



**REPAIR  
& SHARE**



# Final report - Survey of the repair sector for small household electrical appliances

Survey carried out by Möbius, 2020-2021

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# 1. Purpose of this study

There is currently no clear overview of or report on the situation of professional repairers of small household electrical appliances in Flanders. De Transformisten (formerly known as Netwerk Bewust Verbruiken) and Repair&Share believe it is very important to map and survey this sector, so that they have a better overview of the players involved and the points of view and needs of the professional repair sector in order to formulate policy recommendations based on this.

Our first goal was to map the current repair market for appliances. In 2020, we investigated how small household electrical appliances are repaired and recycled. We did this by contacting various intermediary organisations. On the one hand, we asked these organisations for their most important insights on this sector or referrals to contact persons of the repairers to be questioned in our survey. The intermediary organisations we contacted are the following:

- Comeos, the Belgian federation for trade and services
- Recupel, the organisation for the extended responsibility of manufacturers for waste electrical and electronic equipment
- Agoria, the federation of the technology sector (including manufacturers of electrical appliances)
- Nelectra, the professional federation for the electrical sector
- Ifixit, a company and global community of people helping each other to make repairs
- Contact group for the Limburg Industrial Regions (CLI), an umbrella organisation for business clubs in the Belgian province of Limburg
- The Public Waste Agency of Flanders (OVAM) and the Service Public de Wallonie
- Unizo, Union of Independent Entrepreneurs, a Belgian association of entrepreneurs, small and medium-sized enterprises and liberal professions

The mapping of the repair sector for small household electrical appliances was compiled by extensive desk research and expanded during the various in-depth interviews. We looked for a good mix of contacts for the mapping, taking the following factors into account:

- Status of the companies (independent, service centre, linked to a retailer, manufacturer)
- Authorised or not authorised by a manufacturer to carry out repairs based on guarantees
- Product range (small electrical appliances as the core or side business)
- Services offered (sales, home repairs, sale of spare parts etc.)
- Location

We conducted twelve in-depth interviews with three authorised service centres, one independent repairer, one independent sales company with its own independent repair service, one logistics service provider with an authorised repair service, two manufacturers, two retailers and a second-hand shop and the umbrella organisation of second-hand shops, charity shops and repair / recycling shops (Herwin).

Our survey grouped these companies based on the following criteria, as listed above:

	Organisation	Legal status	Authorised / not authorised	Product range	Service providers	Location
1	Servilux	Service centre	Authorised	Core business	Repairs in a workshop, home repairs & sale of spare parts	Hasselt, Belgium
2	EasyRepair	Service centre	Authorised	Side business (of a multimedia company)	Repairs in a workshop & sale of spare parts	Deinze, Belgium
3	Service Center Pringels	Service centre	Authorised	Side business (of a company selling brown goods and white goods)	Repairs in a workshop, home repairs & sale of spare parts	Heusden-Zolder, Belgium
4	Dokter Elektro	Independent repairer	Not authorised by a manufacturer	Side business (of a company selling white goods)	Repairs in a workshop, home repairs & sale of appliances	Ghent, Belgium
5	Vanden Borre	Retailer with its own repair service	Authorised	Side business	Sales of appliances & repair services	Belgium
6	BSH (Bosch and Siemens Home Appliances)	Manufacturer with its own repair service	The parent company gives the authorisation	Side business	Sale of appliances, repairs in a workshop, repairs at home & sale of appliances	Belgium
7	Samsung	Manufacturer	The parent company gives the authorisation	Side business	Sales of appliances	Belgium
8	Lidl	Retailer without its own repair service	Not authorised by a manufacturer	Side business	Sales of appliances	Belgium
9	VLS Henrotte	Logistics service provider including repair services	Authorised	Side business	Repairs in a workshop & logistics services	Alleur, Belgium
10	Kringwinkel Antwerp recycling shop	Social economy company	Not authorised by a manufacturer	Side business	Sale of appliances and repairs in a workshop	Antwerp
11	Herwin (the association of second-hand shops / recycling shops)	The umbrella organisation of social and recycling companies in Flanders	Not authorised by a manufacturer	/	Support for the recycling shops in Flanders	Flanders
12	Elektro Van Assche	Independent vendor with its own repair service	Not authorised by a manufacturer	Side business	Sale of appliances and repairs in a workshop	Zingem, Belgium

**Disclaimer:** The opinions expressed in this study are neither those of Möbius, nor of Repair&Share or De Transformisten, but of the various parties who were interviewed.

Based on these in-depth interviews, we gathered information on the following subjects:

- The barriers, advantages and applicable laws that professional repairers encounter in their repair work for a sustainable future (on a technical, organisational, financial, legal and economic level),
- To what extent do professional repairers feel represented by the current sector federations and policy makers,
- Possible suggestions that professional repairers have made to stimulate the Flemish / Belgian repair sector by official policies, as well as how they view current official policies.

The conclusions in this report (published in Spring 2021) provide a first in-depth insight into the current repair sector in Flanders, but are not necessarily representative of the entire sector. This report is based on twelve different in-depth interviews and therefore reflects the views of the different interviewees.

## 2. Survey of the repair sector for small household electrical appliances

### 2.1 Description of the range of small household electrical appliances

De Transformisten and Repair & Share asked us to investigate appliances which are also repaired in Repair Cafés. Repair Cafés usually repair devices which the consumer can carry. This product range includes, for example, irons, coffee machines, waffle irons, kitchen robots, kettles etc. There are three criteria for the repair work required for this group of small household electrical appliances.

#### Purchase price

For these appliances, there is a big difference between low-cost and high-cost appliances, for example market prices can range from 30 euros to 2,000 euros for a coffee machine. The purchase price will also have a major impact on whether an appliance should really be repaired. An economic trade-off will always be made between the cost price of repairing an appliance versus the cost price of a new, similar appliance.

#### Does the appliance heat up or not

Another distinction that we can make here is between appliances which are heated up and appliances which are not heated up. Appliances which are heated up often function using steam and therefore also water, such as a steam iron. These appliances require more maintenance than appliances which do not use water. Water is therefore one of the biggest causes of problems for small household electrical appliances and this product group therefore also requires the most repairs.

#### Number of component parts

Small household electrical appliances are generally considered to be easy to repair. An espresso machine turns out to be the most complex appliance to repair, since most of its component parts are contained in a very compact casing.

The appliances (within the scope of this study) which are most often repaired according to the different interviewees are the following:

- Steam irons
- Coffee machines
- Vacuum cleaners
- Deep fryers and waffle makers
- Bread ovens
- Microwave ovens

## 2.2 Description of the various companies active in repairing small household electrical appliances

We identified the following companies active in **professional repairs of small household electrical appliances**:

- **Manufacturers** of small household electrical appliances
- **Retailers**: these may have a partnership contract with an authorised service centre (see below) or may themselves be authorised by a manufacturer. They mainly sell these appliances and do not always carry out repairs.
- **Authorised service centres**: these professional repairers are authorised by one or more manufacturers and are therefore allowed to repair certain appliances of these manufacturers based on the guarantee conditions. They do not sell any appliances, in order to guarantee their neutrality in repairing appliances of different manufacturers.
- **Independent repairers**: these repairers are not authorised by a manufacturer and may therefore only repair appliances outside the scope of their guarantee conditions. They often also sell appliances in order to create a working business model (see below).
- **Social economy actors**, like the Kringwinkels (second-hand shops) in Flanders, are not authorised by a brand and repair small household electrical appliances with a view to selling them second-hand.

An important distinction between the companies listed above is whether they are authorised by manufacturers or not. This authorisation determines whether they are allowed to carry out repairs based on the guarantee conditions for a specific brand.

**Repair Cafés** are also involved in the repairs sector in Flanders, but they operate on a voluntary basis and are not regarded as professional.

We can summarise the actors involved in the repair market in Flanders as follows:

Professional						Not professional
Authorised			Not authorised by a manufacturer			Repair Café
Manufacturers	Service centres	Retailers	Retailers	Independent repairers	Recycling / second-hand shops	

Retailers are listed in the overview above both as authorised and non-authorised professional repairers, since they are not authorised by all the manufacturers of the appliances they offer and are therefore not themselves allowed to repair all these appliances based on their guarantee conditions.

### 2.2.1 Manufacturers of small household electrical appliances

In this market there are two very big manufacturers, namely **Philips** and **the manufacturing group SEB** (a group with a multi-brand strategy: Moulinex, Krups, Rowenta, Calor etc.) Together, these two manufacturers account for about 60 - 70% of the small domestic electrical appliances market.

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A core business of manufacturers is not only selling these appliances, but also the after-sales service for these appliances. For example, at BSH (Bosch and Siemens Home Appliances), the after-sales service is also a profit centre, which means that money must also be earned with their repair work. BSH carries out about 7,000 repairs each year of small household electrical appliances based on their guarantee conditions. But they only carry out about 1,750 repairs each year of electrical appliances outside the scope of their guarantee conditions.

Some manufacturers also have their own repair workshop and their own technicians who carry out the repairs of their small household electrical appliances. These repair services also provide feedback for their product design department to identify which defects often occur so that lessons can be learned from them. Certain manufacturers, such as the ones we interviewed, make great efforts to promote their repair services. They do this, for example, by focusing on the eco-design of their appliances, product-as-a-service business models, low prices for spare parts, paying the initial research costs for repairs outside the scope of their product guarantees etc. The professional repairers we interviewed also stated in their interviews that there is a big difference between the manufacturers in promoting their repair services and in supporting the repair sector. Both BSH (Bosch and Siemens) and Samsung are already taking many initiatives in this area.

For their repair services, manufacturers often work together with one or sometimes two authorised service centres (= professional repairers) which carry out repairs for their appliances based on the guarantee conditions. They choose these service centres in order to guarantee the quality of the repairs so that they are carried out according to the correct procedures and using the correct technical components. In addition, just as with their own repair workshops, they also receive feedback from these authorised service centres about repairability of their appliances and certain common defects. For the repairs carried out based on the guarantee conditions, these service centres are paid by the manufacturers at a flat rate. These service centres also have access to all the necessary spare parts and components, as well as all the necessary technical information and manuals. However, the manufacturers are very protective of the technical information on the repairability of their appliances. According to some of our interviewees, this is to guarantee the quality of the repair services. For this reason, all authorised repairers must sign contracts and non-disclosure agreements requiring them not to share this technical information with third parties outside the repair service. In addition, only these authorised repairers are allowed to sell the spare parts of these manufacturers. However, this is not the case with all manufacturers. According to some of the respondents in our survey, some manufacturers even prohibit their repairers from selling spare parts to private individuals.

For some of their appliances, the manufacturers that we have identified work together with the following service centres for their small household electrical appliances sold in Belgium:

- Samsung
  - o Servilux based in Hasselt, Belgium
  - o CE Repair in Tervuren, Belgium (only for large white and brown goods)
  - o Service Center Pringels in Heusden, Belgium
- BSH (Bosch and Siemens Home Appliances)
  - o Zes authorised service centre in Goes in the Netherlands
  - o VLS Henrotte delivery company based in Alleur, Belgium

We found that the service centres with which the manufacturers cooperate for their appliances sold in Belgium are sometimes located in the Netherlands or other countries. This is because some of the headquarters of the different manufacturers are located in the Netherlands. It is therefore not surprising that these manufacturers work together with service centres based in the Netherlands. Many appliances sold in Belgium which need to be repaired are therefore first transported to the Netherlands for repair. In addition, small household electrical

appliances are easy to transport and these appliances are often transported to countries with lower wage costs, for example Turkey, Romania etc. in order to reduce the repair costs for the manufacturers.

Manufacturers are required by law to give two-year guarantees for their small household electrical appliances. However, manufacturers also still offer repair services for their small household electrical appliances after the expiry of their guarantees. For such repairs they have fixed repair prices which are set for each appliance. For example, with some manufacturers it costs 249 euros to repair a high-tech espresso machine, including cleaning. The service centre will give a quotation for such repair work after the expiry of the guarantee period and submit this to the customer. This quotation is often charged for, but the service centres set their own prices for their quotations. Some manufacturers are also experimenting with offering a service free of charge to customers to have their defective appliance checked and to give them a quotation free of charge (including free transport and overhead costs). Market research by these manufacturers showed that customers are mainly put off by the initial inspection costs before repair work. These manufacturers therefore hope to increase the number of their repair services after the expiry of their guarantees.

If the customer does not accept the price quotation because the price for repairs is too high or the appliance breaks down, some manufacturers apply the guidelines of Techniek Nederland (the former Uneto VNI, the Dutch organisation for the installation sector and the technical retail trade). These guidelines are based on the principle that an electrical appliance should last for a certain number of years, and if the electrical appliance malfunctions before the end of this period (for example 5 years for some types of appliances), then the manufacturer should either pay part of the repair costs or the customer should receive a coupon to buy a new electrical household appliance from one of the authorised sellers. For example, such a voucher has the following value at one of the manufacturers we interviewed:

- In the 3rd year after the purchase: 60% of the price of a new similar device
- In the 4th year after the purchase: 40% of the price of a new similar device
- In the 5th year after the purchase: 20% of the price of a new similar device

## 2.2.2 Retailers

In addition to sales, retailers also offer after-sales services, just like the manufacturers. Logistics is a major problem for retailers, however, as they receive defective small household electrical appliances made by different manufacturers and they therefore have to dispatch them to different authorised repairers. In Belgium there are different ways in which the different retailers deal with this problem.

For this purpose, the hypermarket Carrefour works together with the delivery company VLS Henrotte, for example, who have expanded with their logistics services. They were originally a logistics company which collected all the defective small household electrical appliances in a central location and then transported them to the various authorised repairers. VLS Henrotte eventually also employed repairers to meet this need. They now also serve other retailers in addition to Carrefour.

Vanden Borre solves this logistical problem by hiring its own technicians to carry out various types of repairs. Vanden Borre is the only appliance retail chain in Belgium with its own technicians, they chose to hire them so that they can carry out repairs quickly and thereby provide a good service to their customers. Vanden Borre must also be authorised by the manufacturers to repair their small household electrical appliances within the guarantee period. Not all manufacturers are willing to grant an authorisation to a retailer for repairing their appliances. Some manufacturers only allow their appliances to be repaired by their own technicians or by their own authorised

repairers (who are often based outside Belgium). According to Vanden Borre, this choice made by the manufacturer will depend on the way in which the manufacturers are organised. The retailers therefore cannot repair all the electrical appliances from all the manufacturers themselves, so they also dispatch some appliances to professional authorised repairers or to the manufacturers themselves. They receive about 7,000 appliances to be repaired per month, of which they repair about 700 appliances internally.

When a customer comes to the store with a defective small household appliance (within or after the guarantee period), the retailer will have to create a file for this repair job. When the serial number of the appliance is entered in the report file, the retailer will receive a message in the file as to whether this appliance should simply be replaced (a low-cost appliance within the guarantee period) or repaired (a high-cost appliance within the guarantee period) or whether the consumer has the option of having the appliance repaired (after the guarantee period). If the appliance is to be repaired, the retailer must record details of the breakdown and the condition of the appliance and then send it to the central warehouse. The appliance will then be repaired by the internal repair service or dispatched to service centres or to the manufacturers, depending on the terms of the contract with the manufacturer. The average time to have an appliance repaired in the repair centre of Vanden Borre is 4 days, excluding the time required for logistics and administration. The retailer Vanden Borre employs three technicians and one team leader to repair small electrical appliances, and they carry out all the repairs for all types of appliances made by all manufacturers of small household electrical appliances. The entire after-sales service of this retailer employs 170 full-time employees for all types of small electrical appliances, multimedia, audio & video equipment and white goods.

Other retailers dispatch faulty household electrical appliances back to the manufacturers or to other authorised professional repairers outside Belgium. The retailer Mediamarkt, for example, works together with the Zes service centre in Goes in the Netherlands.

### 2.2.3 Authorised service centres for small household electrical appliances

There are only a few authorised service centres for small household electrical appliances in Flanders (and in Belgium). All of these repairers also repair other electronic goods in addition to small household electrical appliances. This is partly because they have signed contracts with manufacturers as an authorised service centre and these manufacturers often make other types of appliances in their product range. Another reason for this is that there is almost no sustainable business model for repairing only small household electrical appliances and these service centres need to repair other types of appliances as well in order to make a profit.

The authorised service centres sign contracts with the manufacturers for repairing their appliances within the guarantee period and possibly also after the guarantee period. This gives them access to all the relevant technical information and to spare parts. These service centres are also audited each year by the manufacturers to check that they are working according to the relevant technical standards. For example, they must use the correct measuring equipment and this must always be correctly adjusted.

The biggest service centre of this type in Belgium is **Servilux** based in Hasselt. In addition to small household electrical appliances, they also repair TVs, DVD players, audio, video and hi-fi equipment. They are the authorised repairer for brands such as Samsung, LG, Philips, Braun, SEB Group, Panasonic etc. **EasyRepair** based in Deinze is the next biggest service centre in Belgium. They carry out repairs on about 3,000 small household electrical appliances per year. In addition to repairing small household electrical appliances, they also specialise in repairing mainly audiovisual equipment. They are the authorised repairer for brands such as Panasonic, Sony, Technics, Marantz, Denon, JBL and B&W. In addition to these two major service centres, there are several other smaller

service centres such as CE Repair, Service Center Pringels and VLS Henrotte. **Service Center Pringels** is only authorised by Samsung, but they repair white goods and brown goods in addition to small household electrical appliances for Samsung. They also often work as subcontractors for Servilux to carry out certain specialist repairs. VLS Henrotte is also an authorised repairer. They are mainly a logistics service provider who also carry out authorised repair services.

These repairers have no sales operations in addition to their repair services. Their core business is carrying out repairs (in the customers' homes or in the workshop). They do not carry out home repairs for small household electrical appliances, but they do carry out on-site repairs for the larger items in the range of equipment they repair. They do not sell any appliances or equipment because this would make it more difficult for them to make a neutral judgement about whether an appliance is repairable or not. They do sell spare parts from the manufacturers for which they are authorised. The customers they attract are mainly consumers who want a good-quality repair service. However, almost 95% of their repair orders come from the manufacturers or retailers. Few consumers go directly to the authorised service centres. According to the respondents in our survey, this is because the authorised repairers are not known and because consumers have rather limited expectations that small household electrical appliances can be repaired.

These authorised service centres repair small household electrical appliances both during and after the guarantee period. Most of their repair orders are received during the guarantee period, namely about 95 to 98%. We will assess the reasons for this in the following sections.

#### 2.2.4 Independent professional repairers and independent retailers of electrical appliances with their own repair service

Independent professional repairers are not authorised by any manufacturer to repair their appliances during the guarantee period. They can, however, repair the appliances of different manufacturers after the guarantee period. However, they do not have any cooperation based on contracts with specific retailers or manufacturers. This also means that they do not benefit from the support and training offered by the manufacturers. However, in order to be able to carry out the repairs correctly and professionally, they need access to the relevant technical information, diagnostic software and spare parts for the various appliances. To be able to use this support, they must subscribe to the brands on their information platform.

In addition, independent repairers only receive requests for repair services directly from consumers. This ensures that they do not specialise in one particular type of appliance or brand in order to serve the consumers as well as possible. This means that they also have to pay for access to the various technical platforms and diagnostic programs of the brands. In our interviews, we learned that accessing all these platforms is very expensive.

Independent repairers of small household electrical appliances are hard to find. This has a lot to do with the fact that the repair costs for small household electrical appliances are often higher than the purchase prices of a new appliance. Since independent repairers are only allowed to carry out repairs after the guarantee period, these costs are not reimbursed by the manufacturers (or retailers) and the consumers must pay these costs themselves. In practice, we see that consumers do not want to pay these high repair prices for small household electrical appliances. This is only the case for more expensive small household electrical appliances, such as a built-in coffee machine (for which the purchase price is on average about 800 euros) or microwave ovens. For this reason, we find most independent repairers working on large household electrical appliances, sometimes also on some high-cost small household electrical appliances. In order to make their business model even more viable, these

independent repairers also sell new appliances. These repairers and retailers are therefore similar to independent retailers of small household electrical appliances with their own repair service, and face the same challenges.

We interviewed the repair company **Dokter Elektro** which has been operating in Ghent for 20 years now. This repairer was previously authorised by various brands, but has now changed to become an independent repairer. They carry out about 700 repairs per month, of which only about 10 repairs per month are for small household electrical appliances (such as coffee machines). The reasons why this repairer decided to no longer be authorised are as follows:

- The low flat fees offered by the manufacturers for repairs within the guarantee period;
- The conditions for repair services imposed by some manufacturers (for example, visiting the customer within 24 hours of the reporting of a fault);
- The many intermediaries who may be involved before a fault is reported to the professional repairer.

We also interviewed **Electro Van Assche**, a retailer of electrical appliances with 3,000 m<sup>2</sup> of retail floor space which also offers repair services to its customers. They are authorised to repair large household electrical appliances by a few manufacturers, but not to repair small household electrical appliances. They carry out about 4,536 repairs annually for all types of appliances. Small electrical appliances only account for about 10 - 15% of these repairs.

## 2.2.5 Social economy actors (second-hand, charity and repair / recycling shops in Flanders)

Recycling shops are subsidised by the government for their employment of people with limited prospects on the labour market. One part of their work also involves repairing electrical appliances, including small household electrical appliances. These appliances are discarded by the consumers, and then repaired and tested by the recycling shops and sold again after the repairs to another consumer. They also collect small household electrical appliances based on agreements with certain retailers (e.g. MediaMarkt, Vanden Borre etc.) and the recycler Recupel<sup>1</sup>. The Kringwinkel Antwerp recycling shop Antwerp reported that they receive small household electrical appliances from some retailers which are still in very good condition. These are clearly appliances provided by the after-sales service which have not been considered valuable. The other half of the electrical appliances they receive from retailers is not high-quality and reuse is often no longer possible. The quality of the appliances collected which they receive from the recycling centres of Recupel is often even lower. The collected electrical equipment that was dropped to the bottom of the recycling collection containers is usually very badly damaged by the weight of the top layers of electrical equipment.

When the collected electrical appliances arrive at the Kringwinkel recycling shop, an initial visual inspection and pre-sorting of these appliances takes place. They report that of the small household electrical appliances that they collect, only a very small fraction is actually repaired, and this is only about 1% of the total volume collected. This low rate of repairs is due to various reasons:

- The sales value of small household electrical appliances is often very low, especially compared to the price of a new appliance.
- Very old devices can no longer be sold
- Some appliances are dated (e.g. carving knives which are no longer in demand today)
- Lots of appliances cannot be repaired

<sup>1</sup> Recupel is the organisation for the extended responsibility of manufacturers for waste electrical and electronic equipment

- They do not even try to restore many of the low-quality old appliances that are collected

The Kringwinkel recycling shops also mainly repair vacuum cleaners, coffee machines, irons and kitchen robots because there is still the greatest demand for these and the repair costs are still worthwhile from an economic point of view. Despite the fact that the recycling shops have lower wage costs than the other professional repairers, they also have difficulties in creating a sustainable business model for the repair of small household electrical appliances. Since they deal with other types of appliances in addition to small household electrical appliances and they don't have to make a profit, they can still carry out this repair work and compensate for any losses with profits from other types of products. They also see the repairing of small household electrical appliances as a training course for people with limited prospects in the labour market. They are not as performance driven as the "normal" professional repairers and the employees can take time to learn repair skills and go on to work on electrical appliances which are more difficult to repair.

The recycling shops are not authorised for repair work by the manufacturers. However, they do have various repair procedures and tests required by the federation of recycling shops (Herwin) which they must follow or carry out. They also have free access to tools such as Encodex and Tradeplace<sup>2</sup> from the recycling agency Recupel to support their repair work. They are also audited by Recupel and the Public Waste Agency of Flanders<sup>3</sup> to check that they are following these procedures correctly. They must also be able to trace all their goods. During the repair process, they give each repaired item a unique bar code on which all the stages in the repair workshops are recorded. However, for small household electrical appliances, they do not record the customer data due to the large administrative workload this would require, but for all large household electrical appliances, the customer's data is recorded with each sale.

Several recycling shops are starting to consider how to also offer repair services to consumers.

## 2.2.6 Repair cafés

Repair cafés are local meeting places where citizens can repair their broken items under the supervision of volunteer repairers. Unlike professional repairers, they have an obligation to make their best efforts but not an obligation to achieve results. An advantage of the repair cafés is that the owner of the appliance is always present so that the repairer can ask questions about the problems that the small household electrical appliances have had. This reduces the time required by the repairer to identify the problems and thereby also the time required to make the repairs. On the other hand, the repair cafés do not have access to the necessary technical information or spare parts. Repair cafés as such are not part of this study, but the professional repairers were asked how they feel about repair cafés.

<sup>2</sup> Tradeplace and Encodex are internet platforms where many manufacturers provide technical information about each appliance that is put on the market (electrical circuit diagrams, technical information and the necessary spare parts for repairs).

<sup>3</sup> OVAM is the Public Waste Agency of Flanders

### 3. Description of the professional repair market for small household electrical appliances in Flanders

Within the repair market for small household electrical appliances, there are two different markets, one for appliances during and one for appliances after their guarantee period. Only authorised repairers are allowed to carry out repairs on appliances during their guarantee period. By law, the manufacturers are obliged to grant a guarantee period of two years. This period can be reduced to 1 year for second-hand goods.

Some manufacturers and retailers also give consumers an option to extend this guarantee period, sometimes this is a commercial offer and in other cases the consumer pays for this extended guarantee.

However, according to two of our interviewees, the repair market has evolved from repairing or replacing components to replacing modules. This means that previously only the components that were broken were repaired. Today, the small components are no longer repaired separately, but appliances are assembled in modules and an entire module is replaced. This has the effect that the cost for spare parts or components used to be lower, but staff costs, on the other hand, were higher. Replacing single components required much more detailed work by the repairer, since the components had to be soldered in place again, for example.

#### 3.1 The authorised repair market for appliances within their guarantee period

The market for repairs of small household electrical appliances is mainly for items within their guarantee period. Even the market for repairs to appliances within their guarantee period appears to be a difficult market for authorised repairers in Flanders to remain viable due to the unprofitable business model (see below). The interviewees all reported that it used to be easier to operate in this market. This is mainly due to the high wage costs of the professional repairers' staff, as well as the high overhead costs (logistics costs, administration for the manufacturers, customer services / telephone bills etc.)

Our interviewees have different opinions as to whether this market for repairs within the guarantee period is growing or declining. The arguments for a growing repair market are mainly that the market for small household electrical appliances is growing and so is the ecological awareness of consumers. In contrast, the potential reasons for a declining market are the current disposable culture of consumers and an ever-growing need to receive repaired appliances quickly. At Bosch and Siemens Home Appliances (BSH) and Samsung, for example, we are seeing an increasing number of repairs of small household electrical appliances, but they both also have an increasing market share in their sales of this type of appliances. For the time being, we cannot confirm a trend of a growing or declining repair market for small household electrical appliances based on the recorded figures (see also section 8).

European legislation<sup>4</sup> gives consumers the right to choose between repairs or replacement of their appliances at no cost. Manufacturers often have internal guidelines not to repair low-cost small household electrical appliances. The authorised professional repairers then only have to complete some administrative procedures and the consumer will receive a new appliance or be refunded. These guidelines are different for each manufacturer. Samsung, for example, has a policy of repairing all its appliances regardless of the repair costs (this does not include the accessories).

Who will repair the defective appliance depends on the choice made by the consumer. The consumer can choose to take the defective appliance directly to the manufacturer or to the retailer. If the retailer has a repair service under its own management and is authorised for this by the manufacturer, the appliance will be repaired by its own technicians. If the retailer does not have a repair service, or its in-house repair service is not authorised to repair the appliance, the retailer will send this appliance to the manufacturer for repairs or to an authorised repairer with whom the manufacturer or retailer has a contract.

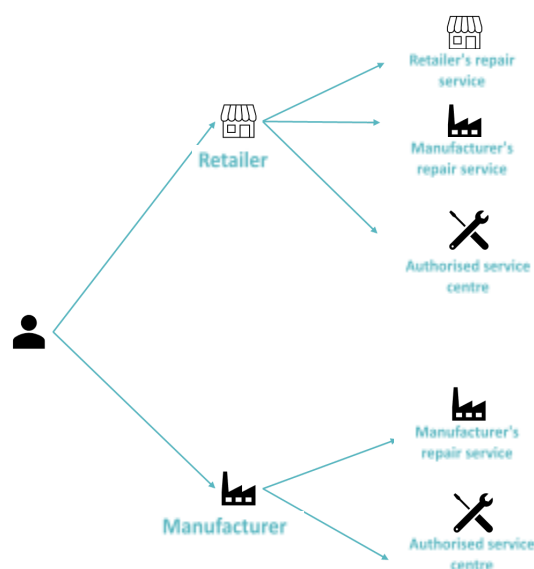


Figure 1 - The repair market for appliances within their guarantee period

If the consumers take their defective appliances to the manufacturer, these appliances will either be repaired by the manufacturer's own technicians or repair service, or by an authorised service centre with which the manufacturer has an exclusive contract. This also depends on the choice of the manufacturer. Samsung, for example, does not have its own repair service and will always send broken appliances to the authorised service centres they work with. BSH (Bosch and Siemens), on the other hand, have their own technicians and are more likely to carry out their repair work themselves if consumers bring or send back their broken appliances to the manufacturer.

It is very unusual for consumers to take their defective appliances directly to an authorised service centre; this only accounts for about 2 - 5% of the requests for repairs received by the authorised service centres. If consumers go to these service centres to request repairs, it is often due to word-of-mouth recommendations from satisfied customers or advice from the retailers themselves.

<sup>4</sup> The EU Consumer Sales and Guarantees Directive



## 3.2 The repair market for appliances after their guarantee period.

Our interviewees all agreed that the repair market for appliances after their guarantee period has declined sharply in recent years and is likely to contract further given the current circumstances. According to our interviewees, this is due to the high repair costs compared to the prices of new appliances. One of the interviewees stated that their experience showed that if the cost price of the repairs is more than one third of the price of a new appliance, the consumers almost always choose not to repair their appliances.

The imbalance of the high repair costs compared to the price of a new appliance has increased in recent years for various reasons, namely:

- Rising labour costs
- An increasing market share of low-cost appliances
- The growth of e-commerce with very competitive prices
- Impatience of the consumers due to long delivery times for spare parts and therefore also long repair times for appliances

As a result, there is hardly any repair market in Flanders for small household electrical appliances after their guarantee period. However, some interviewees stated that they have been questioned very often about this subject recently and expect that measures will be taken to change this situation with policies and action by the government to boost this market.

In addition, the interviewees state that most people make little effort to have their small household appliances repaired. Due to the current disposable culture, most people do not usually bring back their defective appliances to the retailers for repairs. If consumers do ask to have their appliances repaired after their guarantee period, they are often discouraged by, for example, the high prices and the long time required for repairs, according to the respondents in our survey. During the interviews, several interviewees also expressed the suspicion that the sales staff of the retailers sometimes advise the consumers not to have their appliances repaired.

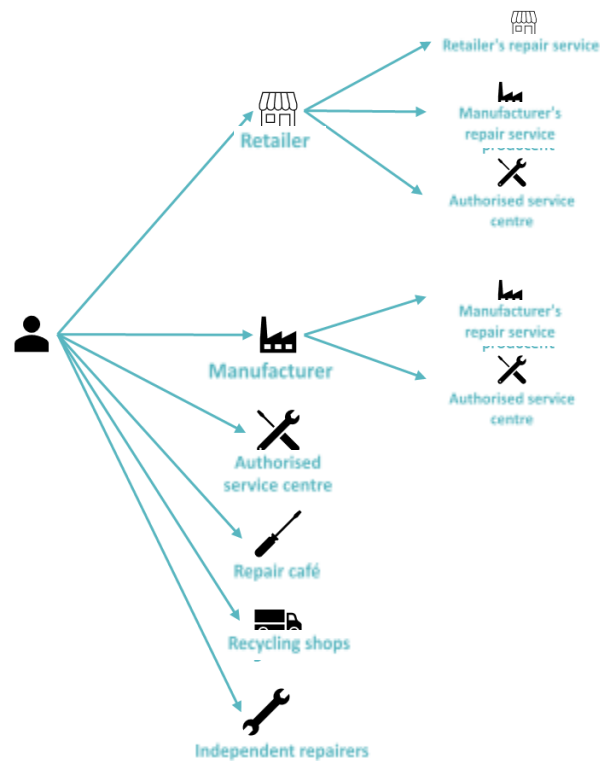


Figure 2 - The repair market for appliances after their guarantee period

Who will repair the defective appliance depends on the choice made by the consumer. As in the market for repairs within the guarantee period, the consumer has the choice to take a defective appliance directly to the manufacturer or to the retailer. The manufacturers or retailers may also offer an extended commercial guarantee in some cases, which is often 3 or 5 years instead of the legally required guarantee period of 2 years. In such cases, the manufacturers or retailers will also have to pay the repair costs, as with appliances with the normal guarantee period (see section 3.1).

After the guarantee period (after the legal and commercial guarantee period), they can still offer repairs, but the consumer will have to pay all the repair costs. In such cases, the customers will always have the choice of whether or not to have their appliances repaired. Vanden Borre, for example, has a price list for accepting each type of appliance for repairs after the guarantee period. This is a fixed amount that the consumers must pay if they bring in their appliances for repair after their guarantee period. If the actual repair cost for an appliance is greater than the charge for accepting the appliance for repairs, the customer will be given a quotation for the additional cost of the repairs, and here too the customer can choose whether to accept this or not.

After the guarantee period, the consumer can also contact an authorised service centre or an independent repairer or retailer offering repair services. In addition, the consumer also has the option of going to a repair café or requesting repair services at a recycling shop. Due to the high repair costs for appliances after their guarantee period, it is more likely that a consumer will go to a repair café or a recycling shop to repair an appliance after the expiry of the guarantee period instead of going to the more expensive professional repairers.

## 4. Advantages and difficulties for the professional repairers in Flanders

In this section, we will first present the advantages and difficulties for **authorised professional repairers** in a map. We will identify the success factors and risks in their internal operations, as well as the external threats and opportunities they face today.

We have chosen to present a more detailed analysis in this section, since the repair market for appliances within their guarantee period, in which the authorised repairers operate, is still the main repair sector in Flanders and Belgium. So in this section, as described above, we have assessed the service centres and the authorised repair services at retailers. Many of the success factors and risks, as well as the threats they face, are similar for all of these repair services. Finally, we also report on the non-authorised repairers, i.e. the independent repairers, repair services at independent retailers and the recycling shops, and other success factors and risks.

### 4.1 Success factors for the authorised professional repairers

Authorised repairers must be able to process a large **volume** of repairs to small household electrical appliances in order to be successful today. This is because of the low flat-rate payments which authorised repairers receive from the manufacturers for repairs to small household electrical appliances (for example, 9 euros for the repair of a Senseo coffee machine and 11 euros for the repair of an iron). In order to be able to work with these low prices, they retrain their staff to be **specialists for specific appliances** so that they can repair them very efficiently and quickly. If an appliance cannot be repaired within half an hour, the repairer will not make any profit from this. A large volume of appliances to be repaired is therefore required for the repairer to make a profit from this work.

If the repairer is also involved in the **sale** of new appliances, then a repair service can be a way of retaining customers and increasing customer satisfaction. They can also, for example, sell new appliances to replace appliances after their guarantee period or if the repair costs are too high. They will therefore have the option of distributing their high overhead costs among other areas of their operations. Since service centres do not sell appliances, only occasional spare parts, this only applies to retailers or independent retailers with a repair service (for example Vanden Borre or Elektro Van Assche).

In addition, it is also an advantage for the authorised repairers **that they are repairing the same types of appliances for the same manufacturers for years**. This is in addition to the fact that the repair technicians working for one authorised repair service specialise in particular appliances. As a result, they also become increasingly familiar with the different versions of these appliances of the specific manufacturer. In this way, they know their technical information very well and they no longer lose time looking up the technical information and examining the manuals before they can carry out a repair job.

A **fast service** for customers is also seen as one of the most important success factors for satisfied customers and therefore also for an efficient repair service. These are some of the few advantages for authorised professional repairers in Flanders, compared to the repair work which some retailers or manufacturers can offer, where repairs are sometimes carried out outside Belgium, making the waiting times for the customers even longer.

The repairers can achieve fast repair services by on the one hand having sufficient staff to carry out the repairs quickly. And on the other hand by quickly having the spare parts available to carry out the repairs. For this reason, some repairers keep a **stock of certain common spare parts**, the so-called 'fast runners'. Here too, the volume of repair jobs is an important factor. The greater the volume of repairs a repairer can carry out on one particular appliance, the more sense it makes to keep a stock of specific spare parts. Some repairers also stated that they also kept a stock of spare parts which can be used for different models of appliances. This concerns, for example, fuses for microwave ovens, oven lamps, microwave oven door locks etc. However, this is not possible for all component parts, such as a microwave oven door, which is different for every type of microwave oven. One respondent suggested that standard parts for appliances could be a possible solution for this.

If a repairer wants a greater market share of repair jobs for appliances after their guarantee period, it is important that the **spare parts from the manufacturers** are cheap. Compared to other brands, Samsung spare parts are very cheap. They want to win customers who are as loyal as possible and so they make things as easy as possible for their customers. Also in their repair work, they want to serve their customers as well as possible with good and affordable repairs.

They also tell all their customers that the correct **technical information and access to spare parts** is crucial for good repair services. The manufacturers are responding to this by giving their authorised repairers access to all the necessary technical information and the necessary **training** for their repair technicians.

## 4.2 Risk factors for the authorised professional repairers

The **diagnosis** of a fault can take a lot of time according to some professional repairers. This also accounts for a large part of their staff costs. It is much easier for a repairer if the consumer is still on site so that the repairer can continue to ask questions about the type of fault, when it occurred, for example, etc. This is impossible with appliances submitted for repairs anonymously. If the necessary information is not correctly recorded in the store or by the manufacturer, this sometimes requires extensive testing of an appliance before the fault can be identified. In addition, it is not always known by the repairer what the history of an appliance is. For example, what were the previous faults and repairs, and if these facts are not known, this can make the search for the cause of a fault more complicated and longer.

In addition, repairs are still mainly carried out manually. The high **labour costs** and generally high **prices for spare parts** mean that the price for a repair after the guarantee period is often not economical for the consumer. Especially when compared to the low prices for a new appliance.

According to our interviewees, the professional repairers also find it increasingly difficult to achieve a good economic model for professional and authorised repair services. The wage costs are the main factor in making the costs of repairs so high. According to one of the respondents, the professional repairers for small household electrical appliances are members of the **joint committee** for electricians. The trade unions of electricians are very strong, which means that they have very good wages and working conditions. This also gives the professional repairers very good wages, but this creates a negative effect of making their business model more difficult due to these high wage costs. The fact that they are members of this joint committee for electricians can make life harder for the repairers. They need their own joint committee for the repair sector, so that they can have good wages which at the same time will not make their business model difficult to achieve.

In addition to the high labour costs, the authorised professional repairers are also faced with the cost of **investments** which they should make in computer science so that their **IT systems** are compatible with those of

the manufacturers. According to some professional repairers, this increases both their **administrative work** and thereby also their **overhead expenses**. This also requires significant investment costs which cannot always be paid by smaller professional repairers. Often the defective appliances also have to be transported from the manufacturer or retailer to the professional repairer, and if these **logistics costs** are passed on to the professional repairers, this makes it even more difficult for them to have a good business case.

In addition to the increased costs, these transport logistics result in **longer waiting times for the consumers** who have increasingly higher expectations for fast repair services. On top of that, there can be **long delivery times for the spare parts**. These are often long (2 - 7 days or sometimes even longer depending on the manufacturer), which means that the consumers have to wait a long time for their repaired appliances. And this is in a world where consumers can receive a new appliance the next day from bol.com or cool blue or other online platforms.

For the manufacturers, these long delivery times for spare parts are often a cost factor, because they have to have a central store for all their components in order to reduce their logistics costs. Some authorised repairers, for example, also have to pay additional logistics costs for orders for spare parts under 500 euros. The repairers must therefore combine their orders sometimes in order to be able to order parts cost-effectively. This also prolongs the waiting times for the consumers. In addition, some retailers also have a policy that if an appliance is not repaired within 14 days after the consumer has brought it in for repairs that the customer will receive a new appliance, despite this appliance still being repairable. For other types of appliances (e.g. TVs), some retailers and manufacturers will give the consumer a replacement appliance temporarily. This is not feasible for small household electrical appliances, as these are often not the most hygienic appliances. In addition, 'small household electrical appliances' include a wide range of types of appliances, and it is not possible to have all these types of appliances in stock for the event of possible faults.

The considerations above are only applicable if the spare parts are still available. However, the repairers reported that some manufacturers **do not have spare parts** in stock. For example, manufacturers no longer have spare parts for devices that are five years old or the spare parts are no longer in stock. This can prevent the repairers from making the repairs. However, the repairers informed us that this depends very much on the manufacturers concerned, who may have very different prices, availability and delivery times for their spare parts. The repairers informed us that some manufacturers score very well in these areas, if the circular economy and repairs are part of their strategy.

There is also nothing in Belgian law about the **maximum repair time for appliances**. This creates the opportunity to offer repairs as cost-effectively as possible. In addition, there is no pressure on the retailer to deliver these appliances quickly to the professional repairers, even if they try to organise their transport logistics as efficiently as possible. However, this often pushes the consumers to buy a new device that they will receive much faster, according to some of our respondents.

Another major risk for the authorised service centres is their **dependence on the manufacturers**. The authorised professional repairers adjust their operations to the requirements of the manufacturers, but if they revoke their authorisation and give the exclusive repair contract to another party, all the investments and job security of the authorised repairers will be lost.

Due to the strong competition between manufacturers, and also under the influence of retail chains such as MediaMarkt and online retailers such as Amazon, Bol.com etc., there is very high pressure on prices in the market for new small household electrical appliances. For the manufacturers it is a very difficult balance between the quality and low prices of their appliances. It was reported in our interviews that the **repairability** and the **service life of the appliances** suffer due to this pressure. In addition, appliances are increasingly complex due to the efficient and optimised production processes. Yet the product design is of much less concern to the repairers we surveyed than the other risk factors described above.

### 4.3 Opportunities for the authorised professional repairers

A number of manufacturers of small household electrical appliances have recently focused more on the **circular economy**, which in time may create more opportunities for the reuse and repair of these appliances. For example, this will motivate manufacturers to make appliances that are easily repairable. The SEB Group of manufacturers of appliances, for example, has committed itself to make parts available for repairs for ten years and at a reasonable price<sup>5</sup>. We also see experiments with so-called 'as-a-service' appliances, where consumers do not pay for the purchase of an appliance, but for its use. This makes the pressure on prices less important and makes the repairability of appliances and the extension of their service lives more interesting. These more sustainable 'as-a-service' appliances may also benefit professional repairers, as their suppliers (the manufacturers or intermediaries) will often rely on partners for maintenance and repair services. For example, there is the Dutch start-up Bundles that offers (Siemens) coffee machines to private individuals based on a lease subscription<sup>6</sup>.

Some repairers also see that for large household electrical appliances there is already a move towards more **home automation and communicating devices** (such as 5G devices). The professional repairers expect that this trend will also develop in the sector of small household electrical appliances. This trend will make it easier to diagnose any faults in these appliances and thereby make repairs easier. However, this will only happen on the condition that the manufacturers also take into account the eco-design and the repairability of their appliances.

### 4.4 Threats for the authorised professional repairers

One of the biggest threats to the authorised repairers is the **lack of ecological awareness of the consumers**. According to the interviewees, people make very little effort to have their small household appliances repaired, and certainly not after their guarantee period has expired, when they would have to pay the repair costs themselves instead of buying a cheap new appliance. Very often they are also not aware of this solution and have little motivation to have their small household appliances repaired. In addition, several respondents stated that in today's market, consumers tend to buy new appliances instead of having them repaired, since the design and innovation of some appliances make it very tempting to buy a new appliance instead of repairing the old one.

When consumers do consider having their appliances repaired and they ask a professional repairer how much this will cost, the price quoted is often much too high. The price to repair small household appliances after their guarantee period has expired is very high. The consumer must not only pay for the man-hours for the repair work (12 - 13 euros for every quarter hour), but also for the spare parts. For most small household electrical appliances, this **price is much higher than the price of a new appliance**. Professional repairers are therefore usually unable to offer competitive prices for their repair work. If the consumers take their broken appliances to a retailer after the guarantee period has expired, the logistics costs will be added to the price for the repair work. For this reason, retailers will often discourage consumers from having their appliances repaired after the guarantee period has expired, and they recommend that the consumers should buy a new appliance.

<sup>5</sup>Source: website of the Belgian federation of manufacturers of appliances (Agoria), article on the repairability of appliances: <https://www.agoria.be/nl/Groupe-SEB-wil-hersteligheid-van-producten-garanderen>

<sup>6</sup>Source: <https://koffiemachine.org/koffiemachine-leasen/>

In addition, many manufacturers have relocated outside Belgium and many appliances are therefore also repaired there. There is also a major trend towards buying from online retailers (bol.com, amazon etc.), and they also send all the defective appliances to other countries for repairs.

The manufacturers give guidelines to the authorised repairers about whether appliances can be repaired within their guarantee period or not. Different manufacturers have different internal operations and therefore also different procedures. These internal rules sometimes set certain financial limits for repairing small household electrical appliances, such as a minimum value of the appliances. Some manufacturers require that appliances with a purchase price below 125 euros may not be repaired due to the high costs of repairs and because it is cheaper to give the consumer a new appliance. Other manufacturers, on the other hand, will repair anything. Agreements with retailers often include conditions which require that repairs cannot be carried out if they will cost more than a certain amount. In such cases, these appliances will therefore end up in the Recupel recycling collection even though they could be completely repaired. The appliances collected by the Recupel recyclers are shredded and their materials are recycled, so the recovery of valuable materials is rather limited in these cases. It is important to note here that all the respondents reported that the repairing and recycling procedures are very different for different manufacturers.

The **trend towards more home automation and communicating devices** will create some risks according to some repairers. As a result of this trend, repairers are expecting a new wave of purchases of small household electrical appliances, as a result of which the older, non-automated appliances will no longer be repaired, but will end up on the scrap heap or in landfill. In addition, in these automated devices, the importance of their software and the sharing of technical information is increasing and therefore also the importance of being authorised by the manufacturers to have access to it at all times. In addition to this trend, according to the respondents, many consumers want new appliances due to their new designs and new functions.

## 4.5 Additional factors for success and risks for non-authorised professional repairers

### Additional factors for success

For repairs of large household electrical appliances, independent repairers can charge consumers higher prices than the fixed prices charged by the manufacturers. This allows these repairers to have larger profit margins than authorised repairers. In addition, they do not have to submit to the audits and checks imposed on authorised repairers. The referral of customers takes place one-to-one and not via various intermediaries via the retailer or manufacturer, so this reduces the waiting time for the customers wanting repairs. This means that these repairers are more appreciated by their customers.

According to one interviewee, these repairers see the effect of this very clearly when there is a financial crisis. Then the non-authorised repairers see that the financial incentive for customers to order repairs increases. This is especially true for repairing the more expensive appliances. The respondents reported that with the current COVID-19 crisis the number of repairs requested, especially for the more expensive appliances, is increasing.

### Additional risk factors

Independent non-authorised repairers, unlike authorised repairers, cannot specialise in a few appliances and brands. For this reason, they also need to subscribe to various technical platforms in order to carry out the repairs

correctly on a variety of different appliances. They must also pay all their own costs for the training offered by the manufacturers.

The non-authorized repairers stated that their lack of access to the correct technical information and software updates is their greatest risk. Some authorized repairers also have difficulties with this (especially those who carry out repairs for retailers and who therefore have to repair different brands of appliances) as they are not authorized by all the manufacturers and therefore do not have access to all the information they need.

Since they have not signed a contract with the manufacturers, they do not receive appliances to be repaired from retailers or manufacturers, but only from consumers. This is also not a problem with large household electrical appliances, but it is a problem for small household electrical appliances, since the consumers lack the price incentive to request repairs.



## 4.6 Summary SWOT analysis for the professional repairers according to the different respondents

The table below provides a summary SWOT analysis for the authorised professional repairers.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Large numbers of appliances to be repaired</li> <li>- Specialised personnel for each type of appliances</li> <li>- Access to all the necessary software and technical information</li> <li>- Sufficient training</li> </ul>	<ul style="list-style-type: none"> <li>- High wage costs</li> <li>- Investments in IT systems aligned with those of the manufacturers</li> <li>- High overhead costs (telephone bills, administration etc.)</li> <li>- High logistics costs</li> <li>- High prices of spare parts</li> <li>- Long waiting time for the consumer for repairs               <ul style="list-style-type: none"> <li>• Long delivery times for spare parts</li> <li>• Time taken for transport logistics</li> </ul> </li> <li>- Unavailability of spare parts (for old appliances, due to limited stock or manufacturers who do not provide spare parts)</li> <li>- Dependence on the manufacturers for authorisation</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Trend towards a circular economy, causing manufacturers to focus more on repairs</li> <li>- More financial incentives for repairs due to the financial crisis</li> <li>- Trend towards home automation and communicating devices which will facilitate identifying faults and repairs</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of consumer awareness to request repairs for small household electrical appliances</li> <li>- Pressure for low prices for new appliances compared to the high repair costs</li> <li>- Trend towards home automation and communicating devices which will make the consumer buy new appliances</li> </ul>

Almost all of the strengths, weaknesses, opportunities and threats listed above are the same for the non-authorised repairers. However, the points listed above marked in green do not apply to the non-authorised repairers.

## 5. Impact of other actors in the repair market in Flanders

### 5.1 Repair cafés

In all our interviews, we always asked the respondents how they feel about repair cafés, and we found a possible complementarity in their repair work on small household electrical appliances. The following sections describe the views of the various actors on repair cafés.

#### 5.1.1 Views of the authorised repairers

The authorised repairers do not view repair cafés as competition but as a complementary player in the market. They also serve a different type of customers. Repair cafés mainly serve ecologically conscious consumers, while authorised repairers of appliances after their guarantee period has expired are more likely to attract consumers who are less price-sensitive and who attach importance to good-quality repairs. For example, as a consumer you also receive a guarantee for professional repairs, while repairers in a repair café do not offer a guarantee for the repairs carried out with their help. This also ensures that consumers with high quality standards mainly use professional repairers and not a repair café.

Some of the authorised repairers we interviewed also volunteer in a repair café in their spare time. They find that this is a very friendly environment where they receive a lot of gratitude from people for the repairs, while in their day-to-day job they have to deal with a lot of frustration from consumers because of, for example, the long time taken for the repairs and the high costs involved.

However, the various service centres we interviewed also believe that repair cafés should be more professional and better supported. For example, they need access to the correct technical information and spare parts. They often cannot obtain the correct spare parts because only authorised repairers are allowed to order them. They currently do not see repair cafés as competition because they carry out repairs after the guarantee period has expired and the repair costs for low-cost appliances by a professional repairer are too high for the consumer to have the repairs carried out professionally. They see the repair cafés as a good complementary partner serving the repair market for low-cost appliances after their guarantee period has expired.

For example, some of the authorised repairers we interviewed are in the process of setting up an online training centre, offering certificates to those who complete the full training course. This can form the basis for a kind of sharing platform on which consumers can find out who is certified in their area to repair defective appliances. This platform will also ensure the certification of the repairers connected to it. It puts the consumers and repairers in contact and they then have to agree how to carry out a repair job. Ideally, this platform could also provide online diagnoses of faults based on the consumers' descriptions, thereby reducing the time the repairer needs to invest in the repair job. Since these repairers have received proper training, the repairs can be carried out safely. After the repairs are completed, the consumers pay a small contribution to the repairer. These non-professional repairers can earn 500 euros a month tax-free from this work as a sideline.

However, authorised repairers who also sell appliances are sceptical about repair cafés as these citizens' initiatives do not have any authorisation from the manufacturers and therefore no access to the correct technical information and spare parts. They would never refer their customers to a repair café because they want to provide services to their customers themselves and retain them. However, the customer always has the choice.

### 5.1.2 Views of the non-authorised repairers

Their views are very similar to those of the authorised repairers who do not sell appliances. The Kringwinkel Antwerp recycling shop supports repair cafés, for example by offering repair kits containing the necessary tools and spare parts.

### 5.1.3 Views of the manufacturers

The manufacturers are not fans of the repair cafés in their current form because, in their opinion, they do not comply fully with European standards and safety regulations. Manufacturers are very sceptical about this and fear legal consequences based on product liability claims. Manufacturers are responsible for the damage caused by defects in their appliances if they do not ensure the safety that consumers are entitled to expect. This takes into account specific circumstances such as the normal or reasonably foreseeable use of the appliances. The manufacturers will probably be able to argue that an adaptation or repair of an appliance by the user, such as 3D printing of a component part and using it as a replacement part, is not the normal or reasonably foreseeable use of an appliance. Nor will the manufacturer be liable if it can prove that the defect occurred after it put the appliance on the market<sup>7</sup>. However, the burden of proof lies with the manufacturers and it is not always easy to prove that they did not create this defect and this unsafe situation. In addition, the manufacturers mainly fear damage to their reputation, as consumers may then get the idea that their brand is the cause of the unsafe situation. They also fear the use of unauthorised spare parts for the same reasons.

The manufacturers we interviewed are of the opinion that the network of repair cafés should be made professional. They believe that repairs can be done together with the consumers if the correct safety tests are carried out by the repairers in the repair cafés and on the condition that there is proper professional support. Quality labels and correct guidelines from the government should be created for the repair cafés. For example, regulations for the repair cafés can be imposed in the same way as for the recycling shops (see section 2.2.6). The repair cafés could then obtain free access to tools such as Encodex and Tradeplace from the recyclers Recupel to support their repair work.

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<sup>7</sup><https://www.agoria.be/nl/Juridische-drempels-bij-circulair-ondernemen-echt-of-gepercipeerd>

## 5.2 Professional federations

### 5.2.1 Views of the authorised repairers

The authorised repairers currently do not feel that they are represented by any professional federation. None of the authorised repairers we interviewed is affiliated with any professional federation.

The authorised repairers believe that the Belgian federation of manufacturers of appliances (Agoria), for example, could better represent them in supporting policies with the aim of promoting professional repair work more and making it cheaper. In addition, they could start a dialogue with the manufacturers to make spare parts cheaper and available more quickly. The authorised repairers always comment that there are very few remaining authorised repairers and they therefore do not consider it abnormal that they do not have any point of contact or representation with the government via a professional federation.

### 5.2.2 Views of the non-authorised repairers

One of the independent repairers we interviewed is affiliated with the Belgian professional federation for the electrical sector Nelectra. But they also stated that they feel they have very limited support. Nelectra could provide very good support for electricians and companies working in construction.

The independent repairers are mainly looking for support in technical training in repair work from the manufacturers. In addition, they also want better representation to support the policy of introducing certain measures (see also section 6) and promote better awareness of consumers of the need to repair electrical appliances.

The Kringwinkel Antwerp recycling shop feels well represented by its umbrella organisation Herwin. They are very good at lobbying the recyclers Recupel to secure fair prices and access to the appliances collected for recycling. In the initial period when these recycling shops and services were set up, there was a major focus on repairs in order to properly support the various recycling / second-hand shops in their work. In recent years, however, this focus on repairs has shifted somewhat to certain other issues.

### 5.2.3 Views of the manufacturers

Manufacturers of small electrical appliances feel well represented and supported by Agoria, the federation for their sector of industry. Agoria plays an important role in representing the manufacturers by promoting policies and the wishes of the manufacturers to make the repair of electrical appliances more professional. For example, Agoria recently advocated the opinions of the manufacturers in consultations on preparing implementation measures for the European Eco-design Directive. In these consultations, the sector federation Agoria, together with the manufacturers, drew up recommendations on which requirements professional repairers should fulfil (see the next section).

## 6. Possible policy proposals according to the respondents in our survey

During our in-depth interviews, we initially asked the interviewees an open question about which policy measures would better support and encourage them. After that, we specifically asked how they felt about certain possible measures. We took a closer look at the following measures:

- Extended guarantee periods
- Introduction of obligations for 'designs for repair' and for the provision of spare parts in the European Eco-design Directive

### 6.1 Views of the authorised repairers

The authorised repairers are in favour of a **VAT reduction** from 21% to 6% on the repairing of small household electrical and other electronic equipment. This would significantly reduce the costs of repairs for the consumers. Since the wage costs are the biggest costs for the authorised repairers, the government can also do something about the **wage costs for special professions** such as professional authorised repairers. This could be done, for example, by partly subsidising them or by using part of the contributions to the Recupel recycling system to invest in reliable repair services. To further reduce these repair costs, the repairers want the **prices for spare parts to be cheaper** and want the government to impose guidelines for the manufacturers on this subject. Spare parts should also be **made available for longer** by the manufacturers for repair work, so that the repairers can even repair older appliances correctly. Some interviewees stated that a minimum availability period for spare parts of 5 years for all manufacturers would mean a lot.

To make repairs easier, it would be good to have a **legal obligation** for both manufacturers and professional repairers to keep **information on repairs carried out available and updated throughout the service life of the appliances**, for example using QR codes. With this information, the professional repairers would have good documentation immediately available about, for example, how many times an appliance has been repaired, what the specific problems were, which parts have already been replaced etc. Better and obligatory **tracking and tracing** where the different appliances of manufacturers are located is also desirable according to them. This can be done based on a **unique sales registration** of appliances when they are sold. In the event of manufacturing defects, appliances can then be more easily recalled and repaired.

In addition, some requirements can be included in Belgian law on **the maximum repair time** for small household electrical appliances. This can dissuade manufacturers and retailers from transporting small household electrical appliances outside Belgium in order to carry out repairs there more cost-effectively. In this way, more repairs can be carried out locally in Belgium and professional repairers here can regain their competitive advantage over repairers in other countries.

Most authorised repairers are **not in favour of an extension of the guarantee period for appliances** because the consumers would then have to pay for this extended guarantee period. According to these repairers, appliances which actually contain a manufacturing defect will usually be returned for repairs within the first few months, so the current warranty period is long enough to deal with such cases. In addition, the repairers also fear that this will result in negative effects, since the manufacturers will have to cover the costs of the added risks and of other

resulting expenses. Some other authorised repairers, on the other hand, think that a 5-year guarantee should be given so that Chinese manufacturers, for example, will also have to offer the same guarantee period. Only if the manufacturers have to pay the costs for the longer service life of their appliances will the repairers benefit from a change to this longer guarantee period according to this interviewee. Certainly for small household appliances where there are no major technological developments, a longer service life should be enforced, according to this person.

In addition, the repairers we interviewed in our survey consider it wrong to base the guarantee on a specific period and not on the amount of use of the appliances. Some repairers are more in favour of basing the guarantee period on the number of times an appliance is used rather than a specific period of time. However, this will be difficult to prove. For example, a family of 6 uses a vacuum cleaner more frequently than someone who is single, and in the latter case any defects are likely to occur later.

In addition, the authorised repairers are also in favour of **better professional regulation for the repair cafés** since the repairers consider them to be good and complementary partners who attract a different type of clientèle, and who repair other types of appliances than the ones the repairers work on (mainly low-cost appliances). The professional repairers mainly see themselves as a coordination partner for the repair cafés, ensuring that they receive the right spare parts, technical information, training etc. The repairers also want the flow of information and reports back to the manufacturers to be maintained and respected.

The repairers are also in favour of complying with the recent European Ecodesign Directive and creating a **register of repairs** for professional repairers. This will enable them to repair other types of appliances from other manufacturers as well. However, the repairers made the comment that this will require extra training time for them in order to use this new technical information and this will therefore increase their repair costs for appliances which they are not familiar with. In their opinion, the most important criteria for inclusion in this list of professional repairers is proper training, both mechanical and electrical. In addition, the professional repairers must be able to demonstrate that their repair work is professional and well organised. This can be proven, for example, by the repairers being obliged to have authorisation from at least one manufacturer. The repairers also believe that audits and checks should be carried out in the workshops of professional repairers. Some professional authorised repairers also recommend that the repairers in this repair register should also not sell appliances so that they can maintain their neutrality in repairing different types of appliances.

Since the professional repairers do not feel represented in the policymaking decisions by the authorities, they have a great need to set up a **federation for professional repairers**. This can certainly also be done to include repairers of different types of product groups. Such a federation could defend their interests in dealings with the authorities as well as acting as a lobby. The repairers could then also fill the major gaps in their staff training. In addition, there is no single government department or point of contact for anything related to repairs to appliances. If this were to be created, according to the repairers, it would also be an important improvement that a minister or department could deal with the issues affecting this sector.

The most important measure that the policymakers could adopt, according to the authorised repairers, is **making consumers more aware** the small household electrical appliances can be repaired. Consumers are still insufficiently aware of the fact that small household electrical appliances are easy to repair and that they still have too much of a tendency to buy new appliances instead of repairing the old ones. According to the repairers, this increased awareness could also take place with the contributions to the recyclers Recupel, so that it is made clear to consumers that they should first consider repairing their appliances before deciding to dispose of them using Recupel. In addition, according to some repairers, a **repairs index** should also be created based on the example of the nutriscore nutrition label displayed on food products. This index could give a score of how easily appliances can be repaired after their guarantee period has expired. For example, how long the spare parts will be available, how open the manufacturers are about their technical information, how well the network of professional repairers

has been developed for this appliance etc. This will inform the customers in an objective way about the repairability of various appliances.

In addition to raising awareness among consumers, the government could also stimulate consumers by, for example, issuing coupons for repair work, similar to ecological coupons. The consumer can then use these coupons or credits for repairs to furniture, small household electrical appliances etc. Another possible incentive, in their view, could be to make repairs tax-deductible.

## 6.2 Views of the non-authorized repairers

The independent repairers are in favour of a **VAT reduction from 21% to 6%** for repairs of small household electrical appliances and other electronic equipment for the same reasons as the authorised repairers. They also share the opinions of the authorised repairers concerning **a repair register, repair index, the professional regulation of repair cafés, longer service lives of appliances, cheaper spare parts and extended guarantee periods.**

They too are strongly in favour of increasing **consumer awareness** at a very early stage by, for example, including repairs and recycling in the school curriculum. Apprentice repairers also need to be better trained to repair equipment so that we have competent repairers in the future. Some non-authorized repairers were also in favour of producing standard parts for all types of appliances.

However, these non-authorized repairers consider it even more important to provide **availability for everyone** for software updates, **technical information** and the training necessary for proper repairs. Especially in today's evolving market where home automation and the related software is becoming increasingly important.

The Kringwinkel Antwerp recycling shop and its professional federation Herwin are also great advocates for **good eco-design product standards**. If appliances are better designed to be repaired, then this will also benefit the second-hand market and the reuse and repair of appliances.

They also advocate making repair procedures accessible for everyone (or at least for everyone listed in the repair register) so that repairs can be carried out as locally as possible.

## 6.3 Views of the manufacturers

The manufacturers are in favour of a **VAT reduction** from 21% to 6% on the repairing of small household electrical appliances and other electronic equipment. The manufacturers are also open to discussing **lowering the prices for spare parts** in order to further stimulate repair work. This mainly concerns strategic decisions by the manufacturers. The manufacturers we interviewed include reuse and repairs in their strategies and see great added value in further stimulating the circular economy to further promote repairs and reuse, with lowering the price of spare parts as one of the options for achieving this.

The manufacturers are **not in favour of extending the guarantee periods**. According to them, this would lead to higher prices for household appliances since the manufacturers would have to include this risk in their price calculations. This would also lead to job losses at independent, non-authorized repairers in Flanders, since repairs of appliances within their guarantee period are mainly carried out by the manufacturers, or in collaboration with

authorised repairers which are very often not located in Belgium. An extension of the guarantee period is also no guarantee for repairs. This can just as easily result in a replacement with a new appliance. Especially for small and cheap household electrical appliances which are not repaired for cost reasons, but for which the consumer is offered a free replacement. In contrast, the manufacturers are not against an **extension of the period for the reversal of the burden of proof**. This means that the consumer must demonstrate during the first six months of the use of an appliance that a lack of conformity was already present at the time of sale or delivery. After this, the burden of proof is reversed against the manufacturer, so manufacturers are open to extending this period further. Starting from 2022, this will already be extended to one year, but manufacturers are also open to a further extension of this period.

One of the manufacturers we interviewed also stated that the idea suggested by one of the other respondents to incorporate standard components into their appliances is very difficult. This is because the component parts are very specific for each appliance and they are even different for different types of the same model. It is extremely difficult to standardise parts for all manufacturers, especially since manufacturers want distinguish their brands from other appliances.

In addition, the manufacturers are also in favour of **better professional regulation for the repair cafés** because they want safety regulations to be respected and proper repairs carried out on their appliances. Some manufacturers see this type of regulation as a kind of qualification label that the repairers should receive in order to carry out these repairs. This would be equivalent to an authorisation for which the repair café repairers must complete certain training courses, as well as having access to the manufacturers' systems in order to carry out all their repairs correctly and to register all their repairs correctly. According to these manufacturers, this is necessary to guarantee the quality of the repairs and also to safeguard the reputation of the manufacturers for their customers. These manufacturers also see this professional regulation of repair cafés as a possible opportunity for them to better serve their customers and, above all, to improve and increase local repair work.

Manufacturers are not against the creation of a repair register which could be created according to the recent European Ecodesign Directive. However, this repair register should be created with a **good regulatory framework and effective inspections so that the safety of the consumers can be guaranteed at all times**. According to the manufacturers, professional repairers must fulfil the following criteria:

- They must have a professional status and be a registered business engaged in the repair of household appliances and be operating during normal business hours. A company profile, continuity and financial stability are of fundamental importance and must be supported by:
  - proof of official company registration with a legally registered company name, VAT number, articles of association and financial details and accounts;
  - confirmation of the bank account details (stamped and signed by the bank);
  - proof that the business is licensed and registered as a home appliance repair business in the EU member state where it is based;
  - compliance with the relevant legislation.
- They should be covered by appropriate professional indemnity insurance and protection to cover their civil liability risks for their repair work.
- They must respect the intellectual property and copyrights of the manufacturer's repair information.
- They must have appropriate resources to carry out repairs of household appliances.
- They should ensure that household appliances are repaired only by persons who have completed technical or equivalent training (as an electrician or electrical engineer) approved by the EU member state where the independent (repair) operator is based.
- They must ensure that their qualifications are maintained (subject to an annual review).



- They must have proof of their minimum level of equipment available so that the necessary safety tests can be carried out according to national or European standards (e.g. the German electrotechnical standard VDE 0701 in Germany, or European standard EN 60335-2-25).
- They must be familiar with and comply with the international IEC regulations and the German standards DIN, VDE, DVGW and TAB (i.e. the German electricity, water and gas regulations) and are required to keep their technical knowledge up-to-date.
- They must be able to provide evidence that such tests have been carried out after any repairs requiring such safety tests.

## 6.4 Conclusions on the policy proposals made by the various respondents in our survey

In the table below, we have briefly summarised the sections above to provide an overview of which policy proposals the various respondents in our survey agree with and disagree with.

	Authorised repairers	Non-authorised repairers	Manufacturers
Agree	<ul style="list-style-type: none"> <li>• VAT reduction from 21% to 6%</li> <li>• Cheaper spare parts</li> <li>• Longer availability of spare parts (at least 5 years)</li> <li>• No extension of the legal guarantee period</li> <li>• Better professional regulation for the repair cafés</li> <li>• In favour of a register of repairs</li> </ul>		
	<ul style="list-style-type: none"> <li>• Raising consumer awareness</li> <li>• Repair index</li> </ul>		
Disagree		<ul style="list-style-type: none"> <li>• Standard parts in appliances</li> </ul>	<ul style="list-style-type: none"> <li>• No standard parts in appliances</li> </ul>

In addition, the different respondents also responded independently of each other in the interviews with ideas which were not mentioned in other interviews. These ideas are listed for each respondent in the table below.

Authorised repairers	Non-authorised repairers	Manufacturers
<ul style="list-style-type: none"> <li>• Wage costs for specialist professions</li> <li>• Recording repair information throughout the service life of appliances</li> <li>• Time limit for repairs</li> </ul>	<ul style="list-style-type: none"> <li>• General availability of technical information</li> <li>• Better product design measures</li> </ul>	<ul style="list-style-type: none"> <li>• Extension of the time for the reversal of the burden of proof</li> </ul>

## 7. Conclusions from the various in-depth interviews

The repair market for small household electrical appliances mainly exists within their guarantee period. After the guarantee period has expired, it is almost impossible to create a sustainable business model for repair work according to the various interviewees. Even within the guarantee period it is becoming increasingly difficult to keep repair work profitable. This is for the following reasons:

- High wage costs
- Investments in IT systems aligned with those of the manufacturers
- High overhead costs (telephone bills, administration etc.)
- High logistics and transport costs
- High prices of spare parts

These factors result in high repair costs compared to very low prices for new small household electrical appliances. In addition, it is crucial for professional repairers to be able to deliver repairs quickly to the consumers. Long delivery times for spare parts and the many necessary logistical operations can in some cases make this more difficult, according to our respondents. In order to be able to carry out the repairs properly, according to our interviewees, it is necessary to have access to all the technical information and software updates. The manufacturers only provide this information to their authorised repairers or the repairers have to pay for access to these platforms.

Almost all our respondents agree that repair cafés need better professional regulation. However, the underlying reasons for this are different for professional repairers and manufacturers. In addition, all the professional repairers feel insufficiently represented by a professional federation and need a point of contact and an organisation to defend their interests in discussions with the government.

The policy proposals which almost all the respondents agree with are the following:

- VAT reduction from 21% to 6%
- Cheaper spare parts
- Longer availability of spare parts (at least 5 years)
- No extension of the legal guarantee period
- In favour of a register of repairs with well-founded criteria for professional repairers
- Raising consumer awareness
- Repair index to show the reparability of an appliance