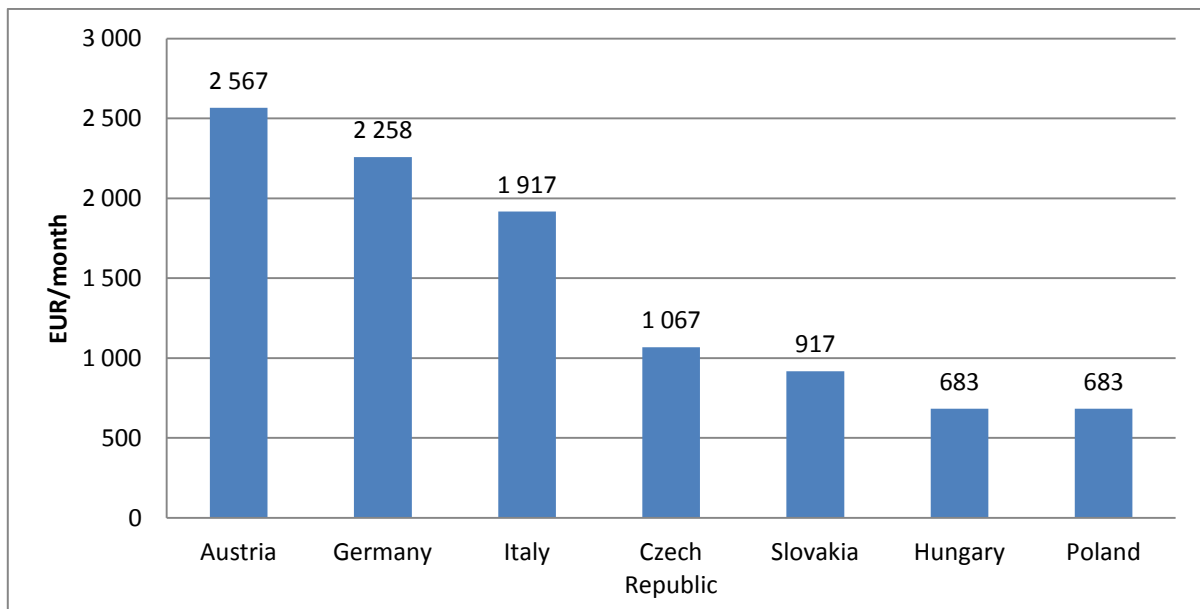


Figure 3. Actual average gross salaries in PP countries¹

¹ source: Eurostat

The figure of the minimum wages in CE countries is also an indicative factor for economical considerations.

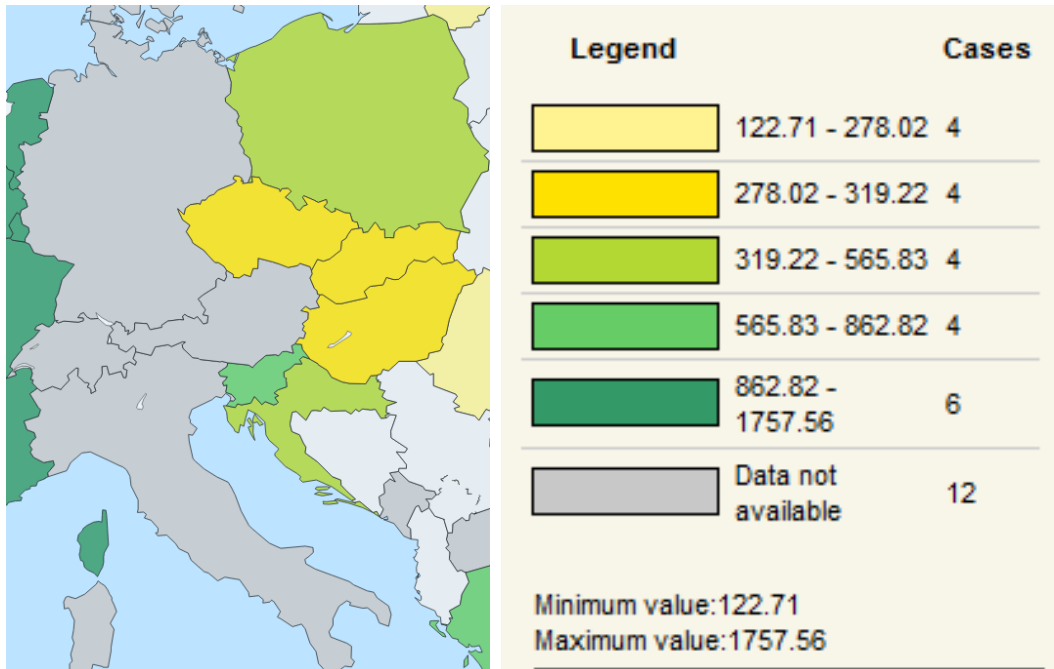


Figure 4. Minimum wages in CE countries

5.4 The actual average unemployment benefit for unemployed people in PP countries

Generally, every PP country has benefit programmes for unemployed people for a defined period of time. The amount of the benefit (Table 8.) usually decreases by the time. The range, amount and period of the unemployment benefits in the observed countries are diverse, due to their complexity by their different socio-economy systems.

Table 8. Average unemployment benefit in PP countries in 2010.

PP country	Average unemployment benefit for unemployed people (per capita per month) in 2010 (EUR)
PL	573-860
HU	139-278
SK	551-569
AT	828,6
IT	„It depends on. No exact data”
DE	24-170 (housing and social benefits are not included)
CZ	227

5.5 Existing and planned programmes for employment of unemployed people

According to the results, all of the PP countries have different programmes for unemployed people, where the social aspects of the CERREC project can be implemented. The other beneficial factor of the project aims that some re-use and repair activities do not need highly qualified personnel, while the highest unemployment rate is typical at the low educated category.

The short abstract of the programmes in each country is presented below (Table 9.):

Table 9. Programmes for unemployed people in PP countries

PP Country	Are there any programmes for unemployed people?	Name of Programme	Remarks
PL	Yes	• “We are active - we are acting” (codes: subdivision: 6.1.3 PO KL)	
		• “I am enterprising” (codes: subdivision 8.1.2 PO KL)	
HU	Yes	• Decentralized programs for the employment of handicapped people (codes: TÁMOP 1.1.2., TÁMOP 1.1.4.)	
		• Support for enterprises employing handicapped people (codes: TÁMOP 1.2.1.)	
		• Public employment system	
SK	Yes	• Allowance for activation by smaller service for village	
		• Self-employment Allowance	
		• Allowance to the incorporation of disadvantaged jobseekers	
		• Support the employment of persons with disabilities	
AT	Yes	• Integration Benefit (Eingliederungsbeihilfe) – Action Come Back	
		• Employment Benefit Job 2000	Regional Programme for Styria
		• “Kombilohn” – combined wages benefit	Additional subsidy
		• The SP3b Model Project “Integration of people distanced from the labour market”	Regional Programme for Styria
		• Implacmentstiftung Energie (Emplacement Foundation Energy)	Regional Programme for Styria
		• Funding of socioeconomic enterprises	
IT	Yes	-	Only general information
DE	Yes	• job creation programs and structural adjustment programs	
CZ	Yes	• Operational Programme Prague Adaptability	
		• Operational Programme Human Resources and Employment	
		• National Action Plans on Social Inclusion (NAPs)	

The related details on each Programme can be found in the National Reports on framework conditions.

5.6 The most disadvantaged areas by unemployment rate in the PP countries

The aim was to reveal the opportunities for common programmes in neighbouring regions, i.e. cross-border co-operations.

Based on the Eurostat data for 2010, unemployment rates in the NUTS region of the PP countries can be seen on the figure below (Figure 5.). The potential cooperation can be viable between the formal communist countries: Hungary, Slovakia, Czech Republic, Poland and Eastern-Germany. This statement can be also proved by the phenomenon of the transportation of significant amounts of second hand goods from Western Europe to the above mentioned Eastern countries. In these countries using second-hand goods is rather accepted (more reference in chapter 8.5).

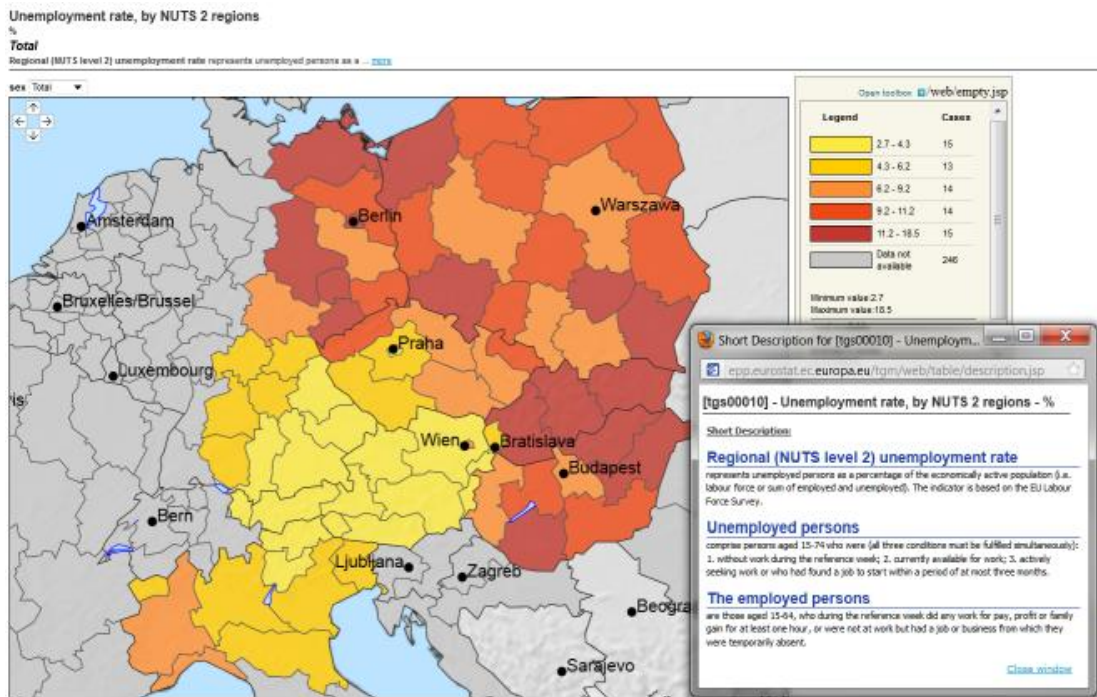


Figure 5. Unemployment rates by NUTS regions of the PP countries, 2010.²

5.7 Conclusions on socio-economy

The PP countries have stated that their actual socio-economy system for RNA is beneficial (Table 10.).

Table 10. Conclusions on socio-economy

PP Country	Actual socio-economy system is		
	beneficial	neutral	obstructive
PL	x		
HU	x		
SK	x		
AT	x		
IT	n.a.		

² source: Eurostat

PP Country	Actual socio-economy system is		
	beneficial	neutral	obstructive
DE	n.a.		
CZ	n.a.		

The common reason was that the RNA needs mainly lower educated people where the highest unemployment rate is typical in all countries. Especially for the former communist countries, the demand on cheap, reliable second-hand products is significant (chapter 9.1).

6 EDUCATION

Unemployment of people with low level education seems to be one of the main problems in the EU to deal with. Such initiatives as re-use centres can employ and also educate people facing this problem, as it can be seen at the Austrian initiatives. Hence the aim of the topic was to collect the special aims/ targets/ intentions/ developments on national/regional/local levels on corresponding educational issues.

The intention was to list and give a short description on existing re-use promotional initiations in PP countries/regions. If there is not any specifically for re-use, we asked to list some other related programmes.

As a general result, it can be stated that there are educational programmes in each PP country generally on environmental consciousness, but not re-use specific ones. The summary of the PP' feedbacks is introduced below (Table 11.).

Table 11. Educational Programmes concerning environmental sustainability in PP countries

PP Country	Are there any Programmes?	Name of Programme	Remarks
PL	Yes	• Something from nothing: recycling workshop for children	No specific focus on re-use, but separate waste collection
		• Recycling on the scene: puppet workshop	
		• Reconstruction: second life of waste	
		• Ecological Foundation: „Green Action	
HU	Yes		No specific focus on re-use, NGO-s and civil organisations conduct general environment and sustainability related programmes
SK	Yes	• University study programmes	No specific focus on re-use, but the Ministry of Environment realised several environmental related activities, like conferences, forums, etc.
AT	Yes	• University study programmes	No specific focus on re-use
		• Forum Umweltbildung	

PP Country	Are there any Programmes?	Name of Programme	Remarks
		<ul style="list-style-type: none"> • ARGE waste prevention • Waste Advisor schooling programme • Die Umweltberatung • The ÖKOLOG-Network • Sustainability schooling initiatives on the federal state level 	
IT	Yes		In Rimini 7 Centres for Environmental Education offers programmes for sustainability
DE	Yes	<ul style="list-style-type: none"> • Recycling design price • BLK-Programm 21 • Transfer 21 	No special governmental education programme on re-use. There are some private, local initiatives to support sensibility on re-use
CZ	Yes		No re-use specific programmes

The target group of such programmes listed above are mainly the children and younger generations (Table 12.).

Table 12. Target groups of environmental programmes in PP countries

PP Country	Identified target group
AT	Public Administration
	Businesses/Commercial Sector
	Private Individuals/General Public
	Pupils and students (from all educational levels)
IT	students of elementary and high schools
PL	all possible target groups, i.e.: children, students, teachers, etc.
SK	all possible target groups, i.e.: children, students, teachers, etc.
HU	children
DE	Young people, pupils, students and families
CZ	children, students

7 STATE OF THE ART

Systems for selling second-hand products are available in all EU member states. Existing structures and networks in the field of repair and re-use can be very helpful for the establishment of repair and re-use centres and networks. Especially an existing good cooperation between the waste management and the social economy sector can be very beneficial. It is of great advantage to have the possibility to learn from positive experiences gained and mistakes made in the past.

7.1 Management organisations in CE countries for re-use activities

However there are no central organisations for the management of re-use in the CERREC countries, association like organisations, co-operations co-ordinate the re-use activity in some countries like Austria and Germany. These co-operations involve public authorities, socioeconomic enterprises (SEE's), NGOs and NPOs and, to a small degree, private companies in Austria; networks and business projects form associations in Germany. In Rimini (Italy) the Hera spa waste management company supports two organisations that are active in the field of re-use, but the work that is currently done represents only a small part of the potential in term of re-use. In Slovakia the "Priatel'ia zeme" company manages re-use activities for a certain level. The other CERREC countries (Poland, Hungary, Czech Republic) have no management on the field of re-use.

7.2 Existing repair and refurbishing companies and re-use shops

Several second-hand/re-use/repair shops / companies have been identified in the CERREC area by the project partners. The organisation types differ on a wide scale. There are profit oriented companies among them, but non-profit as well. Even some foundations had been identified.

Repair centres and networks of large corporations exist together with small family repair shops. The re-use activities are mainly done by small companies with low annual turnover and few employees. The small companies sometimes (like in Austria and Germany) group to a formal system to join forces for lobbying for support and for knowledge exchange. The problem is that usually these groups are regional, interregional and national systems are rare. The main challenges can be seen in the lack of networking between most of the small actors like repair businesses or second-hand shops and regional networks. Studies on re-use networking and communication have shown both potential and will for improvements.

Another issue is the question of employees. Usually the profit oriented companies work only with a few people. They do not employ disabled employees. Non-profit companies can reach even 50 employees also with the state support for handicapped people (long time unemployed or disables). According to expert interviews in Hungary, a re-use-centre can employ around 30 long time unemployed person with support in a settlement of 50.000 inhabitants. Besides this only a few (2-3) "normal" employees can be involved into the work of the centre economically. Disabled and disadvantaged people are also employed in non-profit companies. An example for that is the Polish EKON. EKON is an organisation that is aiming at the activation of disabled people into society by employing them in the area of waste management. There are programmes of collecting recyclables directly from households or from offices. Apart from that, a project called "Eco-Park" is being developed (Figure 6.). It consists of a centre where waste is collected and separated into raw materials that can be recycled. The workers in the centre are disabled. Such a centre would be an interesting starting point for the collection of waste considered products.



Figure 6. Model of an EKON Eco-Park

To sum up the situation: the re-use system is mainly underdeveloped in all CE countries. This is especially the status in the eastern part of CE.

7.3 Conclusion on the existing structures and companies

The CERREC partners characterised the existing re-use structures and companies in their countries as follows (Table 13.):

Table 13. Conclusions on the existing waste management structures

PP Country	waste management structure is		
	beneficial	neutral	obstructive
PL		x	
HU		x	
SK		x	
AT	x		
IT		x	
DE		x	
CZ		x	

Most of the partners have neutral situations for re-use considering re-use structures and companies. Usually the existing structures of re-use are only partially fitting the requirements of the CERREC project. Besides this the re-use/repair companies are usually small, with a few employees and low turnover. They have no real influence on the economy in general.

In some countries (Slovakia and Hungary) companies which are selling the re-used stuff, just buy, import or collect the goods and then sell them in the shops. The cost of repair often exceeds the cost of a new product. A big share of goods, which are sold in the shops as a second hand /re-used product, is imported (PC, notebooks, electronics, sport goods, clothes, etc.).

Non-profit markets work with the purpose to re-use and help socially disadvantaged people. But the formal connection among them and a clear guideline for operation and management to follow is missing.

The profit markets follow a commercial purpose and are not focused on the social and environmental value of re-use.

The existing structures and companies in Austria provide an extensive base and lots of opportunities for the establishment of repair and re-use networks. There are not many super-regional or national networks active, however the existing projects have brought about positive results and there are several intentions to implement new projects. In spite of this, networking is missing also in some parts of Austria.

7.4 Available know-how in the field of repair and re-use

The situation of know-how on re-use is quite diverse in the CERREC countries. While Poland, Slovakia, Czech Republic and Hungary reported to have no, or not much know how available in the countries, Italy, Germany and Austria have enough knowledge on this field. In the Czech Republic the system of utilisation and sale of the re-use goods is in operation with no specific rules or quality standards. The product comes as is, the buyer has to accept the risk of the purchased second-hand goods. However, there are few projects with guarantee of functionality of produced re-used goods (repaired cell phones, sorted out clothes etc.). Italy reported problems on network mentality and the missing point of view to operate like a system rather than starting from the individual will. Germany has more than 10 years of experience and even up-to-date guidelines on re-use as it had been worked out in the framework of a project called "Second life". Although there is certainly a lot of know-how in the field of repair and re-use in Austria, the de-centralized nature of the existing initiatives combined with the dominantly small repair and re-use company size and informal proceedings results in most of the existing know-how being informal and confined inside the individual companies. A significant amount of know-how is synthesised and captured in the project documentations of the EU-funded projects. Even extending the qualification profile to include quality standards for all stages of the repair and re-use process was included. A guideline on the development a regional repair networks is also available.

7.5 Current infrastructure of the re-use network

In general several parts of the re-use network are missing in most of the CERREC countries. Only the waste collection system is reported to be in operation in Poland, Slovakia, Czech Republic, Hungary and Italy. This includes separated collection for special wastes like electronics, garments, etc.

Austria has more operating systems for re-use. In case of the Austrian RepaNet the association operates as a network co-ordinator and knowledge hub, but procurement, preparation for re-use/repair and sales are left to the individual partners. There is a two-level hierarchical system for the ReVital network: while the state waste management association is on top as the license provider, the sales points, repair/testing sites and collection centres as licensees on the lower level. The collected products are tested, refurbished and repaired in five repair companies, which are all at least partly socioeconomic enterprises. The repaired products are then sold in re-use shops, which are operating directly under the ReVital brand or being partner shops.

The current development stage of the repair and re-use market deals with the building of networks and cooperation between the municipal/public waste management structures and socioeconomic enterprises (SEEs). After completion of this stage, the next step focuses on direct collaboration with individual enterprises (for example, in the form of B2B (Business-to-Business) product cycling systems).

7.6 Quality standards, guidelines

Quality standards are missing in Poland, Hungary, Czech Republic, Slovakia and Italy. Standards exist in Germany, mainly for electric and electronic products.

For Austria detailed information is available on standards. Because there is no central organisation or initiative governing the quality of repair and/or re-used products in Austria, there are no uniform quality standards or guidelines.

However, there are internal quality standards and guidelines that are implemented by the two existing larger repair/re-use initiatives. The RepaNet standards cover the process chain parts of business organisation, repair, customer relationships, material flow management, recruitment of employees (HRM) and co-operation with other companies (in this case, other members of the RepaNet network).

The Repair network Vienna Waste Electronic and Electrical Appliances Procurement and Quality Standards include a listing of appliances suitable for repair and re-use sorted by the categories large household appliances, audio, television and video, computers including notebooks and output components, small kitchen appliances, other small household appliances and flipper machines. The requirements for each of those appliances are related to the original manufacturer and appliance type, its age and general requirements regarding the material properties of the appliance. The quality standards proposed in this report relate to the process steps during the repair of an appliance and the required functionality and quality tests for the device. The standards were set for the following appliances: washing machine, PC/storage medium, display screen equipment and mobile phone.

In the course of the QualiPro Second Hand (I and II) EU project, a proposal for quality standards in the qualification process of employees in the second hand sector, with a special regard for non-profit/socioeconomic enterprises and therefore transit employees, was given. The quality standards were divided in the three main categories “input”, “process” and “output” quality standards.

Besides this a larger number of company-internal or small-scale association standards and guidelines which are used by a single or, at the best, a few businesses and which usually are not accessible to the public and in some cases do not even exist in written form.

Regarding general standards for quality management in enterprises, socio-economic enterprises and commercial repair and second-hand shops can implement a general quality management standard/system, such as the ISO 9001 or the European Foundation for Quality Management (EFQM) standard. Those quality management standards are however general and designed to be applicable for any type of enterprise, so they cannot be regarded as specialised quality standards for repair and/or re-use. A possibility for socio-economic enterprises is the certification with the seal of quality for socio-economic enterprises, which is performed by an external assessor working for Quality Austria. A prerequisite for the seal of quality is the implementation of a quality management system based on the EFQM standard by the SEE.

7.7 Distribution of the repaired products

Re-use or repaired products are distributed via different channels in the CERREC countries.

The methods indicated by the CERREC partners are as follows (Figure 7. - Figure 10.):

- Internet portals in different forms (sales, free of charge offers, etc.)
- Repair shops selling repaired electric/electronic and household appliances
- Occasional collections of bulky waste organized by local communes – the items collected by informal pickers for their own needs or for selling
- Second hand shops – mainly clothing (usual in Poland, Slovakia, Hungary, Austria)
- Specialised shops for used items, socioeconomic enterprises (SEE) (organised way – Austria)
- Second hand markets of imported used products (from countries like Germany, Austria, Netherlands, etc.) (usual in Poland, Slovakia, Hungary)
- Flea markets
- Charity; donations for socially excluded people

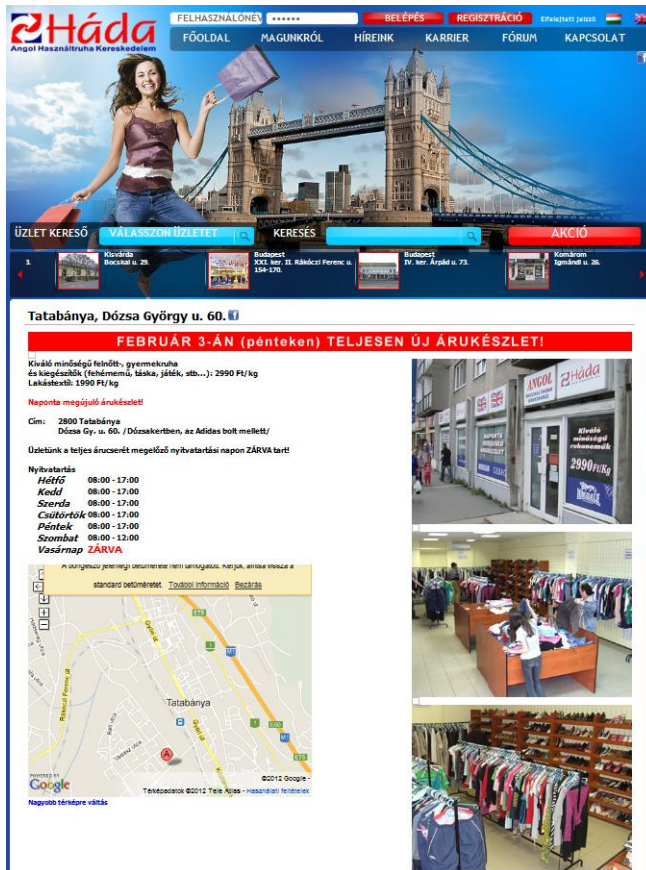


Figure 7. Second-hand sale in Hungary

Source: www.hada.kft.hu

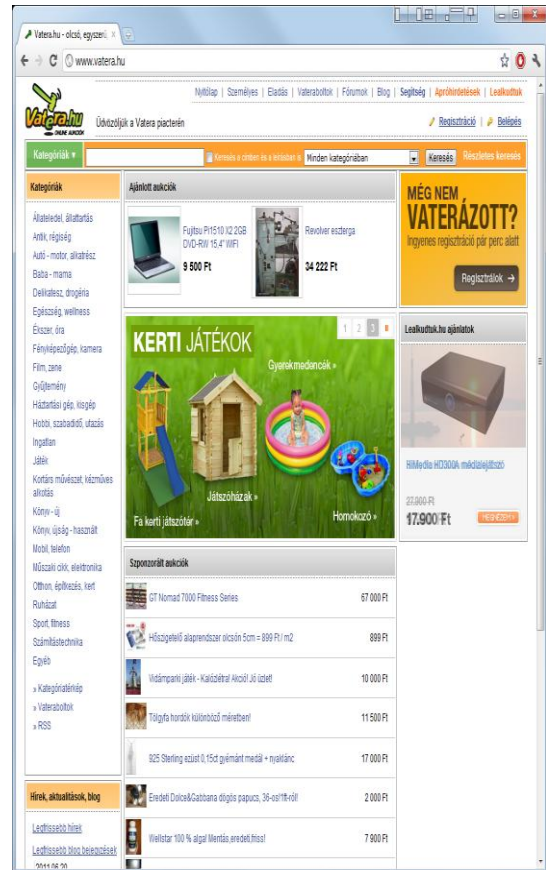


Figure 8. Internet based sale

Source: www.vatera.hu



Figure 9. Specialised shops for used items (ReVital, Austria)

Source: ReVital



Figure 10. Flea market for selling second-hand items

Source: Internet

For the purpose of the CERREC project some of the aforementioned methods are not suitable. The best ways for the distribution of quality products for re-use can be the use of Internet portals or to sell them in specialised shops for used items in an organised way. The organised way can be a franchise like system or a common brand or logo.

8 PUBLIC AWARENESS

The successful implementation of re-use activities highly depends on the public awareness, as people using the products in their first life cycle have to handle it back to repair in an “acceptable” status. Thus two key points are the “use with care” and the “handle it back”. The aim was to analyse the main points on public awareness in details.

8.1 Public awareness relevancy

The aim of the question was to investigate the information availability and awareness of the public, serving to compare the actual situation in different countries/regions.

In coherence with the results of educational issues, there is no re-use specific information available for the public. Austria can be considered as the exemplary one among the PP countries. They possess several public awareness activities on re-use, because they have already had significant practices on the whole segments of re-use network activities, such as collection, refurbishment, retail and even quality management. These examples are the regional ReVital Shops and RepaNet. There is another initiative of ARGE (the project coordination company), called ARGE Waste Prevention, providing services for public organizations, authorities, public institutions, social and private enterprises in the fields of sustainable development and municipal waste management. According to their experiences the public awareness is a critical component in the implementation, which needs better marketing, quality and warranty improvements for re-used products.

The lack of information on public re-use awareness is typical for the rest of the PP countries. In Hungary a study was conducted in 2003. Results of this study were:

- the young people (between age of 13-18) are the most receptive for the environmental issues, they are interested in them. They are more committed to sustainable consumption than people at older ages;
- 41% of adults and 26% of the younger generation claimed that they would pay more (5-15%) for an environmentally sustainable product.

The acceptance of buying and using second hand goods is higher in Poland, Slovakia, Hungary and the Czech Republic comparing to the Western-European countries.

8.2 Public relations work (PR) on the goals of the revised WFD or re-use

Similarly to the situation of public awareness, most of the PP countries do not have organisations expressly dedicated on re-use. There are significant regional activities of NGO-s only in Austria, but their problem is the lack of PR activities on the topics of repair and re-use on federal level.

Italy has no NGO at all for PR work even on WFD issues. Slovakia, Czech Republic and Hungary have a very similar situation, as they have got some civil NGOs, but none of them focus specifically on re-use. They promote the WFD intentions like waste prevention and minimisation (partially re-use) and waste collection. The topic of re-use is getting more and more important in these countries, inducing positive, exemplary initiations, like: Priatel'ia zeme ((Friends of Earth) in Slovakia) already started the activities regarding to re-use of different kind of goods, Humusz (in Hungary) has an ongoing project to analyse the re-use possibilities of waste from bulky collection, and "Deutsche Umwelthilfe" (Germany) has set initial steps on promoting re-use in a sense of the WFD.

8.3 Green Public Procurement activities

Austria, Italy and Slovakia have initiatives and activities on Green Public Procurement (GPP). Austria has developed an action programme for sustainable procurement, which was ratified by the Council of Ministers in July 2010. In Italy, the Province of Rimini is very active through many initiatives about energy conservation, environmental friendly products for the office (paper, toners, etc.), ISO certifications.

In Slovakia, the number of GPP related to the total number of Public Procurement Contracts is only 10%, but comparing them on the value of the contracts, it can be seen, that the GPP possesses almost 51%.

In Poland the level of green procurement is very low and rarely one can find demands for ecological aspects in public procurement activities.

Germany reported having some obstacles in the national implementation of GPP, while in Hungary the new legislation on GPP has just started, but the specific actions, regulations, procedures are still missing which will be governed by a government decree to be issued soon.

8.4 Public willingness to donate re-usable goods to re-use centres

In all the PP countries (excluding Austria) only indirect information is available on public willingness to donate the WCP-s, though PPs concordantly reported that the willingness is high in their country. Austria has more objective answers for the questions, as they conducted a questionnaire in the city of Graz revealing the willingness of the general public to donate re-usable goods: 82% of the participants answered to donate. The leading motives for donation of re-usable goods were named as environmental concerns, followed by social motivations and a lack of storage space. Actually, these reasons are supposed to be similar in other countries as well. Although some concerns were raised, like the lack of information in the general public about the market value of second-hand products and the costs of their collection (especially in the case of collection on demand).

Hungary conducted a survey almost ten years ago, where they tried to map the willingness of companies for donating their usable products: 84% of the companies answered affirmatively.

8.5 Acceptance of using second hand goods

Excluding Italy and Germany, buying second-hand goods is an accepted phenomenon in the other PP countries. In Germany, the image of second hand goods is not good, in Italy “to buy second hand products is something that people are ashamed of only in part of the population”.

In the lack of exact data, all of this information is based on the opinions of the PP-s. Exact, quantitative information can be gathered from the Austrian and Hungarian reports, where they refer to previous studies on the topic. According to this studies, in Austria 72% of the citizens would be willing to buy second hand goods, which is slightly above the EU-27 average of 68%. In the Hungarian report the 21% of the customers at a second hand market were stated with low income, 45% belonged to the middle class, and 29% indicated to have high income. In Hungary the relevant part of the second hand products are imported from Western-Europe.

8.6 Conclusions of general public awareness and reputation on second hand goods and products

The former communist countries within the project partnership have the same conclusion (Table 14.) on the question: according to their answers the conditions for the establishment of repair and re-use centres and networks are beneficial, due to the traditional acceptance of using second hand goods in their countries. In the rest of the PP countries (Austria, Italy, Germany) correlating to the public acceptance of second hand goods: the public has got reservations about the second-hand products, considering their reliability and tidiness. If these concerns would be managed in an adequate manner, they could consider the environment to be beneficial for repair and re-use network.

Table 14. Conclusions of general public awareness

PP Country	General public awareness on re-use is		
	beneficial	neutral	obstructive
PL	x		
HU	x		
SK	x		
AT		x	
IT		x	
DE		x	
CZ	x		

9 ECONOMIC AND FINANCIAL CONDITIONS AND MARKET POTENTIAL

In order to enable small and medium social or private enterprises to set up repair and re-use businesses, the profitability (or at least financial viability) must be guaranteed. This means that there has to be a market with sufficient demand and – as mentioned before – the establishment of repair and re-use centres and networks is in many cases dependent on funding.

9.1 Product categories, demand and supply

As there are no measurements and benchmarks available for comparing the demand and supply of different product categories, the PP countries were asked to classify their opinions on demand and supply on them. The tables below (Table 15. , Table 16.) show the results.

Table 15. Estimates on product demand for re-use

Product category	Demand low (1) - high (5)							Average
	HU	AT	IT	PL	SK	DE	CZ	
• Electric/electronic appliances: according to the WEEE directive,								2,94
○ Large household appliances	3	5	2	3	3	4	n.a.	3,33
○ Small household appliances	3	3-4	3	3	2	3	n.a.	2,92
○ IT and telecommunications equipment	5	1-4	2	3	5	3	n.a.	3,42
○ Consumer equipment	4	1-4	1	3	2	?	n.a.	2,50
○ Electrical and electronic tools (with the exception of large-scale stationary industrial tools)	4	2-3	1	5	2	2	n.a.	2,75
○ Toys, leisure and sports equipment	2	1-4	2	5	2	3	n.a.	2,75
• non electric driven household appliances	3	1-4	2	4	1	3	n.a.	2,58
• furniture	4	2-3	5	4	3	5	n.a.	3,92
• non electric toys / sport / leisure equipment	4	3-4	2	5	5	3	n.a.	3,75
• garments and textiles	5	3-4	5	5	5	4	n.a.	4,58
• furnishing equipment	4	5	3	4	1	3	n.a.	3,33
• other	4	4-5			n/a	-	-	-

Table 16. Estimates on product supply for re-use

Product category	Supply low (1) - high (5)							Average
	HU	AT	IT	PL	SK	DE	CZ	
• Electric/electronic appliances: according to the WEEE directive,	3				5	4	n.a.	2,51
○ Large household appliances	1	1	2	4	3	3	n.a.	2,33
○ Small household appliances	1	1-2	3	4	1	3	n.a.	2,25
○ IT and telecommunications equipment	2	1-3	2	4	5	3	n.a.	3,00
○ Consumer equipment	1	1-2	2	5	2	?	n.a.	2,30
○ Electrical and electronic tools (with the exception of large-scale stationary industrial tools)	1	1-2	2	5	1	2	n.a.	2,50
• non electric driven household appliances	3	1-2	3	4	1	3	n.a.	2,58

Product category	Supply low (1) - high (5)							Average
	HU	AT	IT	PL	SK	DE	CZ	
• furniture	2	2-3	5	5	3	4	n.a.	3,58
• non electric toys / sport / leisure equipment	5	1-2	3	5	5	3	n.a.	3,75
• garments and textiles	5	3-5	4	5	5	4	n.a.	4,42
• furnishing equipment	5	1-4	3	4	2	3	n.a.	3,25
• other	4	1-3			n/a	-	n.a.	-

The cells in the tables above with orange indicate the smallest, while the green cells the highest demand / supply.

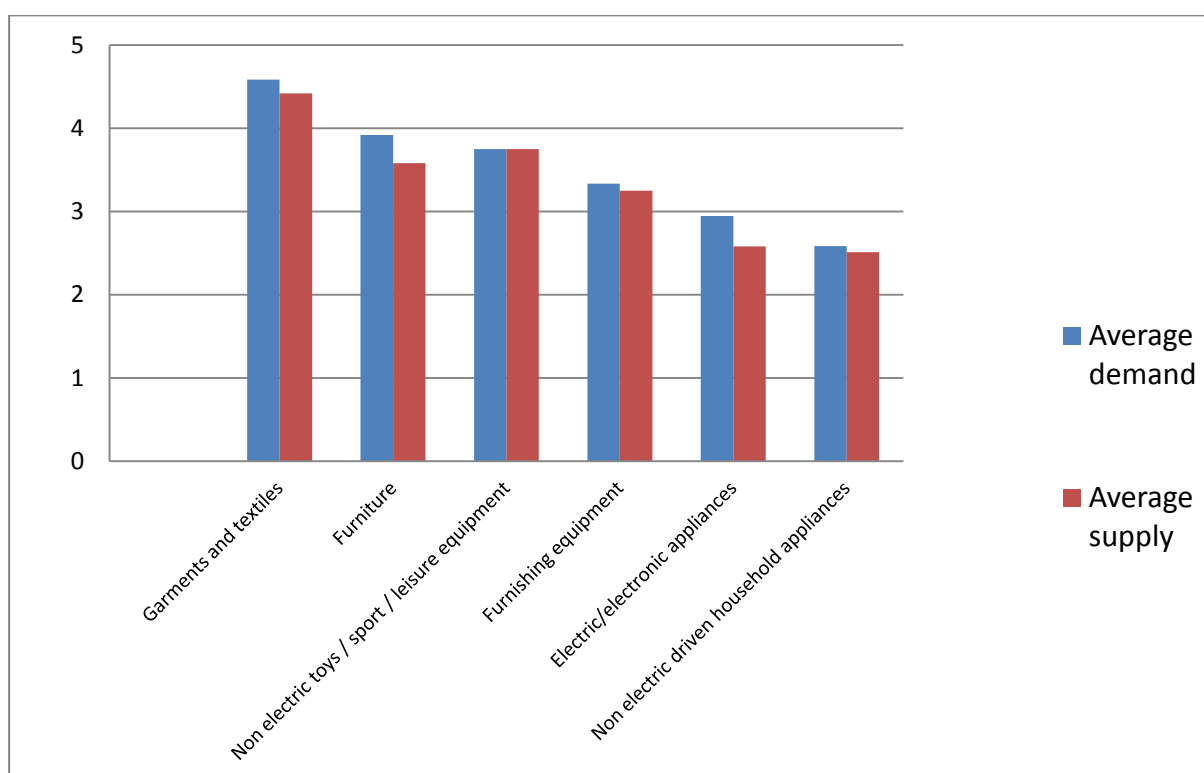


Figure 11. Average demand and supply on product categories (5-highest)

By presenting the demand and supply on a common figure (Figure 11.), it can be seen, that the highest interest is in the “garments and textiles” category, while the electric and electronic equipment supposed to be less relevant.

9.2 Economic studies or analyses concerning the market share and potentials of the second-hand products

The primary intention was to compare the market share of the second-hand products to the new ones. As a main conclusion, there are limited and missing information on the topic, so no reports were listed, or some listed ones had typically indirect information on the question.

According to the reports (Table 17.) in three countries, Slovakia, Italy and Czech Republic have no considerable studies on the topic. For the other countries (Austria and Germany) several background studies exist on the second-hand market due to their experiments. Hungary has some related preliminary studies. Poland reported studies on products out of the WCP categories (i.e. cars, tyres, etc.).

Table 17. Studies related to market share and potentials of second-hand products

PP Country	Are there any studies?	Name of study, remarks
PL	Yes	Studies are available on used cars, tyres, apartments or professional printing and agricultural equipment. No studies on consumer items.
HU	Yes	• HUMUSZ study on feasibility issues of second hand sale
		• Study of University of Pannonia, 2008.
SK	No	-
AT	Yes	• Market analysis for the implementation of a re-use project in Carinthia
		• Sector analysis for second hand
		• ruso Business plan for re-use shops in Upper Austria
		• Guide for re-use of waste electrical and electronic appliances in Austria
		• Re-use in Austria, Overview
		• Business plan for re-use shops in Styria
ITA (Rimini)	No	• Implementation concept for re-use according to the Directive 2008/98/EC
		-
DE	Yes	• Study in the context of the project Second Life (by bag arbeit) on re-use of EE products
		• Outlook on the possible development of the second-hand sector, that focuses on the retail furniture sector
		• Marketing the EU Eco-label in Germany and Austria
		• Study „Qualification fort he European second-hand sector“
CZ	No	-

Considering the implementation of re-use according to WFD, the Austrian study “implementation concept for re-use according to the Directive 2008/98/EC” is very useful from the aspect of project aims, because it includes both a market analysis and a material flow analysis combined with proposals for measures in those sectors.

9.3 Ratios and ways of selling used products

The aim was to reveal the most typical ways for selling the used products in each PP countries. The table below (Table 18.) gives a summary of the outcomes:

Table 18. Ways of selling used products in PP countries based on national reports

PP Country	Typical way of selling	Remarks
PL	<ul style="list-style-type: none"> - flea markets - internet - donation - re-use shops (high end and antiques) - announcements in local newspapers 	- Data from TRANSWASTE (www.transwaste.eu)

PP Country	Typical way of selling	Remarks
HU	- internet - second hand shops - flea market	Subjective estimations
SK	- second hand shops (50%) - bazaars (40%) - internet (8%) - flea markets (1,9%) - other (0,1%)	Subjective estimations
AT	- socioeconomic enterprises - commercial second-hand stores - flea markets, internet (i.e. e-bay, willhaben)	- Differences depending on region: East Austria is typical for second-hand stores (Revital), West-Austria is typical for SEE
IT	- second hand shops - flea markets - internet	Subjective estimations
DE	- second hand shops - specialized retail - private and commission merchants - franchise dealers - non-profit and tax-collection centres - professional textile sorters and distributors	- Transactions of individuals may play a remarkable role by volume via Internet, flea markets)
CZ	- internet - bazaar - second hand shops - flea markets	Subjective estimation

In all countries, the traditional ways of selling used products are in second-hand shops and via private or commercial internet platform. In Poland, Slovakia, Czech Republic, Austria and Hungary the flea markets play a significant role in selling second-hand products. The ratios of different selling methods cannot be estimated dependably due to the lack of information, though. The relevant share of flea markets may make the (legal and measurable) involvement of WCPs more complicated into the RNA in these countries.

9.4 Estimations on market potentials

The results of the survey (Table 19.) lead to the opinion, that there are potential factors, which can make the market for re-use more relevant. Considering the people's concerns on used products (i.e. health safety, reliability on operation), the realisation must give a definite answer to them to make the re-use of products more accepted. Another driving factor for the market penetration of used products is the producers' standpoint. Finding the interest of producers in the process is crucial from the point of project aims.

Table 19. Recognized factors on market potentials in PP countries

PP Country	Identified agents	Remarks
PL	- the supply (from abroad) and demand at the flea markets are falling - the market of flea markets and	-

PP Country	Identified agents	Remarks
	(high-end) re-use shops is saturated	
HU	<ul style="list-style-type: none"> - increment of market share of second-hand shops in total retail - relatively low number of repair shops - still a significant gap between retail of used products to new ones 	-
SK	-	no information available
AT	<ul style="list-style-type: none"> - increase of the general population leads to a market increase - presumption on better future cooperation of waste management structures - increase of the amount of people with low income - increasing disappointment with new products - ageing population 	-
IT	-	no information available
DE	-	no specific agents, but the overall expectations are positive considering the extent of re-use market
CZ	-	no information available

The identified agents at some countries can be considered general and adoptable for all PP countries.

9.5 Intentions to set up a network for re-use activities

The aim was to collect information on the national intentions on the topic and find out the common points, synergies and co-operation possibilities. The results are shown below (Table 20.).

As a consequence the possibilities for international co-operation needs national or at least regional feasible re-use networks. At the moment this potential is very low, because even the exemplary Austria has mainly regional intentions for re-use network activities.

Table 20. Intentions for re-use networks in PP countries

PP Country	Identified intentions	Remarks
PL	not known	Generally all relevant stakeholders for RNA are present in Poland
HU	<ul style="list-style-type: none"> - UWYTA (former initiation, closed in 2008.) - Atypical employment framework programme for setting up the basics of a RNA in Hungary 	Not specified and referenced plan of Hungarian electronics producers for setting up a re-use network
SK	-	Government organizations do not give and non-profit organizations do not have the legislative support to create such a system

PP Country	Identified intentions	Remarks
AT	<u>Existing initiatives:</u> - RepaNet - ReVital <u>Planned initiatives:</u> - Re-Use Shops Steiermark - Re-Use Network Burgenland - Project Re-Use Network Tyrol	The intentions listed are regional ones, except only one superregional repair/re-use network in Austria, the RepaNet
IT	- general intentions	Re-use markets in Rimini are open to co-operate with the Province of Rimini to set up a RNA
DE	- No national intentions at the moment	Association of municipal waste collection companies are open to deal with the sensibilisation for re-use
CZ	No specific intentions	Ministry of the environment, some towns, as well private subjects (collective system, environmental NGO) and experts are interested in further implementation of re-use topic.

9.6 Conclusions on financial conditions and market interests for the establishment of repair and re-use centres and networks

Three of the PP countries considered their actual situation as neutral from RNA-view, though all of them had lack of related information to judge the question (Table 21.).

It is obvious that Austria conceives the situation as beneficial: studies show market potential for second-hand products, existence and further implementation of repair/re-use networks, operating distribution and sale channels.

In Poland there is definite demand for shops with second hand goods in the urban areas and there is also a foreseeable strong increase in bulky waste collection infrastructure.

Germany sees advantages by combining this topic with social integration in Germany or concentrating on certain products in order to have a sustainable financing of this activity.

There is a market potential for re-used products in Hungary due to the traditions and the low price. There are several second-hand shops and flea markets, though the added value and the turnover is very low. In their opinion a well organised re-use system can be a good basis for increasing the RNA.

Table 21. Summing up the opinions of PP countries on financial conditions and market interests for establishment of repair and re-use centres and networks

PP country	Actual situation to establish a repair network is		
	beneficial	neutral	obstructive
AT	x		
IT		x	
PL	x		
SK		x	
DE	x		
CZ		x	
HU	x		

10 FINAL CONCLUSION

Considering the main topics covered the situation of re-use in CE is characterised by the project partners as follows in the table (Table 22.) below. The ratio of beneficial judgements (“Ratio”) is also indicated. Topics with low values show the problematic areas considering re-use.

Table 22. Summary of the conclusions of PP on different related topics

	AT	HU	IT	SK	PL	DE	CZ	Ratio
Legal framework	Beneficial	Neutral	Beneficial	Neutral	Neutral	Neutral	Neutral	29%
Waste management structures	Beneficial	Beneficial	Beneficial	Neutral	Neutral	Neutral	Neutral	43%
Socio-economy	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	100%
Existing structures and companies	Beneficial	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	14%
Public awareness and reputation	Neutral	Beneficial	Neutral	Beneficial	Neutral	Neutral	Beneficial	43%
Financial conditions and market interests	Beneficial	Beneficial	Neutral	Neutral	Beneficial	Beneficial	Neutral	57%

It should be mentioned that no parameter was characterised as obstructive by the partners.

Advantages identified include the socio-economy sector with a number of implemented employment systems and initiatives for unemployed people.

Considering the overall ratio the lowest “beneficial rate” arises at the parameter “existing re-use structures”. Clearly, the re-use system is mainly underdeveloped in all CE countries. This is especially the status in the eastern part of CE. Besides this the legal framework is also problematic, as it is much closer to neutral than beneficial. It seems that the legislation – if it is ready at all – does not entirely support re-use.

The PR work for re-use could be considerably extended. Although there is a demand for re-used products all over CE, there is a lack of knowledge on donation possibilities, collection, etc. Besides this, the underdeveloped system in some EU countries hinders the operation.

Regarding the second-hand products, the main issues are the

- product marketing and
- product quality and warranty, which can be improved by using recognised/universal quality standards and communicating those facts to the general public. Besides this in some countries the
- high obsolescence of products in the bulky waste stream results in a lack of re-usable products.

Considering the financial feasibility of re-use, the number of employees is crucial. As re-use seems not to be self-financing, the re-use centres will remain on a low scale without support. An available support can be the support for employment of long time unemployed or disabled people. Initiatives in the developed CE countries get this support for their activities, usually from regional funds.

According to the results of the aforementioned studies there is a high potential for the establishment of re-use centres and networks in the CE countries. There are some well identified burdens that have to be handled and managed, but solving these problems can result in a successful re-use business activity throughout the CE Member States.

11 REFERENCES

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12 LIST OF ABBREVIATIONS

B2B – Business to Business

CE – Central Europe

EE – Electric and Electronic

GPP – Green Public Procurement

MSW – Municipal Solid Waste

NGO – Non Governmental Organisation

PP – Project Partner

PR – Public Relation

RNA – Re-use Network Activities

WCP – Waste Considered Product

WEEE – Waste of Electric and Electronic Equipment

WFD – Waste Framework Directive (2008/98/EC)