
The impact of Car-Pass on the second-hand market in Belgium

Final report

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Table of contents

Executive summary	6
1. The Belgian second-hand market for passenger vehicles.....	7
A. Belgian families own around 80% of the passenger vehicle fleet.....	7
B. The fleet is renewed every 16 years and the average age is on the rise	8
C. The second-hand market in Belgium is much larger than the growth of the fleet suggests	9
D. More than 650,000 cars are registered as second-hand cars in Belgium annually	10
E. The second-hand market and the market for new cars are symbiotic	12
F. The demand from Belgian consumers does not always correspond to the available market supply.....	12
G. The Belgian market is a major import and export market	16
H. The Belgian market is significantly different to the market in neighbouring countries.....	16
2. Significant developments in the Belgian car market during the past ten years	22
A. What preceded this: the focus on enhancing consumer confidence	22
B. Combatting mileage fraud becomes a priority	22
C. Economic and taxation developments in the period from 2006 to 2016	25
D. The internet as a source of information and a sales channel is gaining tremendously in importance and supports the globalisation trend in the market.....	27
E. The next ten years are also set to be exciting!	29
3. The impact of Car-Pass on the used car market in Belgium.....	29
A. What preceded this: mileage fraud in Belgium and abroad	29
B. Thanks to the implementation of the Car-Pass, mileage fraud in Belgium has virtually disappeared	31
C. Thanks to Car-Pass, prices on the domestic market are a better reflection of the actual value of the vehicle.....	43
D. Car-Pass has made the biggest difference to sales to consumers.....	45
E. Car-Pass indirectly affects other kinds of fraud, and creates growth opportunities for the sector	46
F. Unfortunately, the positive effects that Car-Pass has had have thus far remained limited to Belgium ...	46
4. What is the situation in neighbouring countries?	47
A. The correctness of odometer readings in neighbouring countries is communicated clearly in around two-thirds of the cases, but the way in which this is done varies significantly from country to country.....	47
B. In all the countries, price is the main criterion when it comes to buying a second-hand car, whereas the importance of the odometer reading varies by country. The Germans, especially, attach less importance to a high odometer reading.	48
C. The Dutch example shows the importance of a legal basis and the broad roll-out of an odometer recording system.....	49
D. Markets with a relatively new fleet, like the one in Luxembourg, also stand to benefit from a system that tackles mileage fraud	50
E. There is a registration system in France related to the ownership structure of vehicles.....	50
5. How can the Car-Pass system do more for consumers and professionals in the future?	51
A. Improvements to the existing system that would increase effectiveness	51
B. Improvements to the existing system that would increase efficiency.....	52
C. Expansions to the existing Car-Pass system.....	52

D.	The further expansion in the long term will depend on technological breakthroughs in the automotive sector and market developments in the field of mobility.	54
6.	Conclusions	55
7.	Appendix	58
A.	Interviews with consumers.....	58
B.	Stakeholder interviews	58
C.	Data analysis	61
D.	Bibliography	61
E.	Supervisory committee	64
F.	Key assumptions	64

List of figures

Figure 1: Overview of the development of the passenger vehicle fleet in Belgium (total and index) (Source: FEBIAC)	7
Figure 2: Breakdown of the Belgian passenger vehicle fleet by person registering the vehicle and region (Source: FEBIAC)	7
Figure 3: Composition of the Belgian passenger vehicle fleet by age on 31/12/2015, excl. classic cars (Source: FEBIAC)	8
Figure 4 Growth of the fleet per annum (figures based on information from the DVR, FEBIAC (the Belgian Federation of the Cycle and Motor-car Industry) and Socar Shipping Agency)	9
Figure 5: Car market turnover (Source: FEBIAC)	10
Figure 6: Trend for registered passenger vehicles (Source: FEBIAC)	11
Figure 7: Ratio second-hand versus new (Source: FEBIAC)	11
Figure 10: mileage that consumers indicated as the threshold for their purchase (findings from the consumer interviews)	14
Figure 11: mileage of cars presented for pre-purchase inspection (2011 – 2015) (source: GOCA)	14
Figure 12: overview of the cars on offer per kilometre category and type of fuel for various classified ad sites (May 2016)	15
Figure 13: Types of second-hand vehicles by popularity (results of interviews with consumers)	16
Figure 14: Second-hand car market in surrounding countries vis-à-vis Belgium	17
Figure 15: Composition of the fleet by fuel type (Source: ACEA)	18
Figure 16: Growth of the fleet 2009 - 2014 and proportion of passenger vehicles in the fleet (Source: ACEA)....	19
Figure 17: overview of the distribution per kilometre category of second-hand vehicles offered on the internet for five types of cars (source: Global Automotive Consultancy – the Netherlands)	21
Figure 18: Milestones in the battle against odometer fraud	23
Figure 19: Car-Pass certificates issued between 2006 and 2015	24
Figure 20: Awareness and knowledge about Car-Pass (results of interviews with consumers)	25
Figure 21: Method of searching and sales channels for second-hand vehicles in Belgium (results of consumer interviews)	28
Figure 22: Market situation prior to the implementation of the Car-Pass – natural reflex to mistrust and fraud	29
Figure 23: the seller gets bigger margins (y) through mileage fraud	30
Figure 24: Extra depreciation due to mileage fraud (Source: Car-Pass)	30
Figure 25: Extra maintenance and repair costs (Source: Car-Pass)	31
Figure 26: Federal Public Service Economy: average results of inspection per annum for Car-Passes (2011 – 2015)	33
Figure 27: Number of likely and highly likely fraud cases annually (Source: Car-Pass)	33
Figure 28: Consumers recognise the advantages of Car-Pass and expect that they will actually receive one on purchasing the vehicle (results of the consumer interviews)	36
Figure 29: Less mileage fraud is committed thanks to the Car-Pass (results of consumer interviews)	37
Figure 30: Question in stakeholder interviews: To what extent do you agree with these statements related to the impact that Car-Pass has had on the second-hand market? (Score 0 – 10, whereby 0 = do not agree at all, and 10 = agree completely.) With an average score of more than 7, the large majority of the respondents completely agree with the statement.	38
Figure 31: Average number of second-hand vehicles per annum by category for the period 2001 – 2005 (compared to total number of cars inspected pre-purchase) (Source: GOCA)	40
Figure 32: Evolution of the distribution of odometer readings (based on figures from GOCA, odometer readings recorded during pre-purchase inspections for second-hand vehicles)	40
Figure 33: Average proportion of inspected cars by age category (compared to total number of cars inspected pre-purchase) (Source: GOCA)	41
Figure 34: Average proportion of inspected cars by mileage category for vehicles older than 13 years (compared to total number of cars inspected pre-purchase) (Source: GOCA)	41
Figure 35: Number of km travelled per year per car (Source: FPS Mobility)	42
Figure 36: Trends in actual sales prices in the Belgian second-hand market, by mileage and age category	44
Figure 37: The benefits of Car-Pass are mainly a factor in transactions with consumers	45
Figure 38: Estimated value of fraud in neighbouring countries – conservative versus pessimistic scenario (Source: Car-Pass)	46

Figure 39: Communication on mileage in neighbouring countries and in Belgium (Source: European Commission).....	47
Figure 40: Methods of checking mileage in neighbouring countries and in Belgium (Source: European Commission 28).....	48
Figure 41: examples from Dutch odometer reports.....	49
Figure 42: Possible expansions to Car-Pass (results of consumer interviews).....	53

Executive summary

2006... the year in which the Car-Pass system saw the light of day and Car-Pass vzw was baptised. The first steps were taken many years before, with initiatives from the sector and the long-awaited introduction of the Car-Pass legislation in 2004. Today, we are ten years down the line and look back at the past decade. Has Car-Pass vzw achieved what it had in mind? How has the introduction of Car-Pass affected the sector? And what opportunities still await us in the future? Those are the key questions underlying this study.

In order to answer these questions, an inclusive approach was used whereby the opinions of consumers and stakeholders from the sector were gathered and, where possible, underpinned by quantitative data analysis. The conclusions from the various interviews and analyses make at least one important conclusion crystal clear:

thanks to the Car-Pass system, mileage fraud in Belgium has to all intents and purposes disappeared. Consumers have undergone a major psychological development during the past ten years: they no longer doubt the mileage of used cars, and consider the Car-Pass certificate and the underlying control system to be a natural part of the market. Ten years ago, the sector could only dream about such a result... What's more, consumers and stakeholders alike said that they have gained more trust in the second-hand market since the introduction of the Car-Pass certificate, and that competition is much fairer. So this means that Car-Pass vzw has already achieved its most important goal!

Alongside this, the Car-Pass system has had various other significant repercussions:

- Thanks to Car-Pass, prices on the domestic market are a better reflection of the **actual value** of the vehicle. This trend has been prompted by the fact that sellers no longer charge artificial price increases based on manipulated odometer readings, and consumers no longer have to keep a risk premium in reserve when purchasing a vehicle. This price trend developed slowly and did not trigger a shock effect in the market.
- Car-Pass has made the biggest difference to sales to **consumers**, which was precisely the intention. Consumers form the largest share of the market in the second-hand sector, and the knowledge that they base decisions on is limited. They clearly recognise the advantages of the Car-Pass system, like increased transparency, credibility and professionalism.
- Car-Pass also indirectly affects other kinds of fraud, and creates **growth opportunities for the sector**, thanks to increased consumer confidence.

Unfortunately, the positive effects that Car-Pass has had, have thus far remained limited to Belgium. Car-Pass vzw has been working hard for many years for the implementation of a European system, but so far without any ground-breaking results. The European directive that calls for a statutory ban on mileage fraud in all Member States is a good start, but it has had insufficient impact on fraudulent practices in many countries. The prevention and restriction of fraud require a proper system like Car-Pass, in which the **regular recording** of the vehicle's mileage starting from year one and **monitoring** are important elements.

In addition to the battle that Car-Pass vzw is carrying out on the international stage, a number of domestic opportunities for **improvement to and expansion of the system** have presented themselves. The interviews with consumers and stakeholders that were part of this study and discussions with Car-Pass vzw led to a set of recommendations. These are measures that can contribute tangibly to the improvement of the effectiveness and efficiency of the existing system. In addition, research respondents also mentioned opportunities for expanding the available information that Car-Pass offers to consumers, like information related to recalls not implemented, the number of previous owners or the vehicle's environmental features. Consumer protection remains the central premise for these improvements.

Several of these additional aspects require amendments to the legal framework that regulates the system for recording odometer readings. Based on input from stakeholders and consumers, the real benefits of these amendments are apparent, both for the consumer and the sector. In addition, there are a number of improvements that can be implemented within the existing regulatory framework. So the coming decade is bound to be interesting and challenging for Car-Pass.

1. The Belgian second-hand market for passenger vehicles

A. Belgian families own around 80% of the passenger vehicle fleet

At the end of 2015, the Belgian fleet comprised more than 5.5 million passenger cars. These vehicles represent more than 75% of the entire Belgian fleet, and also constituted the largest focus group for the Car-Pass system. In addition, there are around 680,000 light commercial vehicles on the road in Belgium, accounting for just under 10% of the entire car fleet.

This study focuses primarily on passenger vehicles. Since 2006 – the year that Car-Pass was launched – the number of passenger vehicles has increased by 13%. This increase is a continuation of the rising trend that started when passenger vehicles were introduced on the market in the middle of the twentieth century, and it is linked in part to the growing population index.

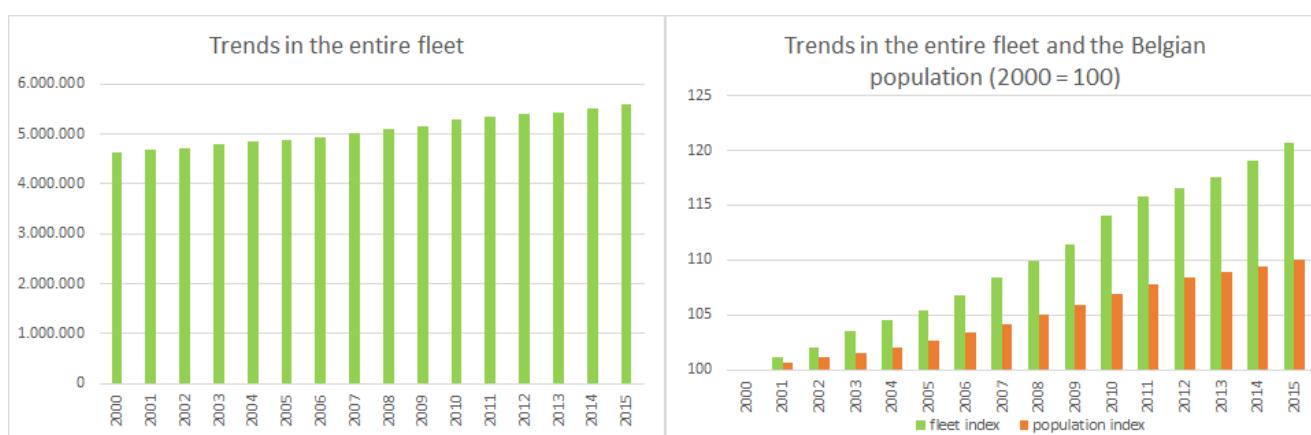


Figure 1: Overview of the development of the passenger vehicle fleet in Belgium (total and index) (Source: FEBIAC¹)

The majority of these passenger vehicles (more than 80%) are owned by families or private consumers. This is also the Car-Pass system's primary target audience, a system that was set up to improve consumer confidence in the second-hand market.

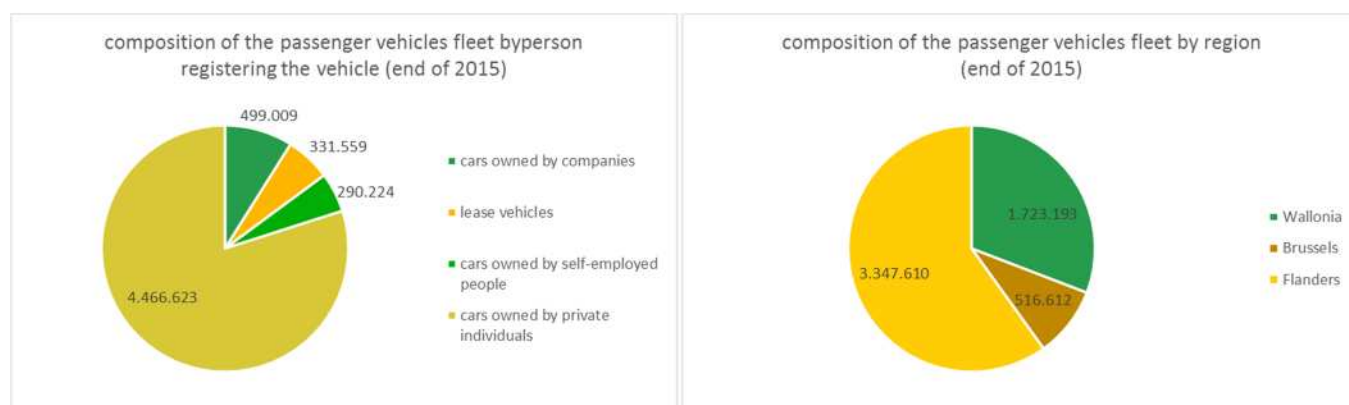


Figure 2: Breakdown of the Belgian passenger vehicle fleet by person registering the vehicle and region (Source: FEBIAC²)

¹ FEBIAC, Datadigest 2016, 5. Development of the fleet by fuel type

² FEBIAC, Datadigest 2016, 5a. Development of the fleet by type of owner and region

B. The fleet is renewed every 16 years and the average age is on the rise

The passenger vehicle fleet in Belgium is characterised by a large number of relatively new vehicles (almost 40% are less than 5 years old) and a large group of much older vehicles. The average age of a car in Belgium in 2015 was more than eight years, and this is increasing each year. The average age is older than the age of the fleet median, i.e. the 'vehicle at the midpoint of the fleet' (first registration = 2009). What is striking is that the biggest group of cars by year of new vehicle registrations consists of those that were registered in 2015.

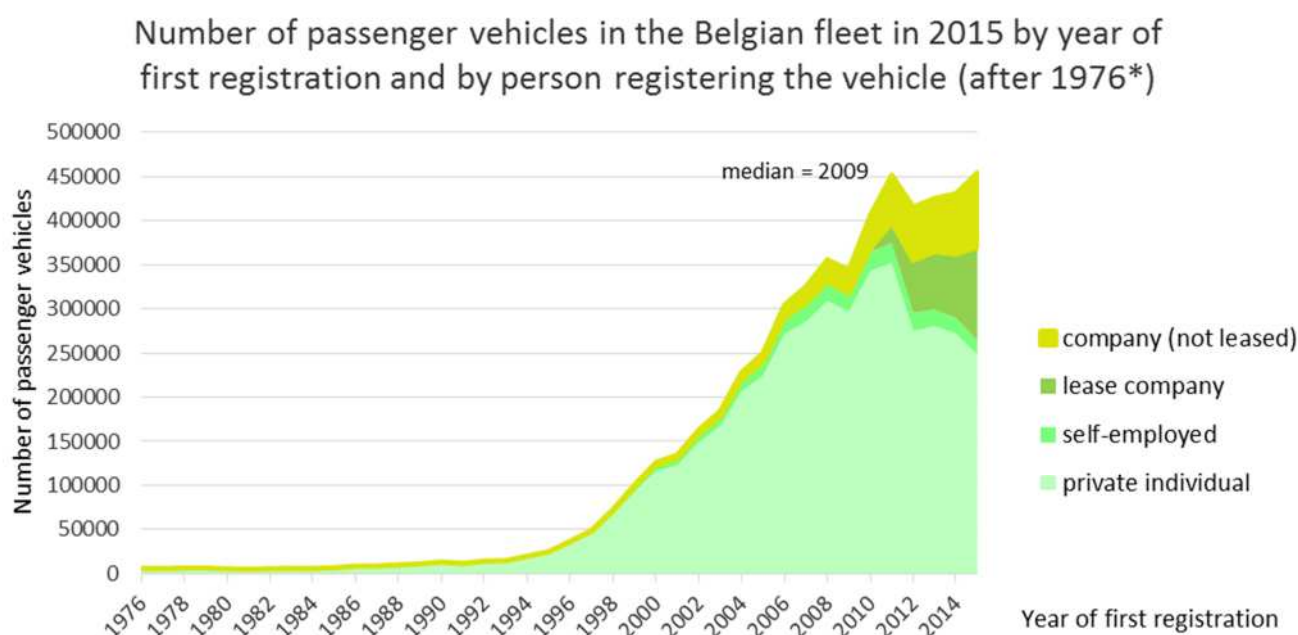


Figure 3: Composition of the Belgian passenger vehicle fleet by age on 31/12/2015, excl. classic cars (Source: FEBIAC³)

The above figure shows that there is actually no such thing as the 'average' Belgian car. The large group of very new vehicles consists partly of the lease market (so-called company cars and short-term rental or lease vehicles); this market has certainly had a major impact on the Belgian fleet in recent years. These cars are new, premium vehicles that rotate quite quickly based on the duration of the lease contracts. The median age of this fleet is one year. Those companies that purchase vehicles as opposed to leasing them also have relatively new fleets. These fleets comprise a mix of pool vehicles and rental vehicles, but also all kinds of cars that are used for travelling between workplaces. In recent years, special regulations have been included in company tax legislation that make it attractive to buy green vehicles. The median age of this fleet is three years.

Vehicles registered in the name of a private individual (hereinafter referred to in short as private vehicles) and vehicles owned by self-employed people are much older on average. The median year of registration for these cars is 2008.

On average, Belgian vehicles sent for scrapping are 15 years old. So the lifespan of a private vehicle in Belgium is relatively long. It is also highly likely that the vehicle will change ownership during its lifespan. Figures from GOCA (the Belgian association of recognised companies for vehicle inspection and driver's licences) show that around 4.4 million vehicles changed ownership at least once if not several times during the ten years since the inception of Car-Pass. This means they would have ended up on the Belgian second-hand market. Of the

³ FEBIAC, Datadigest 2016, 7. Fleet by year of first registration

vehicles traded during the last ten years,⁴ and for which we have information in the Car-Pass database, 65% changed ownership once in that period, 23% changed ownership twice, and around 12% changed ownership several times. All in all, 6.75 million transactions have been recorded in the Car-Pass database in the previous ten years (excl. classic cars).

C. The second-hand market in Belgium is much larger than the growth of the fleet suggests

As opposed to the limited growth per year of the total fleet (an increase of 76,000 vehicles between 2014 and 2015), the number of sales and purchasing transactions is considerable. These transactions result in more than 1.1 million registrations with the Department for Vehicle Registration (DVR) for new and used cars each year. The DVR registered 673,000 used cars in 2015. The growth of the fleet is calculated by taking the number of new and used car registrations less the deregistration of existing vehicles (due to export, scrapping or selling).

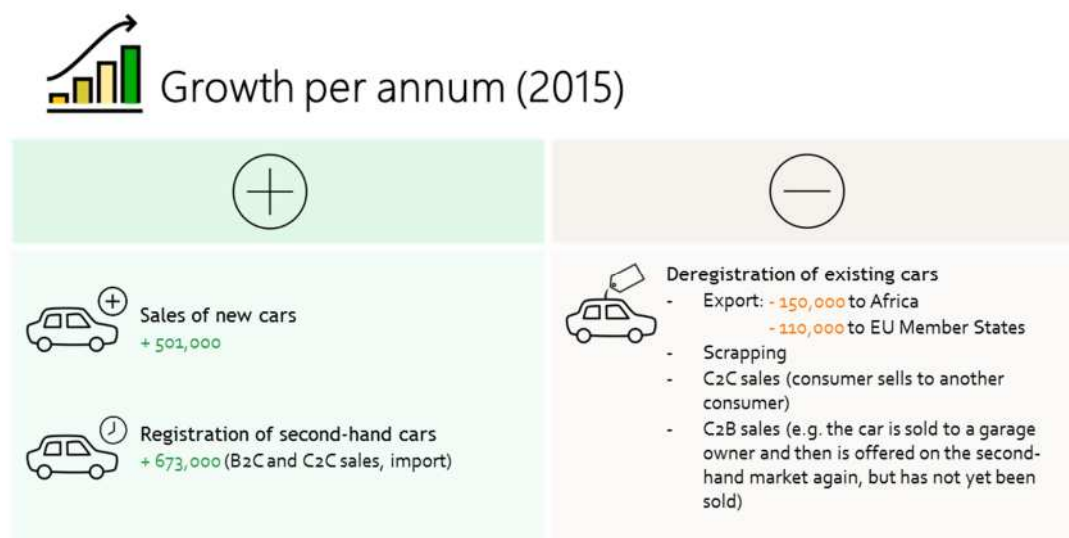


Figure 4 Growth of the fleet per annum (figures based on information from the DVR, FEBIAC (the Belgian Federation of the Cycle and Motor-car Industry) and Socar Shipping Agency⁵)

The number of transactions underlying these registrations is much larger still. From the statistics of Autoscout24⁶ and GOCA,⁷ it can be deduced that approximately 60% of the transactions for second-hand sales go through dealers. Assuming that each registration is preceded by at least two transactions with consumers (from the consumer who is the seller to the professional dealer, and from the professional dealer to the consumer who is buying the vehicle), and that several additional transactions take place between middlemen (from dealer to dealer), it means that 675,000 registrations represent at least 850,000 transactions in the professional dealer sector. An additional 250,000 direct transactions between private individuals must be added to this (40% of registrations). Therefore, the second-hand market accounts for **at least 1.1 million transactions** each year.

In addition to sales, there are other commercial activities (maintenance, logistics, shipping, etc.) that are directly or indirectly linked to the second-hand market in Belgium. It is difficult to estimate the total turnover of the second-hand market because, even though these subsectors do report on their figures, they do not

⁴ Analysis of Car-Pass information 2006 – 2015, number of times that a vehicle occurs appears in the existing history. There may be a few cars in the database of 4.4 million passenger vehicles that were traded prior to 2006. However, these transactions that occurred before 2006 have not been included here since we do not have any information about them.

⁵ Source: <http://www.traxio.be/nl/nieuws/2016/04/dossier-verkoop-export-socar-shipping-agency/>

⁶ Analysis based on the proportion of private individual sellers versus professional dealers on the AS24 classified ads site, March 2016

⁷ Analysis based on the proportion of Z plates (dealer plates) for sales inspection, 2015

indicate whether they are related to new or used cars. In Belgium, the overall market for new and second-hand vehicles combined is good for a total turnover of more than 90 billion euro. Historical figures show moreover that the market is growing significantly.

The table below shows the turnover in the car market (new + second-hand) in the period from 2012 to 2014.⁸

Turnover (x 1,000 EUR)	2012	2013	2014
Trade in vehicles	62,971,948	64,048,216	69,046,207
Servicing and repairs of vehicles	5,184,337	5,334,240	4,993,826
Trade in spare parts and accessories for cars	16,258,950	18,073,662	17,615,502
TOTAL	84,415,235	87,456,118	91,655,535

Figure 5: Car market turnover (Source: FEBIAC)

The purchase and use of cars also provides an important contribution to the Belgian state budget. Recently, FEBIAC calculated that VAT from the sale of new and second-hand cars in 2015 rose to 1.48 billion euro. At 4.7 billion euro, duties on fuel are the most important source of revenue for the government. Servicing and repairs and the sale of parts and accessories brought 4.74 billion euro in VAT into the coffers. Income from motor vehicle tax rose to a record-breaking 1.6 billion euro. Finally, registration tax for number plates fetched 35.23 million euro, plus 4.24 million euro for personalised number plates.⁹

D. More than 650,000¹⁰ cars are registered as second-hand cars in Belgium annually

1. For the period between 2005 and 2015, 1.3 second-hand cars were registered on average for each new car.

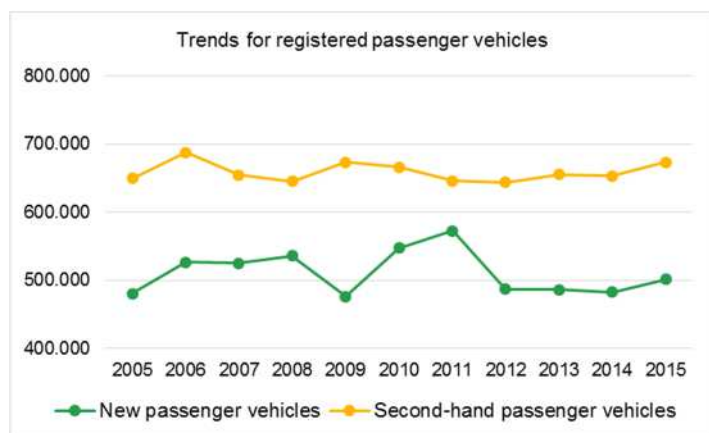
The graph below shows the trend in the number of registered passenger vehicles in the period from 2005 to 2015. During this period, the number of registered second-hand passenger vehicles remained stable, with an average per annum of approximately 650,000 registered cars. The trend in the number of new passenger vehicles registered for the same period was, however, more sensitive to various economic factors. For instance, the decline in sales of new cars in the period from 2008 to 2009 was due to the global banking and financial crisis, and the rise in second-hand sales in the same period can be explained by the introduction of various tax and relief measures (see Section 2C).

In 2015, around 1.3 second-hand cars were registered on average for each new car. This ratio differed each year in the period from 2005 to 2015. The trend of this ratio is mainly driven by trends in the number of new cars that are sold each year.

⁸ Source: FEBIAC, Datadigest 2016, 2.A.2. Turnover

⁹ Source: <http://www.traxio.be/nl/nieuws/2016/06/automobilisten-leveren-16,8-miljard-euro-op/>

¹⁰ Source: Statistics on used motor vehicles, passenger cars in circulation – corrected for short-term registrations and registrations of special vehicles (e.g. military vehicles) (FEBIAC)



For each new car that is registered, around 1.3 second-hand cars are registered.

Figure 6: Trend for registered passenger vehicles (Source: FEBIAC¹¹)

2. The proportion of second-hand passenger vehicles in the overall market for private vehicles rose in the period from 2005 to 2015.

It is not completely accurate to use the ratio of 1.3 second-hand passenger vehicles per new vehicle registered when comparing the Belgian situation with that of other countries. This is because the high number of company and lease vehicles on the Belgian market skews the picture. If we make an abstraction of the cars purchased or taken in lease by businesses and the self-employed, we note that the proportion of used cars in the private vehicles market is higher. In Belgium, on average 2.2 second-hand cars were registered for each new private vehicle in 2015. The rise in the trend started in 2011.

During the last five years, we can see a similar rise in the ratio between the number of second-hand passenger vehicles and the total number of new passenger vehicles registered. Both have remained more or less constant over the previous five years; for new vehicles this is partly thanks to a rapidly growing lease market. So the second-hand market is growing relative to the market for new cars.

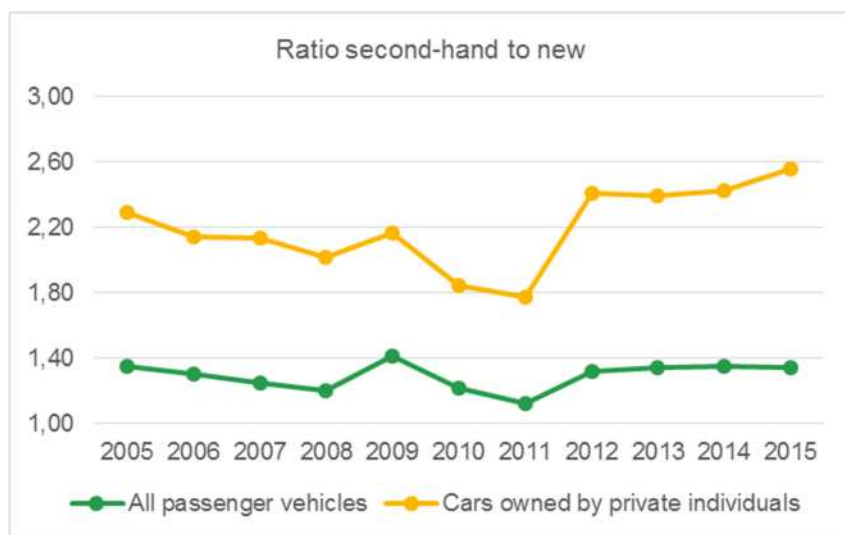


Figure 7: Ratio second-hand versus new (Source: FEBIAC¹²)

¹¹ FEBIAC, Datadigest 2016, 8.a Trend in the registration of new and used cars

¹² FEBIAC, Datadigest 2016, 8.a Trend in the registration of new and used cars

E. The second-hand market and the market for new cars are symbiotic

The second-hand market is often seen as an appendage to or a consequence of the market for new cars. But studies show that the relationship between the two markets is much more complex and intense.

- The second-hand market is highly dependent on the way in which the market for new cars is structured and evolving. After all, supply on the second-hand market is determined to a significant degree by the cars that were bought new a couple of years previously.
- On the other hand, the market for new cars also depends on the demand and pricing in the second-hand market. As an example, for leasing companies the assumed residual value of leased vehicles in the second-hand market is the most important parameter when it comes to assessing the profitability of a lease agreement. Purchasing decisions (optional accessories and trims, colour, fuel and so on) are also determined in part by an appraisal of how the markets are expected to evolve in the future.
- Brand dealers have seen their profitability fall in recent years for a range of reasons, for instance:
 - downsizing of cars purchased;
 - increased stocks;
 - a fall in the after-sales absorption rate;
 - economic unemployment.

Taken together, this has prompted dealers to search for diversification options. A stronger focus on the second-hand market has therefore become an important item for consideration among dealers. Needless to say, having an attractive selection of used cars is an important asset for attendant customer acquisition and retention.

- Discrepancies between vehicle supply and demand (type, fuel, accessories, and so on) in the domestic market have prompted a rise in the import and export of second-hand cars.

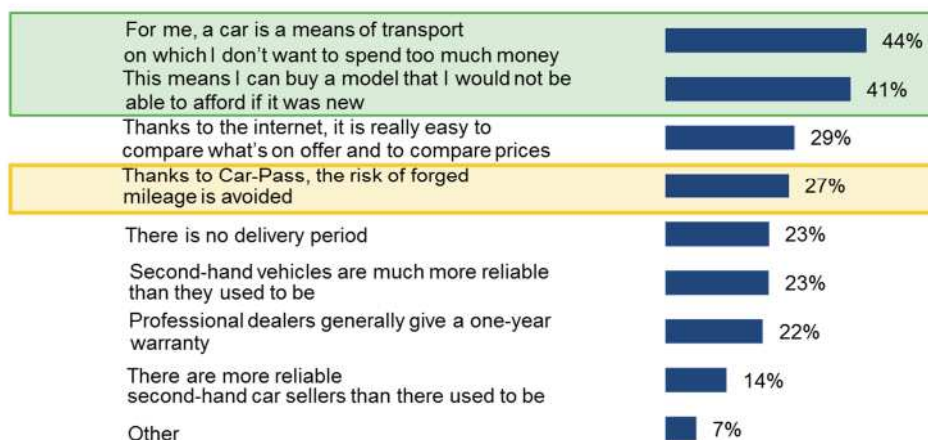
F. The demand from Belgian consumers does not always correspond to the available market supply

Based on the interviews carried out in the context of this study with 1,000 consumers who had recently bought a used car or were planning to do so, it emerged that consumers who opt for a used car use it just as much for commuting to and from the office as they do for journeys undertaken in their leisure time. So the cliché about used cars being an extra family vehicle for small trips no longer holds. Price appears to be the main motivator for consumers when it comes to opting for a used car: it allows them to buy a car that they would not be able to afford if it was new, or to keep the purchase within the budget that is spent on mobility.

For more than 1 in 4 consumers, Car-Pass is an important factor when it comes to opting for a used car. Because Car-Pass removes the risk of manipulated mileage readings, Car-Pass lowers the threshold of buying a used car for some consumers.

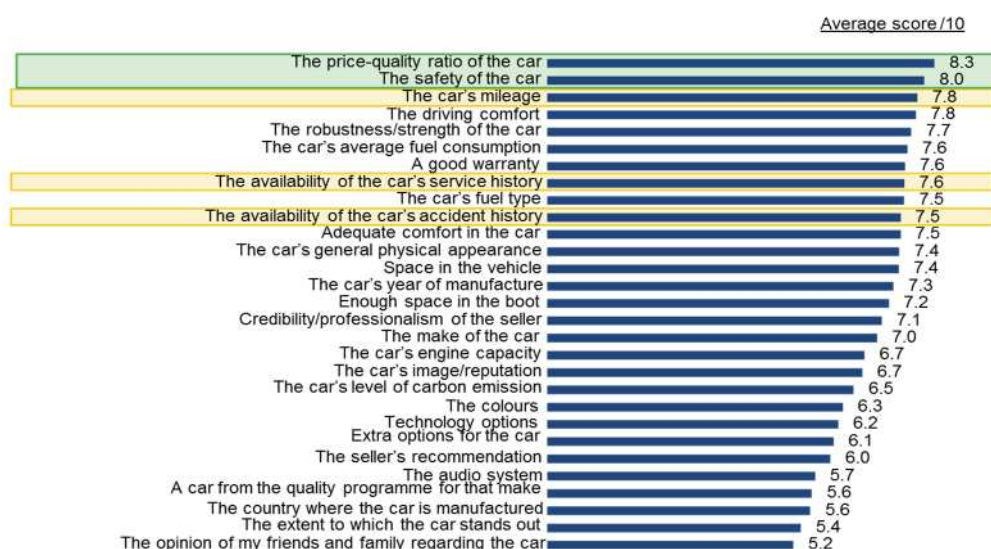
The shift in the perception (in a positive sense) of the second-hand market also plays a role. Almost 1 in 4 consumers indicated that second-hand cars are now much more reliable than they used to be. For them, this is a reason to go for a used car instead of a new one.

Figure 8: Question asked during interviews with consumers: What is/are the reason(s) for opting to buy a used car instead of a new one? N = 1,045



If we look at the most important factors that play a role in the choice of a specific second-hand car, then it is evident that price-quality ratio, safety and mileage are the deciding factors. Other factors in the top 10 are the car's driving comfort, robustness, average fuel consumption, warranty and type of fuel. Having a maintenance history comes in at 9. At 15th place, the vehicle's year of manufacture plays a less important role.

Figure 9: Question asked during interviews with consumers: Which characteristics influence your final choice for a specific second-hand car? N = 1,045



Safety and a guarantee that the car's mileage is correct are closely linked. The European Commission also associates mileage fraud with safety, and stipulates in a 2014 EU directive that 'Odometer fraud should be regarded as an offence liable to a penalty, because manipulation of an odometer may lead to an incorrect evaluation of the roadworthiness of a vehicle. The recording of mileage in the roadworthiness certificate and access for inspectors to that information should facilitate the detection of odometer tampering or manipulation. The exchange of information on odometer readings between the competent authorities of

*Member States should be examined by the Commission.*¹³ It is precisely this aspect that Car-Pass caters for and to which it adds value.

For the attributes listed in Figure 9, the interviews with consumers probed a bit further about the perception that consumers have of odometer readings. When the consumer target population was asked what the maximum mileage is for them when they are considering a purchase, it is noteworthy that the answers given were wide ranging. The large majority were looking for a vehicle with a mileage of between 30,000 km and 120,000 km. In the Autoscout24 classified ads site, we can see, for instance, that the average mileage that consumers enter during their online search for a vehicle is 86,645 km.¹⁴ According to the interviews conducted, only 1 in 4 consumers would consider buying a car with more than 90,000 km on the clock.

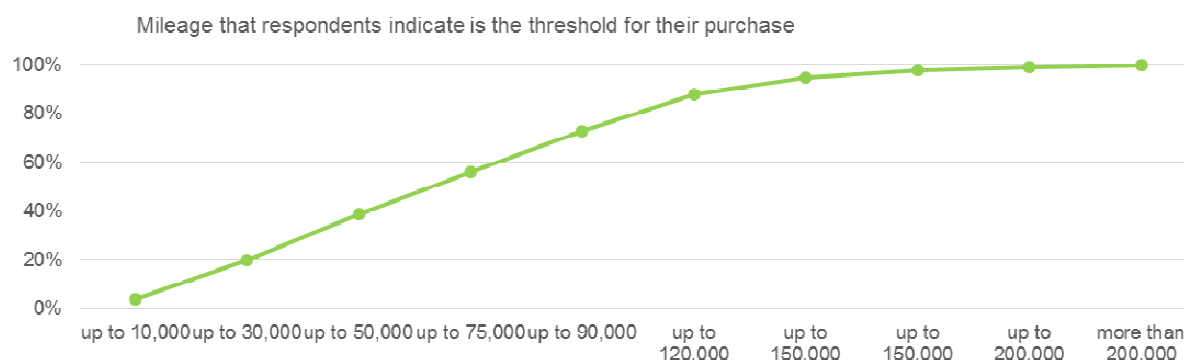


Figure 8: mileage that consumers indicated as the threshold for their purchase (findings from the consumer interviews)

It is evident that this consumer requirement is not altogether in line with market supply. The average mileage for the range of second-hand vehicles available on Autoscout24 during March 2016 was 100,089 km. On average, a car sold in Belgium in 2015 had clocked up around 117,000 kilometres.¹⁵ An analysis of the cars presented to GOCA in the period from 2011 to 2015 for a pre-purchase inspection produced the following distribution for the recorded mileage:

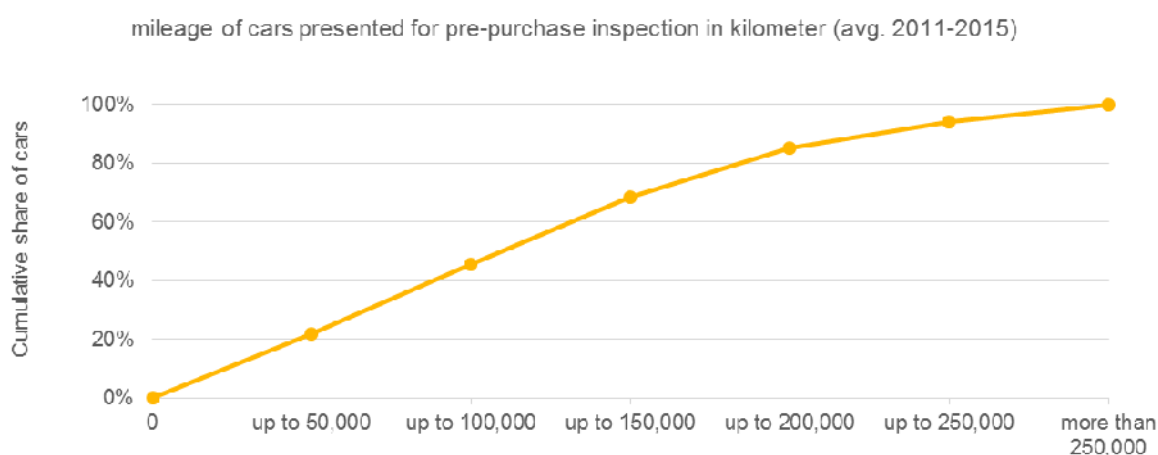


Figure 9: mileage of cars presented for pre-purchase inspection (2011 – 2015) (source: GOCA)

¹³ Source: DIRECTIVE 2014/45/EU OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC

¹⁴ Analysis carried out by Autoscout24 on information on the Belgian classified ads site

¹⁵ Analysis carried out on Car-Pass information for used car pre-purchase inspections for sale in 2015

Here, too, we see an average that is between 100,000 and 150,000 km. However, this average is relative and highly dependent on the vehicle's fuel type and year of manufacture. A study into classified ads on various classified ad sites¹⁶ shows, for instance, that diesel vehicles had clocked up far more kilometres on average than the petrol vehicles on offer in Belgium (see figure below).

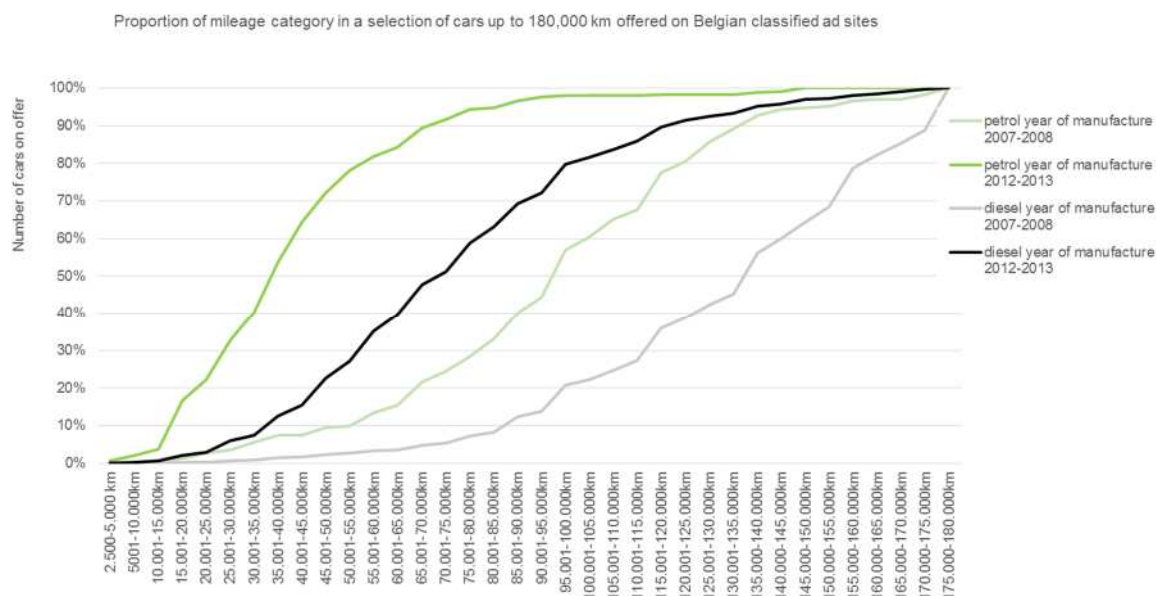


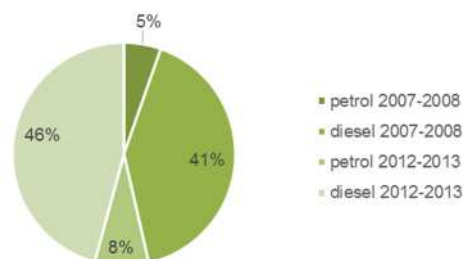
Figure 10: overview of the cars on offer per kilometre category and type of fuel for various classified ad sites (May 2016)

In the survey, consumer preference in terms of mileage corresponds most to the range of newer petrol vehicles on offer. That said, this kind of vehicle represents a mere 5% of the range on offer in the classified ads sample.

This finding on the difference between consumer demand and the available supply also emerged in the interviews held with stakeholders and sector experts in the context of the survey. It confirms that there is a mismatch in Belgium between supply and demand, for instance, when it comes to fuel type.

Or as one of the respondents in the survey put it: 'There are enough used cars on offer in Belgium, but perhaps too many of the same type and a shortage when it comes to a specific demand.' Johan Meyssen, CEO of Cars on the Web, worded this trend in a recent press release as follows: 'The supply of diesel vehicles in Belgium is quite large. The demand for petrol engines in Europe is clearly much larger than current supply.'¹⁷

Distribution of the range on offer by age and fuel type in the classified ads sample



The incentive to export certain cars, for instance cars with higher odometer readings, is additionally being driven by warranty legislation. In the online interviews, stakeholders said that it is difficult to sell a vehicle with an odometer reading that is higher than 130,000 km on the domestic market, and this is mainly because warranty costs may be too high for these cars. Sellers often have to set up a provision for the costs for work under warranty or they have to take an insurance to cover these costs. Typically, the premiums for this

¹⁶ A survey conducted on the range of second-hand vehicles in Belgium and neighbouring countries offered for sale in more than 30,000 classified ads distributed across twenty websites and for five common kinds of vehicles, i.e. Peugeot 206, BMW 320, Audi A4, Ford Focus and VW Golf (selection by year of manufacture from 2007 to 2008 and year of manufacture from 2012 to 2013) – May 2016

¹⁷ Source: Traxio: <http://www.traxio.be/nl/nieuws/2016/04/dossier-verkoop-export-carsontheweb/>

insurance rise in line with the age of the vehicle and its mileage, as well as other characteristics like fuel type and engine size. This guarantee obligation is avoided if the car is exported.

As far as consumer preferences for a certain type of used car is concerned, the city car is the most popular type of vehicle on the second-hand market, and this is especially the case among women. A third of second-hand vehicles purchased are city cars, slightly fewer than 1 out of 5 is a sedan. Station wagons take third place at 14%.

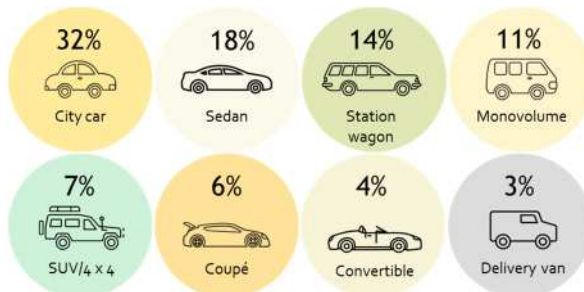


Figure 11: Types of second-hand vehicles by popularity (results of interviews with consumers)

The interviews also showed that there are slight deviations from these average preferences according to the respondent's gender, for instance. Interviews with the sector confirmed that there are indeed local markets. For instance, there are differences in consumer preferences depending on where they live, i.e. in a city or in the countryside. Based on these local differences, it is also difficult to compare the Belgian market with the second-hand market in the surrounding countries.

G. The Belgian market is a major import and export market

Alongside Germany and Lithuania, Belgium is the leader in the export of second-hand vehicles to outside Europe. In 2014, an estimated 480,000 vehicles were shipped from the Port of Antwerp to Africa. This probably involved 150,000 Belgian cars (deregistered in Belgium) and more than 300,000 vehicles from the B2B trade. The trade bought cars from foreign countries which were then sold on from Belgium to Africa. Most of this trade took place in the Brussels-Capital Region and originated as follows:

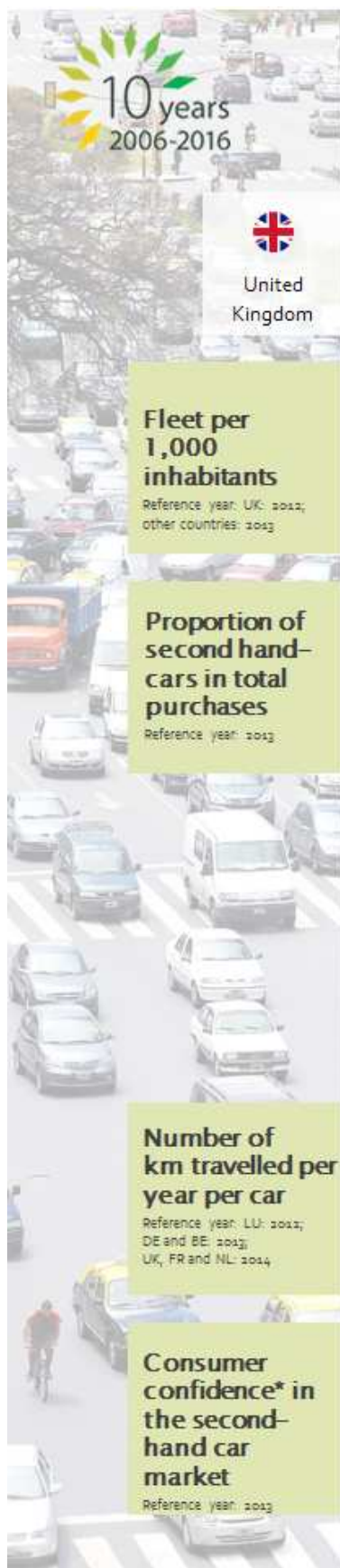
- from Greece, Italy and Spain (due to the financial crisis);
- from Eastern bloc countries (for logistical reasons – haulage companies bring old vehicles while fetching second-hand ones from here);
- from the Netherlands and Germany.

According to the dealers who were interviewed in this survey, this trade is supported by the trustworthiness of the Belgian market, the good image that the Belgian fleet has (well-looked-after and well-equipped vehicles with many optional extras) and the good quality of second-hand vehicles (thanks to relatively strict roadworthiness tests).

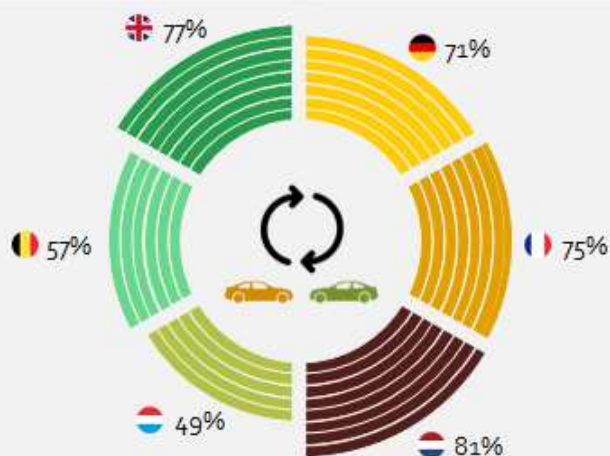
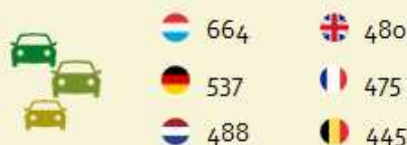
H. The Belgian market is significantly different to the market in neighbouring countries

Each Member State's fleet has its own characteristics. These distinguishing features also determine the dynamics and properties of the various domestic markets for second-hand vehicles, and the import and export opportunities between the countries. In Section 1.A, we mentioned several indicators that distinguish the Belgian market, and in 1.F we discussed in greater depth the range on offer in the second-hand market by vehicle mileage, fuel type and year of manufacture.

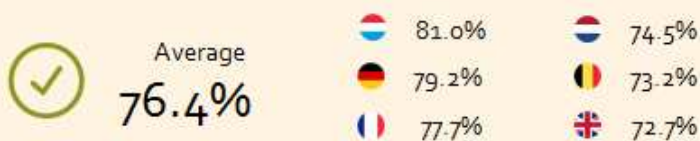
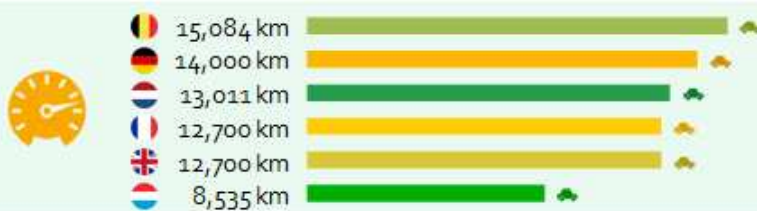
How do these indicators and markets in Belgium compare with those of neighbouring countries? The infographic presented below gives an impression of how the Belgian market compares with those of neighbouring countries for certain indicators. Section 4 of this document provides an in-depth study per country.



Second-hand car market in surrounding countries compared to Belgium



Belgium's neighbouring countries whereby the market in second-hand vehicles is measured by the purchase of a car compared to the market for new cars



* Consumer confidence is presented as a composite index (see below).

Sources: All countries: Consumer Markets Scoreboard (2014) UK: NTS Statistics; DE and FR: Statista; NL: RAI, Bovag; LU: Statoc; Luxembourg, BE: FPS Mobility and FEBIAC

Figure 12: Second-hand car market in surrounding countries vis-à-vis Belgium

What characterises the Belgian market? Several elements distinguish the Belgian market from those of neighbouring countries.

- **In Belgium, there are slightly fewer cars per 1,000 inhabitants on average, but there are noticeably more diesel vehicles on the road than in the Netherlands or Germany.**

Half of all Belgians have a car. This statistic is similar to those for its neighbouring countries where around 500 cars per 1,000 inhabitants are registered. Specifically, we note that, after Luxembourg, Germany was the frontrunner in 2013, with 537 cars per 1,000 inhabitants. Relatively speaking, the size of the Belgian fleet grew less sharply than fleets in the surrounding countries did.

The preference for diesel vehicles is strong in Belgium. Sixty per cent of the Belgian fleet is made up of diesel vehicles, which is significantly more than in the Netherlands (< 20%) or Germany (+/- 25%), for instance. Tax policy is an important parameter for the fuel mix in a country. The same applies for alternative fuels: Germany and the Netherlands place a heavy emphasis on these fuels in terms of policy. This is reflected in the growing share enjoyed by electric cars, plug-in hybrid vehicles and CNG vehicles.

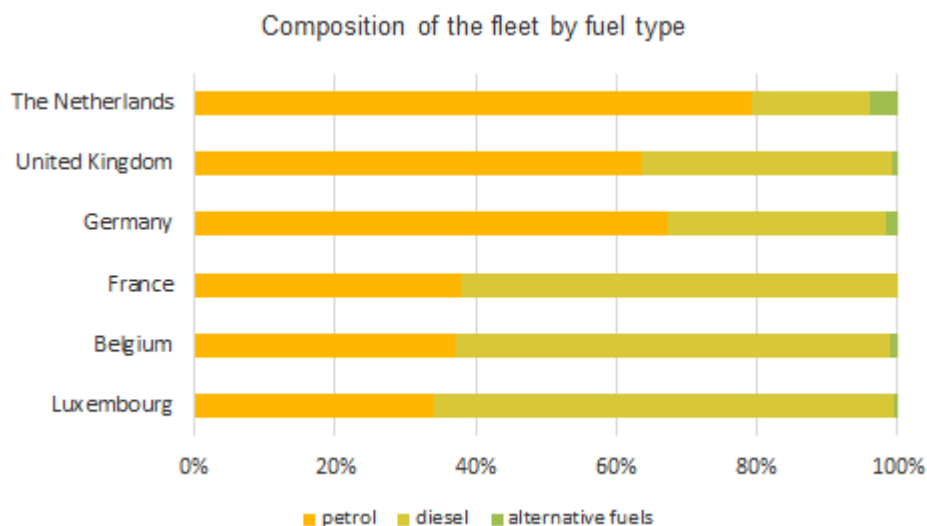


Figure 13: Composition of the fleet by fuel type (Source: ACEA)¹⁸

- **The Belgian fleet is newer in comparison with the fleets in neighbouring countries.**

Despite the financial crisis, the fleets in the various countries grew during the period from 2009 to 2014. We note that from 2009 to 2014 in Belgium and the surrounding countries the proportion of old cars in the fleet (more than ten years old) has grown, to the extent that we can even speak of a kind of greying effect or 'ageing' of the fleet. In recent years, the ageing of the Belgian fleet has, however, been less pronounced than that observed in neighbouring countries. Together with Luxembourg, Belgium still leads the way in Europe with its relatively new and well-equipped fleet: in 2013, 71% of the Belgian fleet was less than ten years old.

¹⁸ ACEA, Passenger car fleet by fuel type

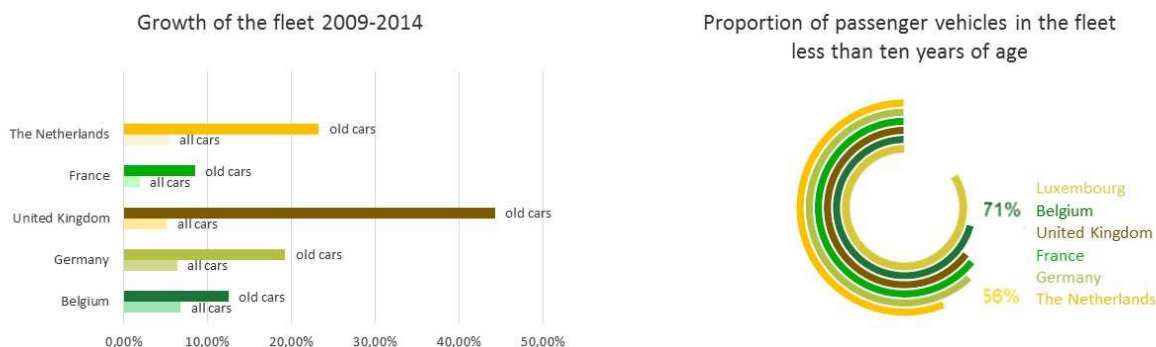


Figure 14: Growth of the fleet 2009 - 2014 and proportion of passenger vehicles in the fleet (Source: ACEA)¹⁹

- **Belgium has a strong lease market which means that each year a large outflow of new, well-equipped cars is available for the second-hand market.**

The composition and development of the Belgian fleet is strongly influenced by the relatively large proportion of company cars. Around half of the new cars in Belgium are registered by businesses, and of these, almost half are lease vehicles. As a result, a relatively large number of new, second-hand diesel vehicles is available for the second-hand market. However, these are high-mileage cars, relatively speaking, when compared with cars of a similar age owned by private individuals. The number of kilometres travelled per vehicle per year also differs significantly in the various surrounding countries. Belgium was the frontrunner in 2013 with slightly more than 15,000 km travelled per annum, while in France only 12,700 km per annum are driven on average.

- **Belgium has a smaller proportion of second-hand vehicles in the overall market in comparison with the surrounding countries, but it does export many vehicles to neighbouring countries.**

As noted previously in this section, the second-hand market in Belgium represented a 'mere' 60% of the total market in 2013. If we compare this with neighbouring countries, we see that the proportion of the second-hand market there constitutes more than 70% of the total number of vehicles purchased. So while we note that there is a significant supply of new, well-equipped cars, the number of used vehicles as a proportion of the total purchased in Belgium is still lower than it is in all the surrounding countries, bar Luxembourg.

As explained previously in Section 1, we can argue that the specific characteristics of the Belgian vehicle fleet give rise to the export, and to a lesser degree also the import, of second-hand vehicles.

- **The confidence that Belgian consumers have in the market for second-hand vehicles is higher than the average in the EU, but lower than in neighbouring countries.**

The European Commission frequently reports on consumer confidence within the EU for various products and services.²⁰ Of all markets (goods and services), the second-hand car market is always rated as one of the worst in terms of consumer confidence, and this is a trend that can be seen across all EU countries. Consumer confidence is presented as a composite index (maximum 100) based on four components that are related to consumer experience. These components are all weighted equally, and comprise:

1. How easy is it to compare products or services?
2. To what extent are consumers confident that regulations for consumer protection are applied?
3. How often do consumers experience problems, and does this lead to complaints?
4. To what extent does the market meet consumer expectations?

The confidence that Belgian consumers have is higher than the average for the 28 Member States, but lower than in neighbouring countries. Specifically, for the surrounding countries in 2013, we see that the confidence

¹⁹ ACEA, Size & Distribution of vehicle fleet

²⁰ Source: Market monitoring, European Commission

that consumers have in the second-hand car market was highest in Luxembourg, followed by Germany and France.

From the interviews with consumers mentioned earlier in this section, it is apparent that Car-Pass offers consumers a solid foundation for confidence when it comes to vehicle odometer readings. There are, however, also other factors that influence consumer confidence, such as the condition of the vehicle and the availability of spare parts, and these factors certainly play a role when it comes to determining the general level of consumer confidence. Culture may also be a factor when determining this indicator. If we look at the results of the indicator for other sectors and products (e.g. electronics, food and so on), Belgium often rates these lower than its neighbouring countries.

- **The range of second-hand vehicles on offer varies significantly between surrounding countries**

From the analysis of classified ad sites (see also 1.F) it became apparent that there are significant differences in Belgium in the available supply according to mileage, fuel type and year of manufacture. These differences are also reflected in the surrounding countries. Still, some general patterns can be observed. On Dutch websites, for instance, it is mainly cars with relatively high mileage that are offered. This can be deduced from the graphs below: the line that reflects the Dutch range on offer for five types of vehicle in the sample is always on the far right-hand side.

Fifty per cent of the older petrol vehicles offered in Belgium (see graph at the top left-hand side) had fewer than 90,000 km on the clock. This figure is 125,000 km in Germany. This can probably be explained by the difference in fleet composition: in Belgium there are many diesel vehicles, in Germany there are many more petrol vehicles.

What is also noteworthy is that the Belgian range on offer is also at the far left-hand side in virtually all the graphs, and that it is quite similar to the range on offer in France. Only when it comes to older diesel vehicles is the range on offer in Belgium similar to the one in Germany. French cars offered in this category have clocked up significantly fewer kilometres.

The conclusion that can be drawn from the analysis is mainly that the local second-hand markets differ fundamentally between the various neighbouring countries, and that the market is strongly determined by national factors, such as domestic policy and taxation, consumer preferences and so on.

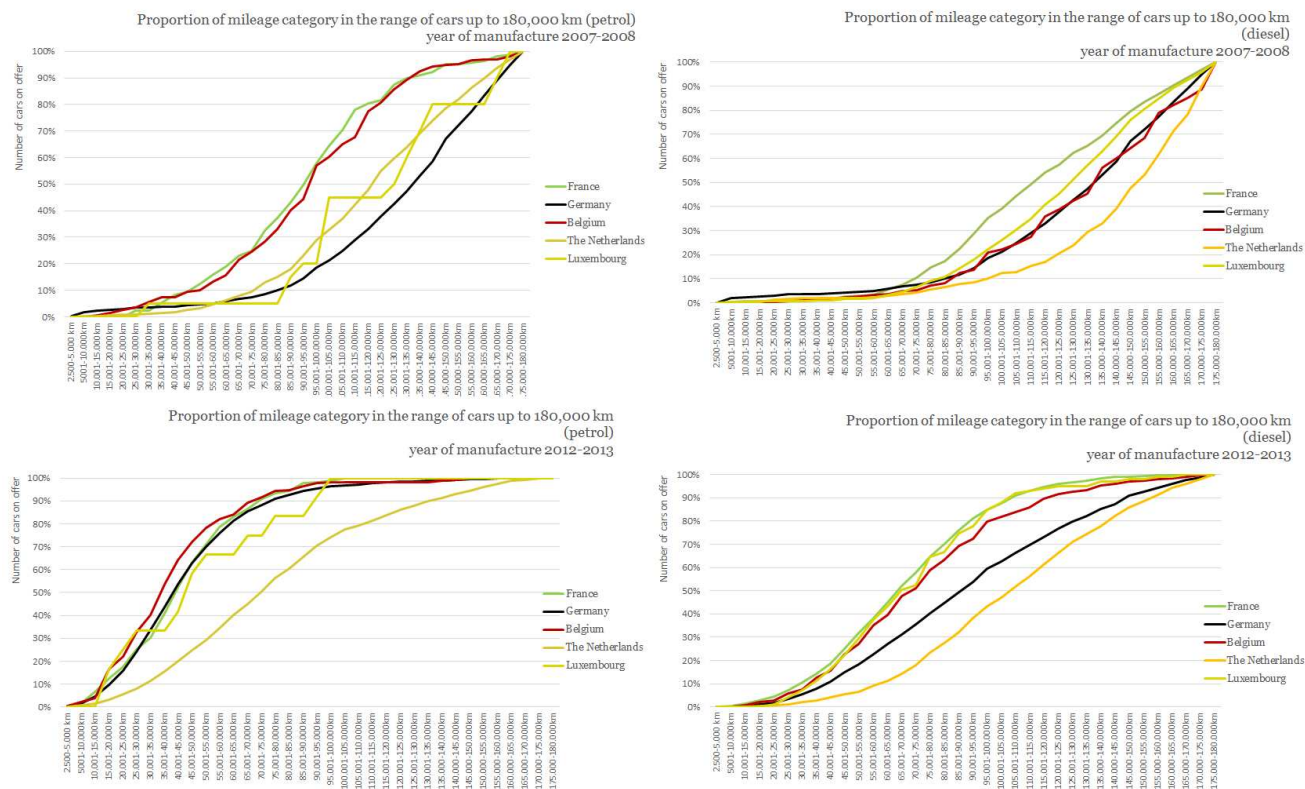


Figure 15: overview of the distribution per kilometre category of second-hand vehicles offered on the internet for five types of cars (source: Global Automotive Consultancy – the Netherlands)

2. Significant developments in the Belgian car market during the past ten years

A. What preceded this: the focus on enhancing consumer confidence

After the turn of the century, many initiatives were taken at European level to enhance consumer confidence in various kinds of products. As an example, since 1 January 2005, Belgian consumers have been able to take advantage of a one-year warranty for second-hand vehicles bought from a professional dealer. Officially, this guarantee relates to a so-called 'no agreement' situation. According to the new legislation, the seller guarantees that the vehicle is supplied according to the order placed by the buyer, and that the vehicle is in working order. The buyer therefore expects that a used vehicle:

- has the characteristics described by the seller in the contract or advertisement or on the internet;
- has the qualities and the performance level that are normal for a vehicle of that age, mileage and price;
- corresponds with the specific use for which the buyer is buying the vehicle;
- is suitable for everything for which vehicles of the same type are usually used.

The buyer cannot invoke the warranty if the defect is attributable to abnormal use of the vehicle, negligence or poor maintenance.

B. Combatting mileage fraud becomes a priority

The legal basis for the Car-Pass system was laid in 2004

In addition to the warranty legislation, which mainly had an impact on B2C sales, the first steps were taken in parallel to improve the trustworthiness of odometer readings. This increased level of reliability affects all buyers of used cars and, alongside the warranty legislation, it supports the proper and healthy functioning of the market. The Act of 11 June 2004 to curb fraud involving vehicle odometer readings forms the legal basis for the further development of what later became known as the 'Car-Pass system'.

The Car-Pass system not only encompasses the mandatory issuing of a certificate with recorded odometer readings to a buyer of a vehicle that is being sold second hand. It also encompasses the obligations that professional dealers or 'sales professionals' have to provide customers with a range of information at the time the sale takes place.

To support the system, various parties, such as garages, panel beaters, fast fitters, tyre centres, vehicle inspection centres and so on, are obliged to cooperate and provide information about the odometer reading at the time that the vehicle is presented to them for servicing or repair.

The enforcement of this system was delegated to the Belgian Federal Public Service Economy (FPS Economy). The Belgian Economic Inspectorate oversees compliance with the legislation that came into force between 2004 and 2006. It also deals with complaints from customers who feel duped and who have identified cases of mileage fraud despite the legislation.

Milestones in the battle against odometer fraud

The past ten-year period has been characterised by changes in terms of mileage fraud. It was not only Car-Pass that had a major part to play in this: legislative measures were also taken that were designed to counteract mileage fraud.

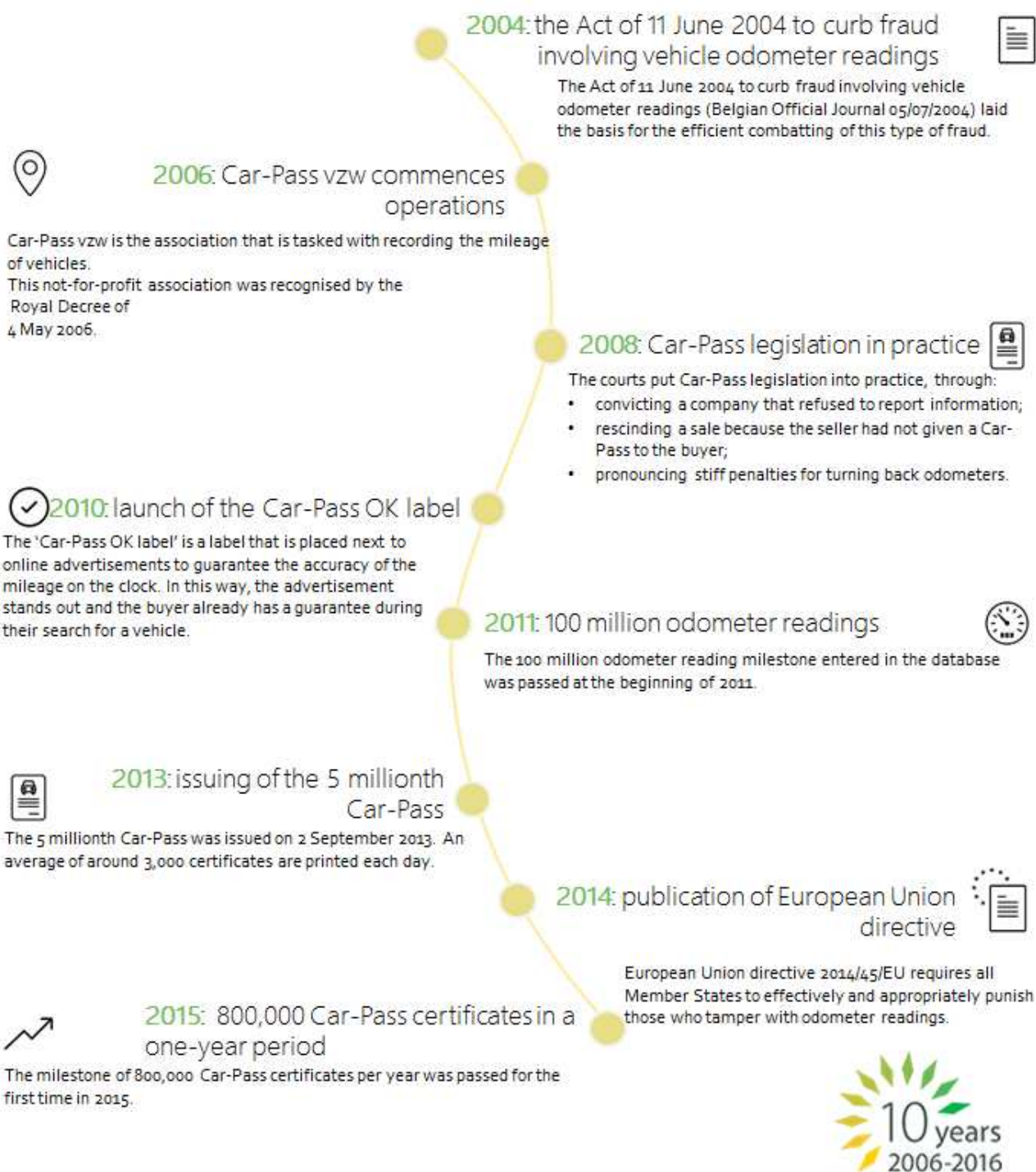


Figure 16: Milestones in the battle against odometer fraud

In 2006, Car-Pass vzw saw the light of day

A national Car-Pass system that covers the entire country can only work if there is an independent authority that collects, manages and stores odometer readings. With this in mind, a number of steps were taken in 2005 and 2006 to establish the Car-Pass organisation.

- On 12 April 2005, the non-profit making association in formation, Car-Pass, submitted an application for recognition as the association responsible for the recording of vehicle odometer readings.
- Car-Pass vzw was established on 8 March 2006.
- On 19 May 2006, the Royal Decree of 4 May 2006 was published in the Belgian Official Journal in recognition of the association responsible for the recording the mileage of vehicles.

Car-Pass vzw is an initiative of FEBIAC, GOCA and TRAXIO, in collaboration with FPS Economy, SMEs, Self-Employed and Energy and FPS Mobility and Transport and with the support of Touring and VAB. The organisation is officially responsible for the Car-Pass database that stores all odometer readings that are collected for a chassis number. In this way, each vehicle accrues its own mileage history. The information is only used for Car-Pass, so it is not used for commercial purposes.

Since the association's inception, the Car-Pass system has witnessed a steady growth.

Since the system was established, the number of certificates issued has grown significantly. Obviously, less information about historical odometer readings was available in the beginning, but the amount of information has grown quite quickly. The system got up to speed in 2007.

- Statistics (certificates issued since 2006, annual development)²¹

	2006	2007	2008	2009	2010
Car-Pass certificates issued	50,185	737,272	730,616	763,190	750,005
Paid Car-Passes	33,704	532,605	564,401	603,225	612,679
Free Car-Passes	16,481	204,667	166,215	159,965	137,326
Growth		205.74%	-0.90%	4.46%	-1.73%
Ratio free versus paying		2.60	3.40	3.77	4.46

	2011	2012	2013	2014	2015
Car-Pass certificates issued	745,694	758,323	777,790	780,556	807,351
Paid Car-Passes	616,614	617,985	623,321	627,021	644,912
Free Car-Passes	129,080	140,338	154,469	153,535	162,439
Growth	-0.57%	1.69%	2.57%	0.36%	3.43%
Ratio free versus paying	4.78	4.40	4.04	4.08	3.97

Figure 17: Car-Pass certificates issued between 2006 and 2015

In addition to raising awareness for the Car-Pass document, name recognition for the 'Car-Pass system' was key to the rolling out of the communication strategy. The system can only work preventatively if all users recognise the importance of the Car-Pass and understand the significance of a correct and complete recording of odometer readings for the future residual value of their vehicle.

²¹ Source: Car-Pass annual reports

Car-Pass vzw regularly assesses its name recognition among consumers. From our most recent interviews with consumers who had recently bought a second-hand car or were planning to do so, it emerged that 87% of the consumers interviewed had heard of Car-Pass. Four out of five also effectively knew what the system entails. The results also showed that Car-Pass is known among consumers who had already bought a used car (89%) as well as among consumers who were still looking for one (84%). Actually coming across a Car-Pass is therefore the best way to understand what a Car-Pass is all about.

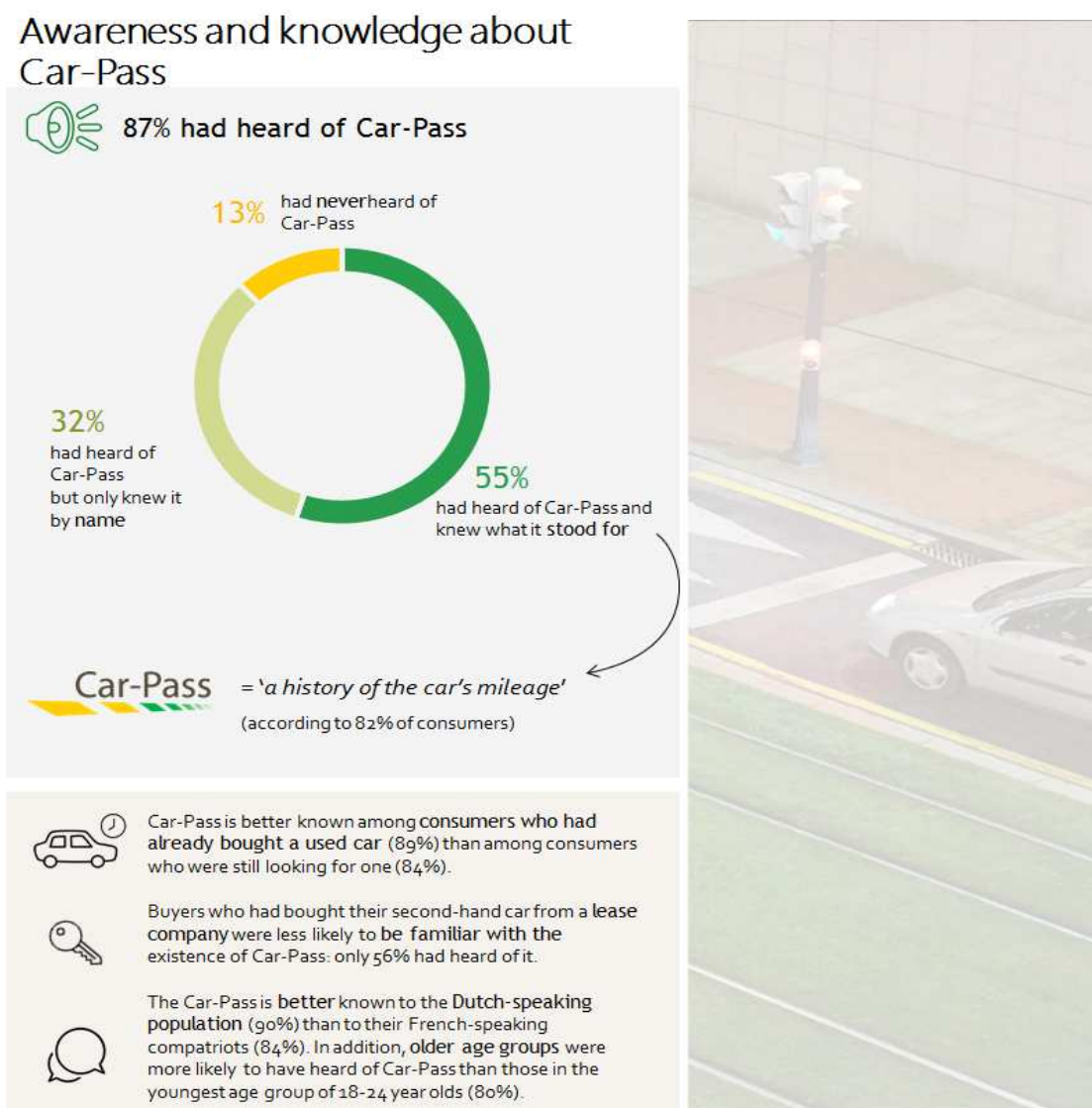


Figure 18: Awareness and knowledge about Car-Pass (results of interviews with consumers)

C. Economic and taxation developments in the period from 2006 to 2016

The previous decade was characterised by far-reaching economic developments at an international level. These developments had an impact on the Belgian economy and the local car market. At the same time, several changes were implemented at policy level, e.g. in terms of taxation, that affected the market in second-hand vehicles. It is not always easy to separate cause and effect given that the events and policy measures followed close on each other's heels and most probably interacted too. The developments are important when it comes to putting into context the trends in the market and the impact that Car-Pass has had. In this section we briefly review some key events.

The on-going opening up of the European market towards the East

The accession of East Germany caused a major shift in the market for new and used cars in Germany in the '90s. A similar but less abrupt development at the beginning of the 21st century was undoubtedly the further opening of the markets in the former Eastern bloc countries. This created a whole new marketing opportunity for second-hand dealers.

The financial crisis and changes in the spending patterns of households and companies

The international financial crisis also had serious implications for the car sector. This resulted in uncertainty about economic forecasts for businesses and families, and a shortage of financing opportunities due to the major change in attitude shown by banks when assessing credit applications. The car sector was suddenly plagued by growing stocks and plummeting demand. Various brands resorted to restructuring their entire manufacturing network or began their search for bigger markets, and formed partnerships or networks through which lease, rental and pool vehicles were sold.

It goes without saying that this crisis situation also had major implications for dealerships. The manufacturers started to apply pressure on dealers to hold stock: dealers were asked to sell vehicles ex-stock (and so to register them too), and sales margins also came under severe pressure due to the fall in demand. Dealerships were forced to reconsider their business model and financial viability.

Dealerships also came under pressure from various technological developments: the quality of vehicles is improving all the time, so there has been a drop in demand for maintenance. What's more, modern cars can easily clock up many more kilometres than used to be the case. The ageing of the fleets in Europe (see Section 1.H) should also probably be seen in this light.

Policy measures to reverse the situation

Before the financial crisis, there was a harmonious relationship between the market for new vehicles and the second-hand market:

- During the economic downturn, relatively more second-hand vehicles were sold (a substitution effect prevailed between the two markets).
- There was a countercyclical shift: if things were going well in the market for new cars, then things were not so favourable for second-hand cars and vice versa.

Also, the various market segments were relatively well demarcated: for instance, those who bought older used cars of a premium make were inclined to buy another one of this type when their car was ready for replacement. In other words, there used to be a certain equilibrium or harmony in each subsector of the market (premium, volume and niche).

This harmony has been disrupted since the financial crisis. This is partly due to volume pressure that arose in the market for new cars, but also partly a result of the policy measures taken. Government authorities in countries with a strong vehicle industry worked out emergency measures to support the sector. Environmental measures that had a direct impact on the car market were also introduced. As an example, the German authorities applied a scrappage premium which meant that old cars could be traded in for an incentive of 2,500 euro. This led to strong demand for new cars, specifically smaller cars, in 2009 and especially in 2010. The fact that the premium had a time limit led to an increase in the demand for cars in stock that could be registered quickly so that the premium could still be obtained. This situation led to a sudden oversupply of second-hand premium cars in the period from 2010 to 2011, particularly of those cars with a higher price tag. These factors led to a sharp drop in the residual value of cars, particularly after 2010. Especially captive banks run by the major players financing premium lease vehicles in Germany had to write off millions of euros.

'Greening' the taxation system

At the same time, other environmental measures were introduced that encouraged a further downsizing in vehicles being purchased. Indirectly, this prompted a rise, albeit temporary, in interest in new cars to the detriment of second-hand vehicles. In Belgium, for instance, the bonus-malus scheme was introduced in Wallonia, and at the same time the authorities in Flanders started to calculate the one-off registration tax for

second-hand cars in the same way as was done for new vehicles. Carbon emission was also taken into account. All these factors had implications for the trends in the market...

D. The internet as a source of information and a sales channel is gaining tremendously in importance and supports the globalisation trend in the market

In recent years, the internet, too, has steadily increased in importance. Apart from functioning as a sales channel, the internet has also become an important source of information during the search for a new or second-hand car. Whereas consumers used to go to showrooms in search of information, they are now looking for technical information and sales prices online. As a result, the number of visits to the dealer has fallen in recent years. Only 2.1 visits to a dealer now precede the purchase of a second-hand car.²² Because the internet has taken on part of the dealer's role, for many consumers a visit to the showroom is only of secondary importance.

This tendency to use the internet as a source of information was confirmed in the interviews conducted with consumers. Consumers are inclined to first find information via classified ad sites, blogs, dealer websites, etc. before making their way to a dealer. Classified ad sites bring buyers and sellers together, but ultimately the transaction takes place in person in the majority of cases. Most websites only provide the opportunity to contact the seller. Only a few websites (e.g. ebb, 2dehands.be) allow bids to be made. After all, consumers would rather test drive the vehicle before making a (binding) offer. The purchasing channel considered most often by consumers who intend to buy a used car (potential buyers) is therefore a second-hand car dealer, followed by a make dealer and an independent garage. Around 1 in 3 consider approaching a private individual (who they may or may not know). If we look at the actual purchase (based on input from buyers), then it appears that make dealers were the purchasing channel for almost 1 in 3 transactions, followed by used car dealers and independent garages. Also, women are more likely to go to a second-hand car dealer than men are.

²² Source: FEBIAC, Consumer survey, 2015



Figure 19: Method of searching and sales channels for second-hand vehicles in Belgium (results of consumer interviews)

Leasing companies that offer second-hand vehicles as well as websites selling used cars cater to this quest for information and strive to inform consumers as comprehensively as possible. In the process, they use photographic material and often also provide expert reports on cars. The odometer reading is one piece of information that is officially advertised.

Besides being a source of information for private buyers, the internet has also become an important tool for companies that buy and sell cars. The relationship between buyer and seller is no longer restricted to what is geographically accessible. Parties buy and sell across national borders, without having inspected the cars on site. E-auction houses are well established in the United States. An estimated 6 to 9 million cars are sold each year there. Currently, only 1.5 to 2 million vehicles change ownership via auctions (B2B) in the whole of Europe.²³

This system can only function if there is a high level of transparency and absolute trust in the other party. The stakeholders in the market who took part in this survey all said that image and credibility were at the top of the agenda for their companies. The Car-Pass is also mentioned in this context, not directly as a tool for B2B sales, but instead as a weapon to keep the credibility of the Belgian market strong, also in foreign countries.

²³ Source: TRAXIO, <http://www.traxio.be/nl/nieuws/2016/04/dossier-verkoop-export-carsonthetweb/>

E. The next ten years are also set to be exciting!

Developments that have taken place in the past ten years are probably only a precursor of a transition on a much larger scale that will fundamentally change the landscape of the automotive sector. Here we have in mind, for instance, new vehicle technology, like the breakthrough of electric cars and fuel cell vehicles that run on hydrogen, and self-driving or autonomous vehicles, but also new kinds of services, such as the mobility budget. Section 5 looks at the future prospects for Car-Pass.

3. The impact of Car-Pass on the used car market in Belgium

A. What preceded this: mileage fraud in Belgium and abroad

Prior to the implementation of the Car-Pass system in 2006, mileage fraud constituted a major problem for the Belgian second-hand sector. The absence of a control system made fraud in many cases extremely lucrative for dealers. Consumers were well aware of the situation, and therefore always acted in a climate of mistrust and deception.



Figure 20: Market situation prior to the implementation of the Car-Pass – natural reflex to mistrust and fraud

This natural reflex to defraud people arose thanks to the considerable margins that a seller could get from odometer fraud. After all, a car with ostensibly lower mileage fetched more money. As a result, sellers would sell the car at an artificial price that was higher than the actual residual value of the vehicle ($p + y$).

Consumers looking for a second-hand car were aware of this tendency. Based on their own experience or that of others they knew that fraud existed in the market, but they did not have the expertise required to be able to judge whether or not the seller or the mileage on the clock were reliable. As a consequence, many consumers provided for a 'risk premium' of x , i.e. an amount that they kept in reserve for unexpected vehicle expenses, and that they would deduct from the asking price.

Because sellers had more information than consumers, the margin that they could get fraudulently was often much larger than the risk premium that consumers had taken into account. So sellers made a profit from manipulating odometer readings.

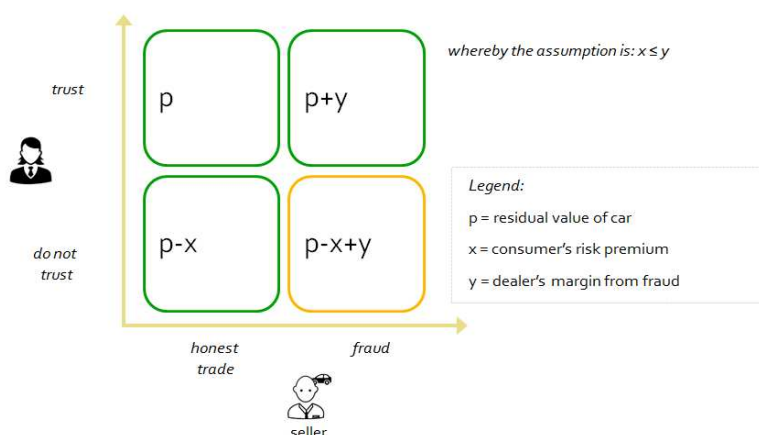


Figure 21: the seller gets bigger margins (y) through mileage fraud

Based on Car-Pass statistics, it is estimated that 60,000 to 100,000 odometers were turned back annually in the period prior to 2006.²⁴ The number of kilometres that were turned back on odometers varied according to the vehicle's destination. For trade on the domestic market it is estimated that fraud was 30,000 km on average, while the estimates for export amounted to up to 60,000 km on average!²⁵

In the event of fraud, consumers are disadvantaged in various ways:

- They pay a price that is higher than the actual residual value of the car. In 2010, Car-Pass calculated²⁶ how much the difference in value was on average for small, medium-sized and large cars, and this for when the clock was turned back by 30,000 km (on the domestic market) and by 60,000 km (cars for import):

Extra depreciation due to mileage fraud		
Segment	Second-hand vehicles traded on the domestic market	Imported second-hand vehicles
Small (15,000 euro)	800 euro (2.7 c/km)	1,220 euro (2.0 c/km)
Medium (30,000 euro)	1,233 euro (4.1 c/km)	2,500 euro (4.2 c/km)
Executive (60,000 euro)	1,800 euro (6.0 c/km)	4,800 euro (8.0 c/km)

Figure 22: Extra depreciation due to mileage fraud (Source: Car-Pass)

- Apart from the impact on the residual value, the consumer runs a higher risk of extra costs for servicing and repair of the car. Because the odometer reading is manipulated, parts are likely to be up for maintenance or replacement faster than one would expect based on what the mileage suggests. According to the calculations that Car-Pass made in 2010, additional costs for the consumer quickly add up, and amount from a few hundred to more than 1,000 euro:

²⁴ Source: Car-Pass 2014 annual report

²⁵ Source: Impact study of mileage fraud with used cars & adaptability of the Car-Pass model in other EU-countries, 2010

²⁶ Source: Impact study of mileage fraud with used cars & adaptability of the Car-Pass model in other EU-countries, 2010

Extra maintenance and repair costs		
Segment	Second-hand vehicles traded on the domestic market	Imported second-hand vehicles
Small (15,000 euro)	300 euro (1.0 c/km)	375 euro (0.6 c/km)
Medium (30,000 euro)	750 euro (2.5 c/km)	1,050 euro (1.8 c/km)
Executive (60,000 euro)	900 euro (3.0 c/km)	1,350 euro (2.3 c/km)

Figure 23: Extra maintenance and repair costs (Source: Car-Pass)

- Another major disadvantage for the consumer is the implications that fraud has for safety. After all, the consumer is not aware of the actual mileage, nor the attendant wear and tear to the vehicle. This situation can have a serious impact on the vehicle's safety and the increased risk of accidents, for instance.

B. Thanks to the implementation of the Car-Pass, mileage fraud in Belgium has virtually disappeared

Mileage fraud in Belgium is effectively punished

The Act of 12 March 2000 to curb certain kinds of fraud involving vehicle odometer readings was published in the Official Journal of 5 May 2000. Under this Act, it is forbidden to change the mileage shown on the odometer of a vehicle. In addition, all professional dealers in second-hand vehicles are obliged to state on the invoice the number of kilometres on the clock when selling the vehicle (Article 4, §1). Moreover, since the Act of 12 March 2000 came into effect, it has been compulsory to have a maintenance booklet in the vehicle (Article 4, §2). The garage owner has to complete the maintenance booklet and enter the vehicle's odometer reading every time maintenance is carried out.

This Act makes it easier for buyers to obtain a dissolution of the contract (Article 6). Previously, the court would generally only award a claim for compensation or order a reduction in the purchase price. In addition, there is also a criminal penalty for the fraudster: those who forge mileage anyway can be punished with a custodial sentence of up to one year and/or a fine of up to three thousand francs (multiplied by surcharges).

However, for a long time this Act did not have much effect: many older vehicles either did not have a maintenance booklet, or only had a limited history dating from 2000 onwards. The maintenance booklets were filled in by hand and there was no standardised format. Case law shows that many discussions arose about mileages that were overwritten, sheets that were torn out of the booklet and so on.

The Act of 2004 to curb fraud involving vehicle odometer readings repealed the Act of 12 March and makes it mandatory for the seller to hand over a Car-Pass certificate when selling the vehicle. The Act gave rise to the enactment of a host of ministerial decrees that form the basis of a comprehensive enforcement and control system, as previously noted in Section 2.

The Act was implemented by the following decrees:²⁷

- the Ministerial Decree of 3 November 2004 on the **appointment of the officials** who are responsible for the detection and investigation of infringements to the Act of 11 June 2004 to curb fraud involving vehicle odometer readings (Belgian Official Journal 19 November 2004);
- the Royal Decree of 30 September 2004 on the coming into effect of the Act of 11 June 2004 to curb fraud involving vehicle odometer readings and on **the documents** drawn up by a professional as a consequence of working on a vehicle (Belgian Official Journal 18 October 2004);
- the Royal Decree of 21 February 2005 on the **recognition and monitoring of the association** that is responsible for the recording of vehicle odometer readings (Belgian Official Journal 14 March 2005);

²⁷ Source: FPS Economy, http://economie.fgov.be/nl/binaries/FAQ_Car-pass_nl_tcm325-84957.pdf

- the Royal Decree of 17 September 2005 on the **amicable settlement of infringements** to the Act of 11 June 2004 to curb fraud involving vehicle odometer readings (Belgian Official Journal 03 October 2005);
- the Ministerial Decree of 19 September 2005 on the **appointment of officials** who are responsible for proposing the amicable settlement, as referred to in Section 11, to the perpetrators of infringements to the Act of 11 June 2004 to curb fraud involving vehicle odometer readings (Belgian Official Journal 03 October 2005);
- the Royal Decree of 4 May 2006 on the **recognition of the association** responsible for recording vehicle odometer readings (Belgian Official Journal 19 May 2006);
- the Royal Decree of 1 July 2006 on the **regulating of the financing of the association** responsible for recording vehicle odometer readings (Belgian Official Journal 24 July 2006);
- the Royal Decree of 26 August 2006 on the **regulating of cooperation with the association** responsible for the recording vehicle odometer readings (Belgian Official Journal 30 August 2006, Ed. 2).

So the Act of 2004²⁸ not only formed the basis for the introduction of the Car-Pass system, it also led to better enforcement. This enforcement is carried out by inter alia the federal judicial police, the Economic Inspectorate of the Federal Public Service Economy and Car-Pass vzw:

I) The federal judicial police

The federal judicial police have been actively combatting mileage fraud since the '90s, a time when there was no specific legislation in this regard. There was, however, a clear need to take action due to the persistent problems on the domestic market, and in import and export. Since the approval of the Mileage Fraud Act (the Act of 12 March 2000, which the Act of 11 June 2004 repealed and replaced) and the establishment of Car-Pass, the Vehicle Crime Unit has noticed a clear transformation in the second-hand market and a drop in the number of fraud cases. According to the Vehicle Crime Unit, mileage fraud hardly occurs anymore within the Belgian national borders. Mileage fraud in export and import flows is clearly another story altogether. There is still a major problem in these flows because the system is restricted to the Belgian market. As a result, the Car-Pass organisation has no insight into the history of imported cars, nor does it have any control over what happens to cars once they are exported.

Accurate police statistics related to the number of fraud cases are not available, but the number of ongoing investigations has dropped dramatically, and these investigations mainly concern the import and export of vehicles and the turning back of odometers in foreign countries. For precisely this reason, the federal police are also proponents of expanding the system to include other European countries. For them, the Car-Pass system constitutes an objective and accurate system that can be used for determining violations and furnishing evidence.

Apart from reporting complaints concerning mileage fraud to the federal police, complaints can always be reported to the FPS Economy, or to the disputes committee of TRAXIO, the federation of the car industry and related sectors engaged in 'mobility retail and technical distribution'. This committee regularly deals with disputes related to the application of warranty legislation, for instance. There are hardly any complaints regarding mileage manipulation anymore, according to the committee's information from recent years.

II) Federal Public Service Economy

- Apart from reactive checks based on complaints, the Economic Inspectorate also organises detective controls on proper compliance with the so-called Car-Pass Act (Royal Decree – Act of 11 June 2004 to curb fraud involving vehicle odometer readings). It does so each year and on a sample of businesses. These businesses are selected on the basis of suspicion of misconduct, for instance, through observations from the Car-Pass database. In recent years, an average of 61 official warnings and 84

²⁸ The Act of 11 June 2004 to curb fraud involving vehicle odometer readings repealed the Act of 12 March 2000 to curb certain kinds of fraud involving vehicle odometer readings.

official reports were drawn up in this context. These often involve several contraventions by a handful of organisations.

- In 2014, the Economic Inspectorate also carried out a one-off, large-scale investigation into the proper compliance with the Car-Pass Act and other fraud matters (money laundering, illicit activities and so on). The investigation was carried out among 781 businesses operating in the second-hand market. Infringements were established at 64 of the companies, i.e. 8% of the sample, and related to the inconsistent submission of odometer readings to Car-Pass vzw. It turned out that ten companies, i.e. scarcely 1% of the sample, had sold vehicles to private individuals without giving them a mileage certificate.

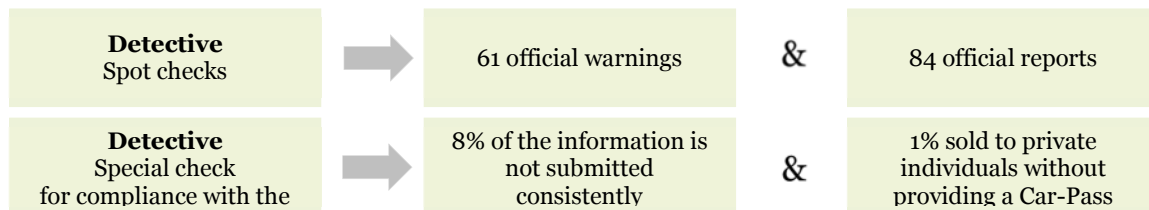
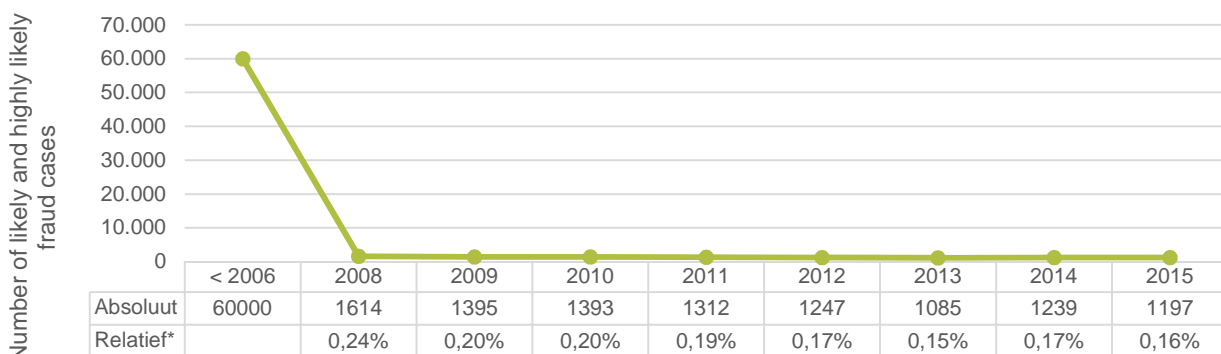


Figure 24: Federal Public Service Economy: average results of inspection per annum for Car-Passes (2011 – 2015)

III) Car-Pass vzw

In its 2015 annual report, Car-Pass reported 1,197 cases in which odometer fraud was highly likely. This constitutes 0.16% of all Car-Pass certificates (excl. certificates issued for imported cars). These statistics confirm a trend that has been continuing since 2006: the number of fraud cases has dropped dramatically since 2006 (see graph below) and remains consistently low.



* compared to the number of certificates issued, excluding certificates issued for import

According to the Car-Pass annual reports, it is estimated that 60,000 to 100,000 odometers were turned back in the period prior to the introduction of Car-Pass

Based on figures from Car-Pass annual reports

Figure 25: Number of likely and highly likely fraud cases annually (Source: Car-Pass)

Fraudsters or companies that do not want to participate in the Car-Pass system are summoned to appear in court. In the context of this study, an analysis was carried out on the judgements pronounced under the Act. The findings of this analysis show that many judgements have been passed by the commercial court, the correctional court of first instance and the courts of appeal. Typical cases are, for instance:

- Rescission of the sale because the seller failed to provide a Car-Pass certificate**

Under Article 7 of the Act, private buyers can request to have the sale rescinded if no valid Car-Pass is provided. The same applies to foreign buyers who purchase a vehicle from a professional dealer in Belgium. It is the dealer who has to prove that he did indeed transfer the document in question to the buyer, at the conclusion of the agreement at the latest. The simple fact that the dealer applied for and obtained a Car-Pass (or paid for one) during the roadworthiness test is not sufficient to provide such proof. The Court has hardly any discretionary

power in this. This means that the seller must refund the buyer for price paid without further ado if he cannot prove that he provided a valid Car-Pass in good time.

- **Rescission of the sale and compensation of costs incurred in the interim**

The Car-Pass database does not contain any mileage history for imported vehicles. This means that a Belgian dealer could buy a vehicle abroad with an odometer reading that has been turned back and then sell it on in Belgium without this being directly apparent from the Car-Pass certificate. (The certificate would state that it was an imported car.) It may take some time before the buyer establishes that his or her vehicle is 'dodgy'.

In such a case, the buyer can still rely on the law. A judgement pronounced in Limburg in 2011 sentenced a dealer for the resale of an imported vehicle that had fraudulent mileage. According to the court of appeal, the dealer ought to have been able to deduce that something was wrong judging by the condition of the vehicle and the fraudulent maintenance booklet. The victim was able to claim a refund for the purchase price, with interest on arrears and compensation for storage costs incurred for the vehicle in the interim.

- **Correctional punishments**

In recent years, several gangs and professionals that specialised in the forging of vehicle papers and turning back odometer readings have also been convicted. In various judicial districts, legal proceedings were brought against individuals and businesses that had tampered with odometers. For instance, the correctional court in Ieper sentenced a garage owner for turning back dozens of odometers. The court took a serious view of the evidence and imposed a community service order of 200 hours and a fine of 27,500 euro. The convicted person had to pay back more than 160,000 euro for pecuniary advantage. He was also given a suspended sentence disqualifying him from his profession for a period of five years.²⁹

- **Penalties for companies that refuse to take part in the Car-Pass system**

Car-Pass has access to the Crossroads Bank for Enterprises and thus it has access to information on all the businesses in the car sector. It is easy to check who is not forwarding any information, unusually small amounts of information or incorrect information. Car-Pass first draws the attention of the professionals concerned to this. However, on request Car-Pass will pass on to the Economic Inspectorate the names of businesses who are in breach. Economic Inspectorate officials give notice of infringement to those who stubbornly refuse to play the game properly, and they may be punished by the correctional court.

In 2008, this led to the first conviction by the correctional court of Liège. The defendant was ordered to pay a penalty for damages for non-material and material loss of 1 euro to the Car-Pass vzw. In the judgement, the criminal court judge stated that: 'the exemption of tyre specialists from the obligations pursuant to the Act of 11 June 2004 would discriminate against the other sectors; reporting odometer readings does not generate a disproportionate administrative workload; the authority conferred on the Economic Affairs officials is not unlawful, on the contrary, it advances the efficiency of fraud prevention; it does not constitute an infringement of privacy laws given that the identity of the owner of the vehicle cannot be deduced from the chassis number; it does not constitute an impediment to the freedom of enterprise; there are no reasons to submit questions to the Constitutional Court; CAR-PASS suffers non-material and material losses when a company does not report odometer readings.'

The above examples illustrate that a watertight system can only work if it has a sound legal foundation, and if all the participants contribute to making the trade honest. This is the only way to effectively rid the world of mileage fraud.

As it stands now, the market context has been radically changed as a consequence of the implementation of the Car-Pass system. The bigger margins that dealers could get through fraud are negated on the domestic market, because of the extra costs that they may incur in fines and the enhanced transparency for buyers about the car's actual mileage thanks to the Car-Pass certificate. As a result, both parties now have access to the same odometer reading information!

It seems as though the primary objective of Car-Pass, i.e. to eliminate mileage fraud, has been achieved in the 10 years since its implementation. When we asked stakeholders and consumers about their experience with

²⁹ Source: Car-Pass 2008 annual report

mileage fraud in recent years, they unanimously agreed that Car-Pass has meant a huge step forward in the fight to combat mileage fraud in the domestic market.

Consumers have more confidence in the second-hand market

'A car-pass represents more safety. I already have a second-hand car, but that was a while ago I can't remember if it had a car pass. But I'm convinced that a car-pass is a kind of extra insurance. One should not forget that big purchases are involved here. Where the rules are not always clear to everyone.'

'The more information that is stated on the car-pass, the less likely the consumer is to be done over.'

'It strikes me that the times of "cheating" are a thing of the past, thanks to the Car-Pass.'

These days, consumers are more inclined to buy a second-hand car than they used to be. Thirty-seven per cent of the stakeholders interviewed confirmed that consumers today have more confidence in the second-hand market than they did ten years ago.

It was also clear from the interviews with consumers that they recognise the advantages of Car-Pass:

- transparency;
- more confidence;
- more credibility;
- higher levels of satisfaction about the purchase; and
- professionalism.

Car-Pass ensures that people can buy a used car with greater peace of mind. The threshold has been lowered and much of the uncertainty surrounding the purchase has been removed. Four-fifths of the consumers interviewed knew that there was a Car-Pass when they bought their second-hand car. Most consumers (82%) did not have to ask for a Car-Pass when they bought the used car: the seller spontaneously presented the Car-Pass certificate to them. Around half of the respondents also read the information on the Car-Pass thoroughly.



Figure 26: Consumers recognise the advantages of Car-Pass and expect that they will actually receive one on purchasing the vehicle (results of the consumer interviews)

Seven out of ten consumers stated that, in their opinion, less mileage fraud is being committed now than ten years ago. According to them, the main reason for this is the Car-Pass. This positive attitude towards the Car-Pass results in an obvious choice for consumers: they go for a car *with* a Car-Pass. For slightly more than half of consumers, having a Car-Pass is an essential criterion for being interested in the vehicle. Only 10% do not take having a Car-Pass into account. Consumers that do not rank having a Car-Pass as highly are mainly consumers who are looking for an extra car that the family is not so likely to be using often.

As a general rule, the more consumers know about the Car-Pass and what it means, the more likely it is that they will consider having one as essential when buying a used car.



Figure 27: Less mileage fraud is committed thanks to the Car-Pass (results of consumer interviews)

'Good experience with car-pass that was offered spontaneously and explained by the seller, which was a good and trustworthy start to the sale.'

'For me a car-pass means that the dealer is more professional and more trustworthy, that he has nothing to hide when it comes to the car he is selling.'

'In the past, I once bought a second-hand Clio from a car dealer. Afterwards it became apparent that the car had a much higher mileage than what was shown on the clock. Also there were lots of hidden defects, like the gears, brake pipes and much more. I traded the car in with a garage two months later when I bought a new car. Now for me the golden rule for everyone is: Only buy a used car if the car pass has been completed truthfully.'

Stakeholders are convinced that competition is fairer thanks to Car-Pass

Based on our interviews with stakeholders and the online survey conducted with more than 400 organisations that buy and sell second-hand vehicles, it emerged very clearly that Car-Pass is tremendously beneficial for the sector:

- Stakeholders unanimously agree that Car-Pass has ensured that mileage fraud has to all intents and purposes disappeared from the Belgian market.
- Customers no longer doubt odometer readings on cars thanks to Car-Pass.
- Competition on the Belgian market is much fairer thanks to Car-Pass.
- For C2B transactions (e.g. a dealer taking over a car from a consumer), stakeholders also ask to see the Car-Pass.

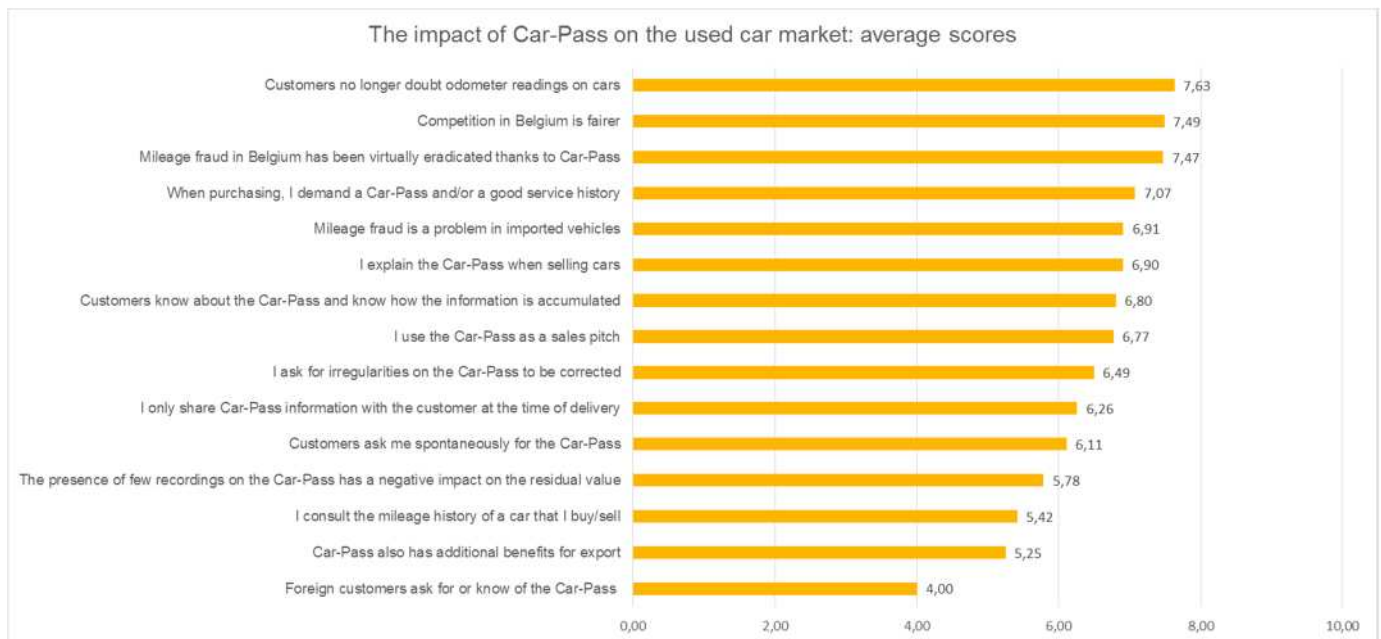


Figure 28: Question in stakeholder interviews: To what extent do you agree with these statements related to the impact that Car-Pass has had on the second-hand market? (Score 0 – 10, whereby 0 = do not agree at all, and 10 = agree completely.) With an average score of more than 7, the large majority of the respondents completely agree with the statement.

Here is a selection of the various responses from the stakeholders:

'Car-Pass not only protects consumers, but also dealerships and dealers who are fighting with honest means.'

D'Ieteren

'Thanks to its positive image, Car-Pass is used as a sales pitch.'
BavariaMotors

'Car-Pass has achieved its objective to reduce mileage fraud.'

SOCO

'Car-Pass is a strong point of reference that has helped to polish up the bad name that the second-hand sector has.'

Vancia Car Lease

'The great strength of Car-Pass is that everyone is obliged to provide the odometer reading. There will always be a history, even if your car is not serviced by an official brand dealer.'

Veys

'The image of the second-hand market has become more positive, partly thanks to the implementation of the Car-Pass and warranty legislation.'

LeasePlan

'Car-Pass is self-evident to consumers these days; it is not a distinguishing factor given that consumers assume that every seller can hand over a Car-Pass. Consumers also proactively ask for the Car-Pass. Dealers can only distinguish themselves from one another by offering a detailed history, an extensive warranty, and so on. The added advantage of the Car-Pass is that it can be used as a certificate to confirm the history.'

LeasePlan

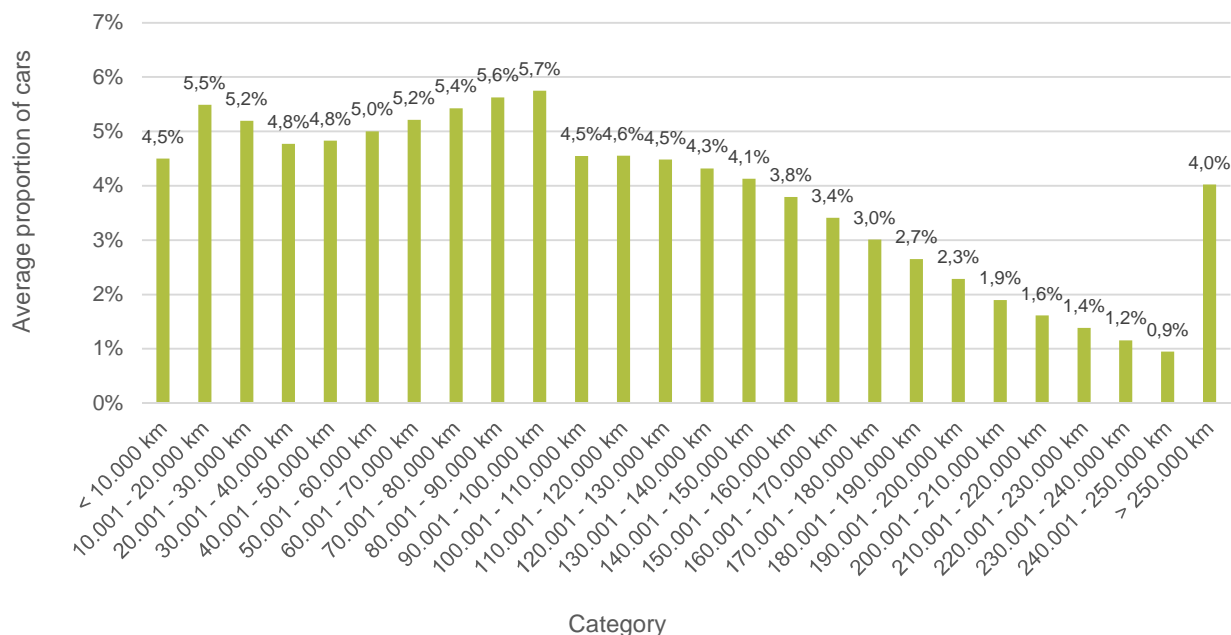
'Acceptance of the Car-Pass system in the sector is good. People can recognise the added value of the system, thanks to Car-Pass's campaigns and positive image, among other things.'

Federal Public Service Economy

'The Car-Pass is priceless because it demonstrates the seller's honesty. It creates a new kind of trust.'

Beerens/Belcar

The results of an analysis of the odometer readings recorded during technical inspections carried out by GOCA further reinforces the suspicion that there was substantial fraud in the period prior to Car-Pass, i.e. before 2006. We analysed the recorded odometer readings for second-hand vehicles (passenger vehicles and light commercial vehicles) for the period from 2001 to 2015. The dataset includes all the information for every vehicle presented for pre-purchase inspection, i.e. 'green' as well as 'red' cards. Each car was classified according to the odometer reading. The analysis for 2001 to 2005 shows an even distribution of the cars presented across the various categories. For each year, we see more or less the same curve as the one shown below, with a clear peak in the number of cars in the category 90,001 to 100,000 km, and a relatively lower proportion of vehicles with odometer readings in the subsequent categories.



Based on figures from GOCA, odometer readings recorded during vehicle inspections

Figure 29: Average number of second-hand vehicles per annum by category for the period 2001 – 2005 (compared to total number of cars inspected pre-purchase) (Source: GOCA)

The graph above shows the average per year for the period 2001 to 2005. This same graphs specifically for 2003, 2008 and 2013 shed light on the distribution of odometer readings for second-hand vehicles presented for pre-purchase inspection. The graph evolves gradually into a perfect Gauss curve, with an increasing proportion of vehicles with odometer readings in excess of 100,000 km.

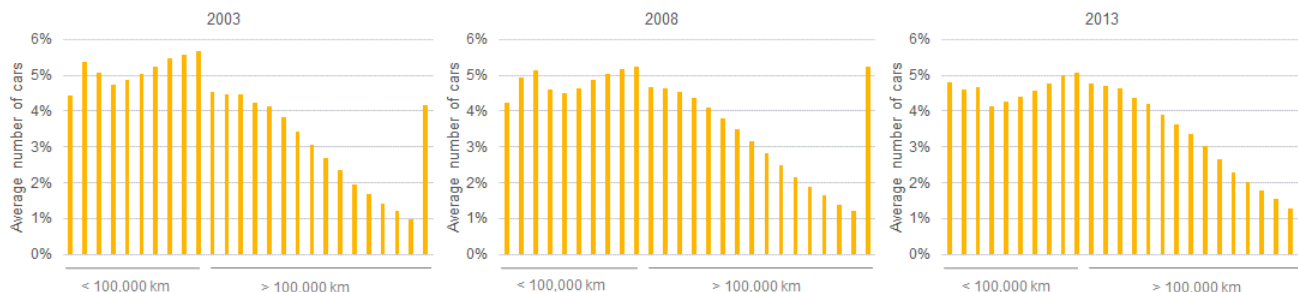
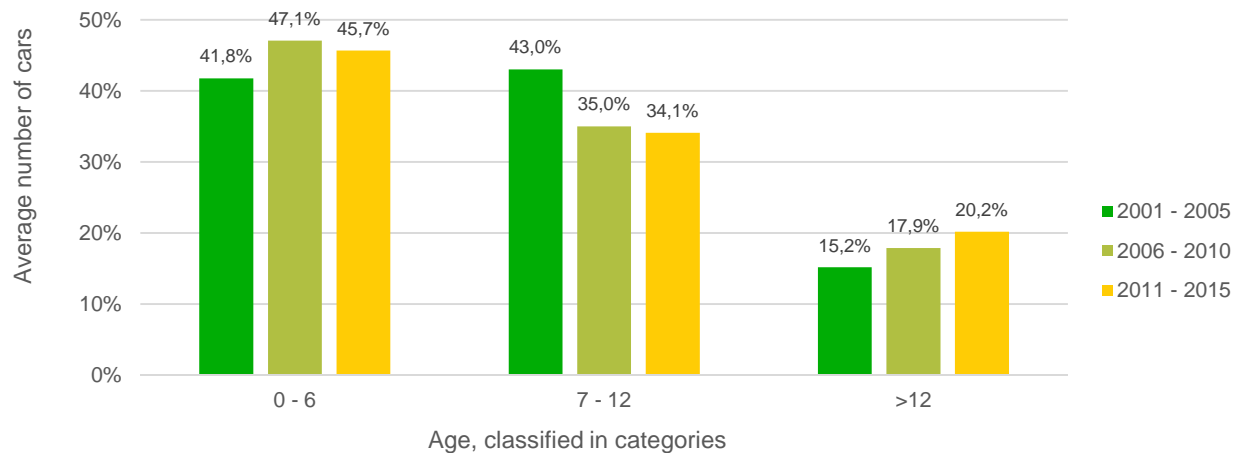


Figure 30: Evolution of the distribution of odometer readings (based on figures from GOCA, odometer readings recorded during pre-purchase inspections for second-hand vehicles)

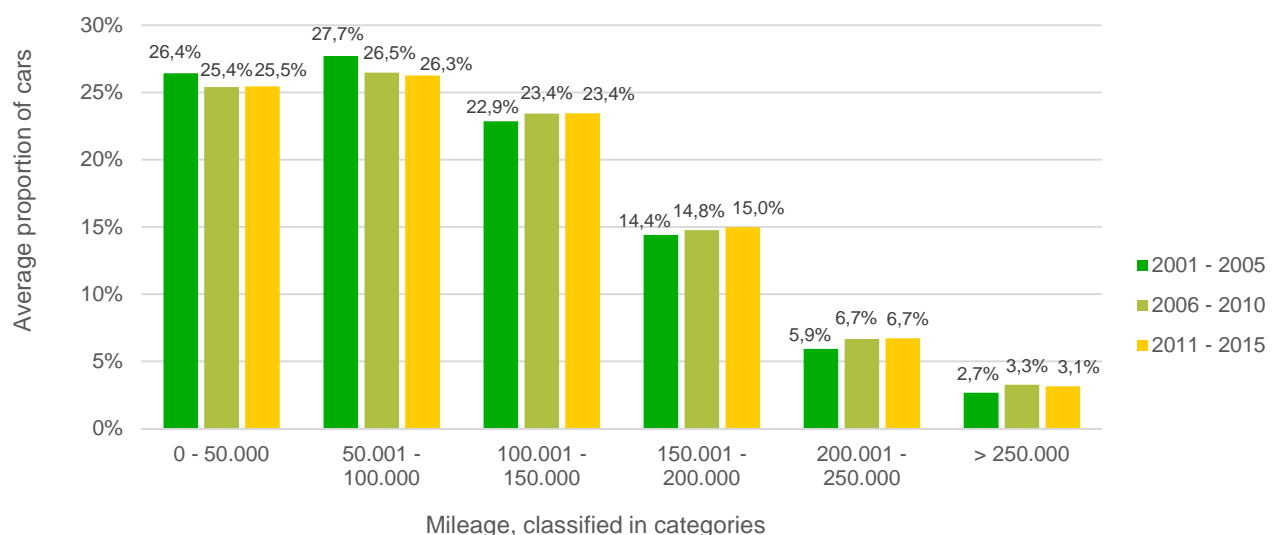
This evolution can be partly explained by the fact that relatively more vehicles that are more than 12 years old are presented for inspection. However, the category of cars that are less than six years old also had an increasing share in the inspections for second-hand sales. The ageing of the cars presented can therefore only partly explain the shift that we see in the figures above.



Based on figures from GOCA, odometer readings recorded during vehicle inspections

Figure 31: Average proportion of inspected cars by age category (compared to total number of cars inspected pre-purchase) (Source: GOCA)

If we filter these older cars (> 12 years) out of the sample, it is still apparent that the number of cars with higher odometer readings (> 100,000 km) is growing with time.

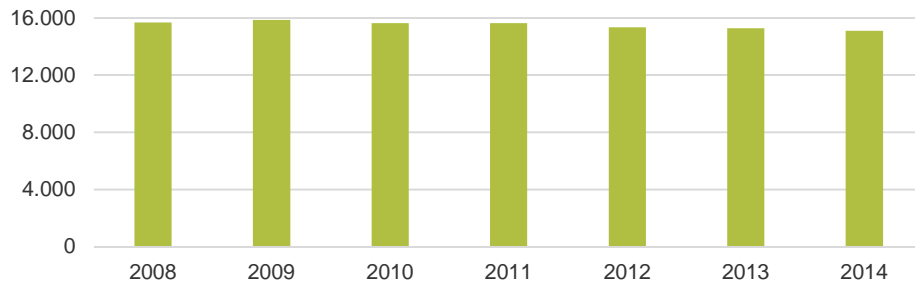


Based on figures from GOCA, odometer readings recorded during vehicle inspections

Figure 32: Average proportion of inspected cars by mileage category for vehicles older than 13 years (compared to total number of cars inspected pre-purchase) (Source: GOCA)

Another explanation for this increase may be the increase in kilometres travelled per vehicle per year. Having said that, we know that the average number of kilometres travelled per vehicle has been dropping for some years now. Figures provided by FPS Mobility³⁰ show that the number of kilometres travelled on average since 2008 has fallen by 0.5% per year to 15,096 km in 2014 across the entire Belgian fleet. So the average car in Belgium is not travelling more kilometres per year.

³⁰ Kilometres travelled by Belgian vehicles, FPS Mobility, 2014



Based on figures from FPS Mobility, 2014

Figure 33: Number of km travelled per year per car (Source: FPS Mobility)

As a result, it seems highly likely that the introduction of the Car-Pass system is one of the elements that has led to vehicles having consistently higher mileages on their odometers after 2006, and this is particularly the case for those categories in which mileage fraud was most likely to pay off, i.e. high-mileage new vehicles. Whereas 100,000 km used to be a psychological threshold value under which many vehicles were offered for sale, this trend has plateaued since 2006 to a more even spread of vehicles across the various mileage categories.

In recent years, confidence levels among Belgian consumers have increased with respect to odometer readings of vehicles bought. It is important to note the observation made by many of the stakeholders we interviewed: that this change in attitude in the market is all down to the Car-Pass system. Stakeholders are convinced that this behavioural change would not last if the Car-Pass system were to disappear. If that were the case, we would soon revert to the original market situation: one of fraud and mistrust. So monitoring is certainly valuable!

***The Car-Pass system
keeps a lid on
odometer fraud in the
used car market.***

C. Thanks to Car-Pass, prices on the domestic market are a better reflection of the actual value of the vehicle

Consumers are less inclined to take a risk premium into account when they buy a car thanks to the high level of transparency regarding mileage. In addition, sellers can no longer apply artificial price increases based on fraudulent, low mileage on the clock. As a consequence, prices better reflect the actual value of the car.

Yet the introduction of Car-Pass in Belgium has not led to a major shock in price setting on the second-hand market. Rather, the trend towards a price that is better substantiated is slow, given that a Car-Pass certificate has to be built up based on the various interventions to the vehicle (servicing, tyre changes, test inspections, and so on), and so a complete history is only obvious to the buyer after some time.

Also, it is not only the risk premium for suspected fraud that affects the prices of used cars. Indeed, it is affected by numerous other factors too. Among other things, the supply of vehicles in a region is also important. The fact that Belgium has a significant lease market, and therefore also a very diversified supply of new, well-equipped second-hand lease vehicles, as well as older vehicles owned by private individuals, means that the price level in Belgium is lower on average than in neighbouring countries. From the analysis carried out on classified ad sites, this mainly seems to be the case for cars with fewer than 90,000 km on the clock. This also explains the success of Belgian exports: there is an ample supply of high-quality, well-equipped vehicles.

'With Car-Pass, Belgium is leading the way in Europe. It is improving the image of second-hand cars tremendously. We are noticing that consumers who would otherwise have gone for a new vehicle are now opting to buy a second-hand car. The initiative has already led to better prices for sellers.'

*Johan Meyssen,
CEO Cars on the Web*

To analyse the trend in sales prices, a sample analysis was conducted in the context of this study on a dataset of used cars from Belgium that were sold on domestic and foreign markets in the period from 2000 up to and including 2015. The analysis relates to the sale prices of around 111,000 cars (in total from 2000 to 2015), or 7,000 cars on average per year. Premium as well as non-premium makes were represented in the sample, with an average ratio of around 25% premium versus 75% non-premium makes per year. The analysis focuses on the actual sales prices of the cars when sold. The cars in the sample were sold after three to four years on average. The sample was divided according to two types of cars: cars with fewer than 100,000 km and cars with more than 100,000 km on the clock.

The sale prices of the cars rose from 3 to 4% on average during that time. This growth rate is, however, an average; the growth rates in the years prior to 2006 were on average stronger than in the years that followed (except for 2010 and 2013). No shock effects in the sales prices in these samples are shown after the introduction of the Car-Pass.

A remarkable fact reflected in this data is the discrepancy that arises between the sales prices in the groups of vehicles divided by mileage. After 2006, a slightly deviating curve arises for the cars with mileages of fewer than 100,000 km compared to the curve of those with more than 100,000 km on the clock. Prior to 2006, sales prices for each group were virtually at the same level; in the period from 2001 to 2004, it seems as though vehicles with higher mileage were even more expensive. Whether this differentiation in prices based on odometer readings after 2006 is attributable to the implementation of the Car-Pass cannot be stated with any certainty, but when it comes to setting prices for this sample of vehicles, it is as though mileage has begun to gain in importance since 2006...

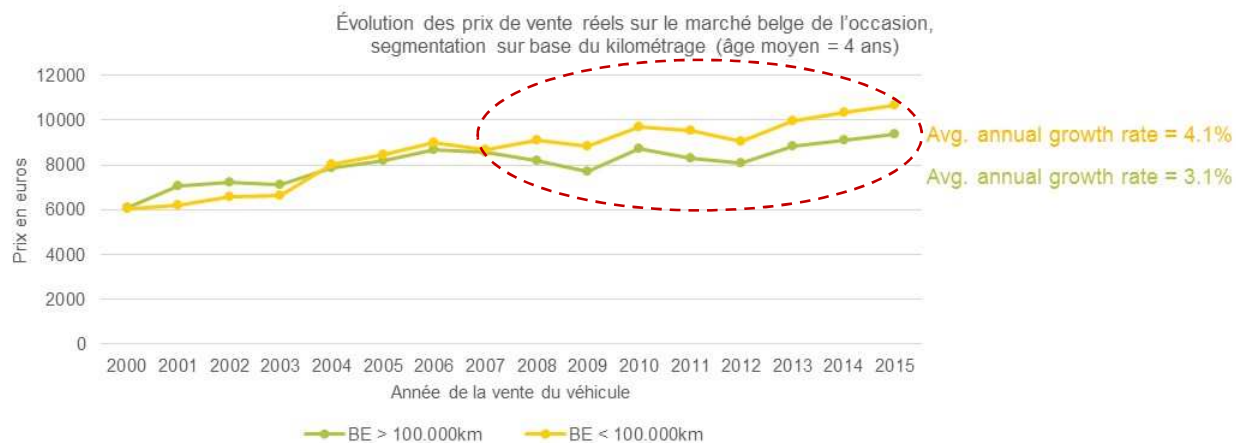


Figure 34: Trends in actual sales prices in the Belgian second-hand market, by mileage and age category

Based on anonymous remarketing data, 2000 – 2015

D. Car-Pass has made the biggest difference to sales to consumers

Various parties trade with one another in the market for used cars. We differentiate between transactions among consumers themselves (C2C), sales from consumers to dealers (C2B), sales from dealers to consumers (B2C), and transactions between dealers (B2B).

The advantages of the Car-Pass system in terms of transparency and creating confidence that consumers and stakeholders recognise unanimously are mainly to be found in those transactions in which consumers are involved as the buyer. Consumers often act without much knowledge on the subject. The impact of incomplete information is reduced if a dealer is the buyer; we can assume that dealers act with knowledge and expertise. Also, in transactions between dealers, there is the very important element of repeated collaboration. Whereas transactions with consumers are often a one-off occurrence or infrequent, dealers often have repeated dealings with each other. So reputation and trust are crucial factors in this relationship.

'It strikes me that the times of "cheating" are a thing of the past, thanks to the Car-Pass.'

Quote from respondent in the consumer interviews

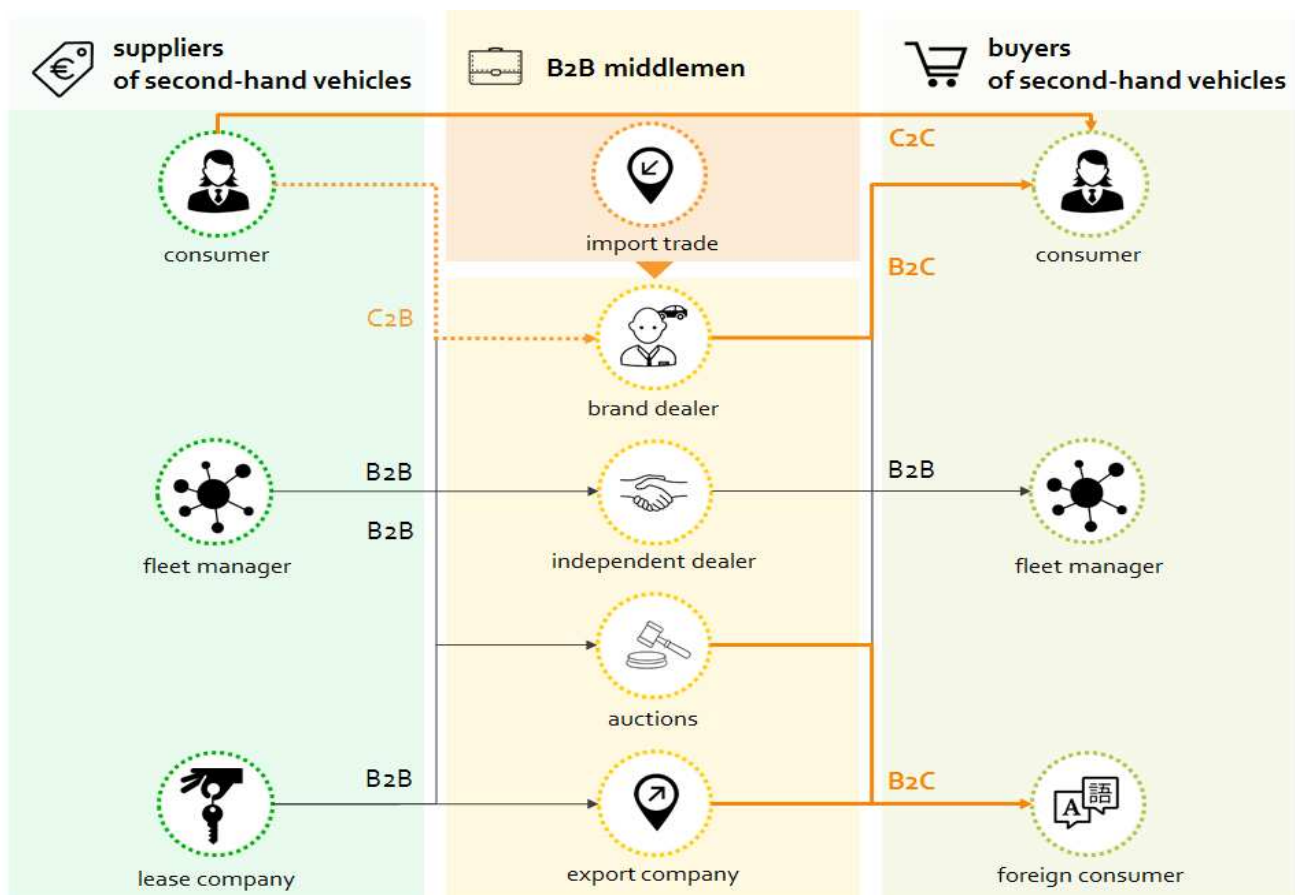


Figure 35: The benefits of Car-Pass are mainly a factor in transactions with consumers

Apart from consumers, companies who frequently sell to consumers also benefit from a strong Car-Pass system and honest trade. Thanks to the Car-Pass system, a climate of trust and transparency is created, which in turn leads to fairer competition in the market and more balanced and correct price levels. Brand dealers cater to this need for transparency and trust by expanding their programmes for makes. Key to these programmes – and as is the case with Car-Pass – is putting cars with a known history on the market.

E. Car-Pass indirectly affects other kinds of fraud, and creates growth opportunities for the sector

Apart from the immediate impact of the Car-Pass system, there are also indirect effects in the market that are related to Car-Pass. As we mentioned previously, the Vehicle Crime Unit at the federal police is no longer buried under a mountain of complaints and files related to mileage fraud; this means that they can make time for other work in their field.

The increased level of trust that consumers have and the growth in the sector also contribute to a higher level of professionalisation. More players are attracted to the market (e.g. the growth in second-hand activities at brand dealers and used car schemes among importers) and the quality bar is set higher each time. This is due, among other things, to the interplay of elements such as warranty legislation, Car-Pass, the introduction of the TRAXIO standard contract of sale and so on. These days, sales targets apply just as much to second-hand vehicles as they do to new ones. The peak in this regard has by no means been reached yet. It emerged from the interviews with consumers and stakeholder experiences that consumers today know about Car-Pass but they are not sufficiently aware of the overall Car-Pass system behind the certificate. If they were to understand better that the Car-Pass is a reflection of the car's history and that offering information can increase the vehicle's residual value, then there would certainly be potential for curbing activities like undeclared work and VAT fraud in the sector. The entire car market stands to benefit in both the short and the long term from the impact of the system that contributes to a better perception and enhanced trust.

F. Unfortunately, the positive effects that Car-Pass has had have thus far remained limited to Belgium

So does this analysis then also mean that fraud in the second-hand market has disappeared altogether and that rogue players have been barred from the market? Unfortunately, this is not the case... Stakeholders said that rogue players have indeed been kept out of the market up to a point thanks to the Car-Pass system. It is highly likely, however, that others have reoriented themselves and are now focusing on other activities (export, VAT fraud, social fraud and so on).

The Car-Pass system's range of operation is currently limited to mileage fraud and to the Belgian market. Car-Pass vzw has no insight into the history of cars that are imported from other countries. Also, Car-Pass has hardly any control over fraud that occurs with vehicles after export. Even though it is mandatory for the Car-Pass document to be provided when selling a vehicle to a foreign consumer, it is extremely difficult to monitor. Foreign consumers are often not familiar with the Car-Pass system, so they do not proactively ask for the certificate. Consumer associations in France and Germany confirm, for example, that they are not familiar with the Car-Pass system.³¹ Knowledge of Car-Pass is more widespread in the Netherlands because they work with a similar system there.

The 2010 Car-Pass survey estimated the fraud in the surrounding countries of Germany, France and Luxembourg in a conservative scenario to be more than 1 billion euro:³²

in euro	Conservative scenario	Pessimistic scenario
Germany	725 million	1.358 billion
France	488 million	1.059 billion
Luxembourg	12 million	15 million
Total	1.255 billion	2.432 billion

Figure 36: Estimated value of fraud in neighbouring countries – conservative versus pessimistic scenario (Source: Car-Pass)

³¹ Interviews through Test-Aankoop with fellow consumer associations in Germany, France and the Netherlands

³² Impact study of mileage fraud with used cars & adaptability of the Car-Pass model in other EU-countries, 2010

Theories on the number of fraud cases in foreign countries are, however, difficult to prove with data and conclusive evidence.

4. What is the situation in neighbouring countries?

Although the market for second-hand vehicles is an open one that includes a lot of import and export business, relatively speaking, every continent and every Member State or region within Europe has its own specific characteristics. These characteristics are to a large extent determined by consumer preferences, and tax policy also plays an important role. Only two member states, the Netherlands and Belgium, have drafted their own policy to actively combat mileage fraud and, by doing so, actively support consumer confidence.

The stakeholders interviewed in this survey said that they would find the introduction of a system like Car-Pass for the European level extremely useful for reducing mileage fraud abroad as well, which in turn would further expand international trade in second-hand vehicles. This study shows that the introduction of a similar system can have a specific effect in any kind of market. In this section, we briefly review the situation in the various markets that we find in neighbouring countries, and evaluate what the possible impact of a system like Car-Pass could be for these markets.

A. The correctness of odometer readings in neighbouring countries is communicated clearly in around two-thirds of the cases, but the way in which this is done varies significantly from country to country.

Communication about mileage through...

	Advert	Dealer	Not given or don't know
Luxembourg	24%	45%	39%
France	25%	45%	36%
Germany	25%	47%	34%
The Netherlands	24%	52%	32%
Belgium	22%	62%	21%

The correctness of mileage is proactively given in the sales advert in a quarter of the cases. In around half of the cases, the dealer provides this information during the purchasing decision. In this respect, Belgium leads the way in Europe with the dealer providing the information in 62% of the cases. This is mainly thanks to Car-Pass, which was described in a study carried out by the European Commission³³ as an example for the other European countries to follow.

Figure 37: Communication on mileage in neighbouring countries and in Belgium (Source: European Commission)

How the correctness of the odometer reading is demonstrated varies from country to country. Belgium and the Netherlands are the only countries that have developed a system that records odometer readings countrywide. So it comes as no surprise that the preference for proving the accuracy of odometer readings in these countries is for these systems (in 86% of the cases in Belgium and 72% in the Netherlands).

Another option for checking the accuracy of mileages is to check the service history. In the surrounding countries, this method is particularly popular in Germany (31%). In France and Luxembourg buyers are mainly obliged to rely on what the dealer says verbally (35% and 22%, respectively). In Germany and France, the accuracy of mileage is proven in a quarter of the cases by a visual check of the odometer reading. It goes without saying that this method is less accurate than submitting an official certificate as is done in Belgium and the Netherlands...

³³ Source: Consumer market study on the functioning of the market for second-hand cars from a consumer perspective, 2014

Odometer reading check based on...

	Service booklet	Verbal guarantee	Official certificate	Visual check of the odometer reading	External check suggested	Dealer provides a guarantee	Other	No assurance given
Luxembourg	17%	22%	0%	0%	6%	11%	0%	44%
France	13%	35%	0%	26%	0%	4%	26%	13%
Germany	31%	15%	0%	23%	12%	12%	8%	23%
The Netherlands	3%	16%	72%	9%	0%	0%	3%	9%
Belgium	9%	2%	86%	4%	0%	4%	0%	0%

Figure 38: Methods of checking mileage in neighbouring countries and in Belgium (Source: European Commission 28)

B. In all the countries, price is the main criterion when it comes to buying a second-hand car, whereas the importance of the odometer reading varies by country. The Germans, especially, attach less importance to a high odometer reading.

In neighbouring countries, price is taken into account in 60 to 70% of the cases when buying a second-hand car. The price is clearly a crucial factor in the purchasing decision; consumers are price conscious. In a third of cases, the price is even the most important aspect of the purchase. In the interviews with consumers carried out in the context of this study, it also emerged that the price is the most important factor when consumers opt for a second-hand car.

A study conducted by the European Commission³⁴ shows that the mileage on the clock is the second most important criterion when it comes to opting for a second-hand car. In 8% of the cases on average, mileage is the most important aspect. In Europe, mileage is taken into account during the purchasing process in 35% of the cases on average. France and Luxembourg are frontrunners in this regard, at 56% and 45%, respectively. Given the value that is attached to this aspect, it is essential that the odometer reading is accurate.

It is striking that the odometer reading was put forward as a less important criterion in the German consumer interviews; this was especially the case when purchasing executive vehicles. Perhaps sales channels play a role in this: German market research shows that new executive vehicles are almost exclusively bought through dealer networks. Dealer networks can rely on the make's own service systems to verify and guarantee mileage. This is another matter for private sales: this segment is dominated by sales of generally cheaper, older cars. The C2C market in Germany has a market share of 69% among vehicles over nine years old (compared to 13% for cars less than two years old).³⁵

On the face of it, a system for recording odometer readings like Car-Pass seems to be less pressing in Germany because of the specific characteristics of this market. Yet one should not lose sight of the fact that Germany is a very important export country for second-hand vehicles. Consumers' sense of having additional protection when buying from a dealer in the neighbourhood that they have known for many years does not apply in these export deals. It is in fact particularly difficult for a buyer of an imported vehicle abroad to find out where the vehicle came from and what the service history is. A system in Germany would have a very positive effect on consumer confidence on used car import markets in other countries.

³⁴ Source: Consumer market study on the functioning of the market for second-hand cars from a consumer perspective, 2014

³⁵ Source: DAT Group, 2015

C. The Dutch example shows the importance of a legal basis and the broad roll-out of an odometer recording system

Most Dutch cars are owned by private individuals (84% of the fleet). The Dutch mainly go for petrol vehicles and buy used cars more frequently and new vehicles less so. Consumer confidence in this specific second-hand market is very important.

The Dutch automotive sector came up with a system for recording odometer readings as far back as 1991. A system was developed in which accredited mechanics initially participated on a voluntarily basis. That said, the system was not sector-wide. According to estimates from the National Car Pass Foundation (NAP) that manages the database, 5% of registered vehicles on the road in the Netherlands have an odometer that has been turned back. This can in part be explained by the fact that there will be no mileage history for imported vehicles in a national system. A Dutch study shows that as much as 30 to 40% of all imported vehicles in the Netherlands have incorrect odometer readings.³⁶

We discussed in Section 3 how the negative implications of odometer fraud go beyond the impact on the residual value of the vehicle. According to a study conducted by the NAP, odometer fraud also affects the car's current market value as used by insurance companies. The current market value is the amount paid out for the car by an omnium insurance in the event of a serious accident (total loss). If the current market value is lower because the odometer has been turned back (even if you are not aware of it), then you will get much less back for the damage, and so you yourself have to pay more.

Figure 39: examples from Dutch odometer reports³⁷



To combat this kind of fraud and to better protect consumers, a change in legislation took place recently in the Netherlands: it is now a punishable offence to turn back an odometer. The official authority, RDW (the National Vehicle and Driving Licence Registration Authority, the department for road traffic that is comparable to the DVR in Belgium), took over the data management from the NAP Foundation. As a consequence, it has been mandatory since 1 January 2014 for all RDW-accredited companies to notify the RDW of odometer readings for passenger vehicles and light commercial vehicles up to 3.5 tonnes.³⁸ As is the case in Belgium, this concerns companies who, in addition to repairing and servicing vehicles, are also authorised by the RDW to carry out technical inspections. When purchasing a second-hand car, consumers are given an 'odometer report' and anyone can check the mileage history of vehicles on the RDW site just by entering the licence plate number.³⁹

The odometer report reflects the history of odometer readings and gives an opinion on whether the way it was accrued is illogical, logical or uncertain. The RDW is unable to check the logic of the odometer readings for imported vehicles because other European countries (apart from Belgium and the Netherlands) do not have a properly functioning system for recording odometer readings. So for these cars, it is stated 'no opinion due to import'. When purchasing an imported vehicle, the buyer must be extra cautious and use other methods to check the reliability of the odometer reading.

The Dutch example shows that a Car-Pass system can only work if it is introduced on a large scale. A legal basis and enforcement are also important components of an effective system that operates countrywide. In Belgium, companies operating in after-sales service (tyre centres, windscreen fitters and so on) are also important providers of information. A system that covers the entire value chain gives more guarantees for a drastic reduction of fraud at national level.

³⁶ Source: NAP

³⁷ Source: Vehicle and Driving Licence Registration Authority (RDW)

³⁸ Source: Odometer readings, RDW

³⁹ Source: Checking odometer readings, RDW

D. Markets with a relatively new fleet, like the one in Luxembourg, also stand to benefit from a system that tackles mileage fraud

Unlike the Netherlands, the market in Luxembourg is characterised by a large proportion of new premium vehicles in a very new fleet: Fifty-nine per cent of the fleet is less than five years old and only 16% is more than ten years old.⁴⁰ As a consequence, the average age of passenger vehicles is low at only eight years (compared to 8.4 years for Belgium in 2015).⁴¹ Despite this, this fleet is also being affected by ageing: the average age of the fleet in Luxembourg has increased by one year in the last ten years.⁴²

On the market in Luxembourg, too, there is an increase in interest for used cars. Moreover, companies and consumers in Luxembourg would rather buy a car than opt for leasing. This results in a relatively large number of transactions on the second-hand market. They often involve new executive vehicles that fall into a higher price category as a result. For this type of car in particular, there is a major risk of mileage fraud because the 'profit' to be made on the residual value is relatively large. The Luxembourg market is also an open market: around 35% of the used car market is made up of imported cars (compared to 8% in the Netherlands). Luxembourg would therefore also benefit from an international system that offers sufficient guarantees for correct odometer readings.

E. There is a registration system in France related to the ownership structure of vehicles.

An additional risk in second-hand sales is that vehicles may be offered by sellers who do not actually have full ownership of the vehicle, i.e. there is outstanding financing on the vehicle. This is a phenomenon that was also discussed often in our stakeholder interviews. In France, too, using financing to purchase second-hand vehicles is standard practice. France has developed a system in which the transfer of a vehicle has to be declared ('*document de cession de véhicule*').⁴³ In this way, it is possible to verify who the official owners of the vehicle are. In the context of this study, several stakeholders referred to this system that could be seen as supplementary to the Car-Pass system, and could further improve confidence in the second-hand market.

Like most European Member States, the French market is characterised by a strong increase in the ratio of used to new cars. In this, it is noteworthy that it is mainly young people who are increasingly buying second-hand cars. From the consumer interviews, it became apparent that the average age of buyers of new cars is very high (52 years on average among the respondents in the survey).⁴⁴ This is noticeably higher than in Germany, for instance, where similar surveys were conducted (43 years in the survey).⁴⁵ As is the case in the other countries, in France, too, there is a significant segmentation according to sales channels: new vehicles in particular are sold via dealers (64%) while transactions between consumers mainly dominate the old car segment. Most cars sold second hand in France are more than four years old (65%).

A Car-Pass system would also offer consumers more confidence in a market such as this, which has a large volume of transactions related to older vehicles.

⁴⁰ Source: Âge des véhicules par catégorie (en %) 2001 - 2016

⁴¹ Analysis based on the Car-Pass database, excl. classic cars

⁴² Source: Le boom des voitures d'occasion au Luxembourg, 2014

⁴³ Source: Déclaration de cession d'un véhicule, Service Publique, France

⁴⁴ Source: Cetelem, 2014

⁴⁵ Source: DAT Group, 2015

5. How can the Car-Pass system do more for consumers and professionals in the future?

Given the importance of import and export flows in the European market, an extension of a system like Car-Pass to combat cross-border mileage fraud is definitely called for. Car-Pass is in a privileged position because, based on its experience, it is able to apply pressure on the various parties that are active in this field in the European context. In addition, there are also opportunities to improve the system on the domestic market. From the conversations with the various parties that work directly or indirectly on the Car-Pass system, as well as from the interviews with consumers, several suggestions to make the Car-Pass system more effective were put forward. Several parties also suggested further innovations and/or expansions to the existing system.

A. Improvements to the existing system that would increase effectiveness

From the interviews with consumers and the sector, a number of avenues were identified that could further enhance the effectiveness and clout of the existing Car-Pass System. The main improvements are listed below as recommendations to Car-Pass vzw:

Continue to focus on raising awareness of the Car-Pass system

It emerged from the interviews that Car-Pass scored high marks for name awareness: most people know what Car-Pass stands for. The Car-Pass campaigns in the media are rated very highly. People have been made aware of the fact that turning back the clock is a punishable offence and that it is a thing of the past.



On the other hand, it was apparent from the interviews conducted in this survey that consumers are less well informed about the way the information on a Car-Pass is accumulated. Apart from recording odometer readings during technical inspections, they are recorded at virtually every service or purchase of tyres or windscreen replacements. Consumers are often not aware of this.

Enforcement by the Economic Inspectorate is also an important keystone in the Car-Pass system. More emphasis should be placed on these enforcement activities, so that it becomes clear that building up a strong Car-Pass for the car is not without obligation. Raising awareness in this respect may contribute to encouraging consumers to take their vehicles to recognised companies for servicing. This would result indirectly in a reduction of undeclared work and an increase in safety.

Make Car-Pass information available sooner

As it stands now, Car-Pass certificates are handed over during the pre-purchase inspection for used cars. Often the sales transaction has already taken place. From a legal point of view, this is not correct and in practice it gives rise to a great deal of debate. Car-Pass could develop a system whereby the information on the Car-Pass would be available for inspection by potential buyers at an earlier stage. In this way, Car-Pass information would support the purchasing decision.

An online application could be developed that would allow access to information in the Car-Pass databases. It would grant access to anyone who wanted to look up information about a specific vehicle. As it stands now, Car-Pass information can already be viewed online, but the certificate number is required for this at the moment.

Focus attention on the fact that imported vehicles have no history in the Car-Pass system

Other European countries do not have a Car-Pass system. Only the Netherlands has a similar database. So there are no odometer reading histories for the mileage that imported vehicles have travelled before being registered in Belgium. Because mileage fraud has been virtually eradicated in Belgium, consumers assume that every car offered on the market in Belgium ‘must be fine’. Nothing could be further from the truth. Including a clear and prominent statement that it is an imported vehicle when the consumer requests information could address this. At present, the Car-Pass certificate already states that the vehicle is an imported vehicle. However, various stakeholders felt that the statement should be clearer.

B. Improvements to the existing system that would increase efficiency

More than 11,000 businesses and self-employed people feed information into the Car-Pass system. Odometer readings have to be read in the vehicle in the workshop, and the information has to be written down and then recorded on a PC, often by another member of staff. So input errors are not inconceivable.

To be able to guarantee the quality of the information, Car-Pass carries out a logic check on the input entered manually based on the history of the odometer readings that have already been recorded. If the odometer reading that is entered is lower than what was previously recorded, the company that recorded the information is contacted. The intention here is that the company checks whether there may have been reading or recording errors. Often this requires an additional search in the company’s own recording systems. Reading errors can occur because digital odometers store various mileages. That is to say, the same display often shows the vehicle’s trip meter and day meter alongside the mileage.

So the automatic read-out of mileage information is certainly an asset and a recommendation for the Car-Pass. Errors would be avoided and the administrative processing time for recordings would be significantly shortened. The time that is required to verify abnormal recordings would also be eliminated. Dongles can be used to automatically read and record information. A dongle is a piece of hardware that can be connected to the car. Dongles can also be used as network receivers. In this way, the information that is read out can also be automatically passed on directly to the Car-Pass IT system.

C. Expansions to the existing Car-Pass system

During the interviews that were conducted in the context of this study, we also gauged the need for an expansion to the Car-Pass system. The questions gauged the requirements for a further expansion to the scope of the Car-Pass system to include vehicles other than passenger vehicles, as well as requirements for an expansion of the information that is currently being captured in the system. In other words, it is conceivable that information other than only odometer readings could be recorded in the central database, and then made available later to consumers.

Consumers still recognise many opportunities for Car-Pass. Reporting serious accident damage would also be extremely useful. Also, being able to report the number of previous owners would be an advantage for Car-Pass.

‘In my opinion, there are several extras that could easily be added, like accidents, inspection reports, servicing and so on. I think it would be perfect if we could come up with one uniform document that contains everything.’

‘I would find it extremely helpful if the Car-Pass could include more details, such as which interventions were carried out (and possibly also where) on the date and odometer reading in question. An online platform would also be useful (or an app?) that you could turn to to check out these things in detail for your specific vehicle/the vehicle that you have your eye on.’

‘Maybe it would be useful to state as much information as possible on the Car-Pass: including mileage on the clock (preferably as detailed as possible), at what odometer reading the vehicle went in for servicing, when it went for an inspection, and so on. By reporting all this information, I think the risk of forged information will be reduced while at the same time it gives the buyer of a used car more confidence.’

‘Only if documents like service books are also no longer necessary, and the services with the mileage are stated on the carpass. And the carpass can be put onto a digital card, like an identity card for instance... A

carpass like this would then be registered in the car's name. Then the garage would only have to add or adjust certain information, like the date of a service and with it the mileage or repair if there is damage. The registration form could be part of an electronic card, but that's way down the line I think...'

Q: What other options do you think the Car-Pass certificate could still offer? N = 1,045 | Filter: None



Figure 40: Possible expansions to Car-Pass (results of consumer interviews)

Two important preconditions were applied in the context of this study when assessing the feasibility and usefulness of all these proposals, namely:

- Precondition 1: It must be **objectifiable, non-commercial information** that the consumer also expects from an officially accredited and independent institution like Car-Pass. So it is not the intention to record all the information about a vehicle and then to offer an electronic service book, for instance.
- Precondition 2: the administrative burden placed on the companies responsible for recording the information and on the Car-Pass organisation must be in proportion to the social benefits that the additional information can provide.

The proposals that were selected as recommended for implementation on the basis of this evaluation are:

1. State the number of owners that the car has already had

Consumers indicated that the number of previous owners of the vehicle (in relation to the car's age) is an important element about which they would like to have additional information. Incidentally, from the GOCA figures that were analysed in the context of this study, it emerged that the number of cars that change hands very frequently on the Belgian market is low. More than half of the cars that were presented for inspection in 2015 prior to second-hand sales had changed ownership for the first time in ten years.

It would be quite easy to add this information to the Car-Pass certificate.

2. State serious accident damage and recalls not carried out

Sixty-two per cent of respondents in the survey indicated that they would be interested in the vehicle's accident history. In itself, this is quite ambiguous given that the degree of damage that an accident can cause can vary, and any damage can also be flawlessly repaired without necessarily entailing any additional risk of an accident. Information that can be objectively established based on an independent expert's assessment is whether the

vehicle requires a technical inspection as a consequence of an accident. This question can be unequivocally answered with a simple ‘yes’ or ‘no’ on the Car-Pass on the condition that this information is added to the Car-Pass database.

The system could also provide information about whether there are any recalls that have not been carried out for a particular vehicle. They can point to any potential safety risks and are also objective, additional facts. In Belgium, the person in whose name the car is registered receives a letter from the manufacturer. It is, however, not possible for a potential buyer of the vehicle to trace this letter, and it can also be withheld. In various other countries, there is an official authority that ensures that information about recalls can be checked. In the Netherlands, there has been a web page on the RDW site since the end of 2012. It contains an overview of all current recalls for vehicles (by make and model) and the main component concerned (brakes, steering system, fuel system and so on). The RDW’s so-called OVI (online vehicle information) screen shows whether there is a recall pending for a specific vehicle registration number, and which main component it concerns. More information can then be obtained for a fee.

3. Make the environmental features of the vehicle available

Low emission zones have been introduced in many European countries to protect air quality in cities. An emission zone will also come into effect in Antwerp next year; Brussels and Ghent have similar plans for the future. The issuing of permits for the zone depends on the vehicle’s category and the European standard. This information is stated on the certificate of registration (at least for more recent vehicles).

This information is also used for the ‘benefits in kind’ tax scheme calculations. Making this information available electronically through the Car-Pass system facilitates administrative procedures. Also, it focuses the new car buyer’s attention on the environmental features and any limitations in use or additional costs that may be related to the purchase of their vehicle.

D. The further expansion in the long term will depend on technological breakthroughs in the automotive sector and market developments in the field of mobility.

The mobility landscape is undergoing a complete transition. Here we have in mind, for instance, technological breakthroughs such as connected cars, and systems in which the vehicle itself tracks its service history and automatically proposes booking it in with the garage. Alongside these technological developments that may be significant for Car-Pass, the sector is indicating that the trend towards an increase in mobility services may also offer prospects for the Car-Pass organisation in the future. Having a car is, after all, evolving more and more towards shared use of a broad-based fleet of various vehicles. The need for good information about the vehicle that will be used at some point in time is only set to increase as a consequence. For Car-Pass, this development is an important strategic item for consideration, particularly for the longer term.

6. Conclusions

The basic premise underlying this study was to evaluate the impact that Car-Pass may have had on the market for second-hand vehicles in Belgium during the past decade. This year, Car-Pass vzw celebrates its tenth anniversary: this is the perfect time to take stock and to have a closer look at developments in the market and the impact that Car-Pass may have had on it.

Car-Pass vzw was officially founded in 2006, with a clear mission: **to curb mileage fraud** in the second-hand market for passenger vehicles and light commercial vehicles. **Passenger vehicles and light commercial vehicles** together are good for around 85% of the entire Belgian fleet. The vast majority of these vehicles are owned by consumers. What's more, in two out of three cases, they choose a used vehicle when purchasing a car, and this choice is driven by price. The second-hand car market in Belgium is estimated at more than 1.1 million sales transactions. This is an important business, one that can only function properly if consumers have confidence that vehicles are being traded in an honest and transparent way, and if there is also a legal safety net if one is cheated. The Car-Pass system and the so-called Car-Pass Act are therefore principally aimed at securing consumer confidence.

The Belgian fleet and the market in second-hand vehicles have very specific features:

- Because of its significant lease market, there is a **considerable turnover in new, well-equipped cars** that are offered for sale on the second-hand market once their lease period expires. These are often **diesel vehicles** that have relatively **high mileage** on the clock on completion of the lease agreement.
- Consumers mainly base their choice for a specific vehicle on attributes such as price/quality ratio, safety and the mileage on the vehicle's clock. For instance, they look for new cars with a **mileage of around 120,000 kilometres**, and in recent years there has once again been a surge in interest in **petrol vehicles**. Needless to say, this preference is also partly influenced by the tax climate driving this demand.

As a result, supply and demand on the domestic market are not always fully aligned. This is also the case in neighbouring countries; that said, the characteristics of fleets in neighbouring countries often differ from those found in Belgium. For instance, the proportion of petrol vehicles in the Netherlands and Germany is noticeably higher than in Belgium. Yet the supply in neighbouring countries is also not fully in line with local demand. These circumstances stimulate important **import and export flows** between inter alia Belgium and the surrounding countries. The growing importance of the internet as an information channel *and* as a purchase/sales channel is reinforcing this globalisation trend in the market even more.

Prior to 2006, the domestic market as well as the markets in the surrounding countries have been confronted with a major problem in the form of **mileage fraud**. This type of fraud was typically extremely **lucrative for sellers**, who were at liberty to apply artificial price increases for vehicles for which they could manipulate the mileage to a lower level due to the absence of a watertight monitoring system and a lack of expertise among consumers. There are various indications that this type of fraud constituted a widespread phenomenon in the second-hand market. Case law has shown, for instance, that taxis with several hundreds of thousands of kilometres on the odometer were offered to consumers as new vehicles with only a few kilometres on the clock.

The intention behind Car-Pass was to contain this kind of fraud, and to do so based on **regular recordings** of odometer readings and the **mandatory issuing of a certificate** in combination with a preventative and responsive **control system**. A detailed overview of the vehicle's history is accumulated by recording the mileage during every intervention carried out on the vehicle from the first year of its life. This history of consecutive, and preferably ascending, odometer readings is the backbone of the mandatory certificate that the seller has to provide to the consumer every time a car or a light commercial vehicle is sold. Anomalies in mileages are noticeable; a downward dive in the mileage immediately arouses the consumer's suspicion. In addition, the control system is intended to ensure that dealers are monitored both preventatively and reactively on the application of Car-Pass legislation. The federal judicial police and the Economic Inspectorate of the Federal Public Service Economy are part of the enforcement system.

This way of working has clearly paid off as it stands today: consumers and stakeholders unanimously agree that **mileage fraud in the second-hand market for Belgian cars has been virtually eradicated thanks to the Car-Pass system.**

Consumers have **more confidence** in the second-hand market and notice an obvious **professionalisation** of the sector. They mentioned the advantages of the Car-Pass as a sign of transparency and credibility, and recognise that the presence of a Car-Pass certificate is likely to make them more satisfied with the purchase they have made.

The stakeholders interviewed concurred with these observations, and are moreover convinced that the Car-Pass is responsible for **fairer competition** in the second-hand car market. An important observation that they make in this respect is the significance that the Car-Pass system has for maintaining this situation. They believe that the curtailment of mileage fraud is mainly sustained thanks to the Car-Pass system, and that without this system the fraudulent practices from the past would surface once more. As a result, **Car-Pass** plays a **crucial role** in ensuring that the positive impact on reducing mileage fraud that we can see today continues in the future.

Apart from the impact that Car-Pass has had on curbing odometer fraud, this study revealed several **other significant trends in the market** that were achieved mainly thanks to Car-Pass:

- Thanks to Car-Pass, prices on the domestic market are a better reflection of the **actual value** of the vehicle. This trend has been prompted by the fact that sellers no longer charge artificial price increases based on manipulated odometer readings, and consumers no longer have to keep a risk premium in reserve when purchasing a vehicle. The analyses of the price levels of new and used cars on the market showed that the price correction occurred slowly following the implementation of Car-Pass certificates. The Car-Pass system did not trigger a shock effect in the market.
- Car-Pass has made the biggest difference to sales to **consumers**, which was precisely the intention. In addition, Car-Pass is also an important factor when dealers buy from consumers. For instance, dealers said that they also often demand to see Car-Pass certificates when they purchase a car as a source of information about the car's history.
- Car-Pass also indirectly affects other kinds of fraud (social fraud, VAT fraud and so on), and creates **growth opportunities for the sector**, thanks to increased consumer confidence.

This leads us to the conclusion that Car-Pass has managed to achieve its original objective as far as the domestic market is concerned. As it stands now, however, the impact of the Car-Pass system is unfortunately **restricted to Belgium**. The markets in the surrounding countries all have a different level of maturity when it comes to the curtailment of mileage fraud:

- One factor that connects consumers in Belgium to those in neighbouring countries is the significance that price has when buying a used car. It emerged that price is the most important criterion everywhere for choosing a second-hand car.
- The importance that consumers attach to the mileage of the used car that the buyer wants to purchase varies from country to country and is highest in Belgium. This is most probably down to the differences in the reliability of odometer readings in the various countries.
- The context in **the Netherlands** is closest to the Belgian situation when it comes to combatting mileage fraud. They, too, have a system that is enshrined in the law. Whereas previously there was no obligation to record odometer readings, they have recently also been working on the wider roll-out of a mandatory mileage recording system.
- The market for second-hand vehicles in **Luxembourg** is more restricted and focuses mainly on new, expensive vehicles. As a consequence, they would certainly also benefit from a system that curtails mileage fraud. At present, there is not an objective system in Luxembourg; consumers have to mainly rely on the dealer's verbal guarantee, which obviously offers little security...
- A significant proportion of the **French** second-hand market is made up of transactions involving older used cars in particular. They have opted for a registration system related to the ownership structure of

vehicles to combat fraud in this respect. A recording system for mileage fraud would, however, also offer them a solution.

- **Germany** is an important export country. This means that turning back odometer readings not only has implications for German consumers, it also has a significant impact on foreign consumers. At the moment, however, there is no German system for curbing mileage fraud using a comprehensive recording system; introducing such a system in Germany would represent a major step forward in the European landscape.

This benchmark study shows that the system in Belgium safeguards consumer confidence in the second-hand market; it is a unique system, and one that only the system in the Netherlands resembles, up to a point. Given the large proportion of imported and exported cars within the EU, and the increasing globalisation of the market, mileage fraud can only really be curtailed if a **European cross-border system** can be set up. Car-Pass has been working hard on such a system for many years, and will hopefully continue to do so in the future, so that it can have an **impact on a large scale**.

Apart from this potential improvement on a European scale, there is also certainly room for improvement within the context of the Belgian system. The interviews with consumers and stakeholders that were part of this study and interviews with Car-Pass vzw led to a set of **recommendations. These are measures** that can contribute tangibly to the improvement of the **effectiveness and efficiency** of the existing system:

- The effectiveness of the Car-Pass certificate can be improved by focusing on raising **awareness** of the Car-Pass system, in particular when it comes to how the information on the certificate is accumulated. Raising awareness in this respect may contribute to encouraging consumers to take their vehicles to recognised companies for servicing and repairs. This would result indirectly in a reduction of undeclared work and an increase in safety.
- As it stands now, Car-Pass certificates are handed over during the pre-purchase inspection for used cars. Often the sales transaction has already taken place. **Making Car-Pass information available sooner** would ensure that consumers can consult this information earlier on in the purchasing process, and as a consequence they would be better informed when making a decision.
- **Imported vehicles** do not have any history in the Car-Pass system; consumers are often not sufficiently aware of this fact and the risk that they run. At present, the Car-Pass states that it is an imported vehicle for which no history is available. This statement could, however, be given an even more prominent place on the Car-Pass certificate.

In addition, consumers and stakeholders also see opportunities for expanding the **available information** that Car-Pass offers to consumers. Needless to say, it is important that **objective** information should always be sought that serves to protect consumers. Here we have in mind, for instance, information about serious damage to the vehicle, recalls not carried out, the number of previous owners or the vehicle's environmental features.

These improvements would require amendments to the legal framework that regulates the Car-Pass system, but stakeholders and consumers alike believe that they would offer real benefits for consumers as well as the sector.

7. Appendix

A. Interviews with consumers

The survey among Belgian consumers was conducted using an online interview followed by an (optional) online discussion forum. The advantage of this method is that not only is quantitative data collected (via the questionnaire), but we also gathered qualitative input from consumers (via the online discussion forum).

Participants were recruited, on the one hand, via an online research panel and, on the other hand, via banners on partner websites (Touring, the Flemish Automotive Association and AutoScout24). A total of 1,045 consumers completed the online questionnaire in full. N = 1,005 consumers were recruited via the online research panel and N = 40 consumers took part via the banners on the partner websites. Consumers were given the opportunity to complete the questionnaire from 5 February to 16 February 2016.

All consumers who participated in the survey were Belgian residents aged between 18 and 70 years old. The sample was structured in such a way that it is representative for the population in Belgium in terms of language (60% Dutch, 40% French), gender (50% male, 50% female) and age category (13% 18-24, 19% 25-34, 22% 35-44, 21% 45-54, 25% 55-70).

Using a number of screening questions at the beginning of the questionnaire, a sample was compiled that matched the target population of our survey, i.e. potential buyers or buyers of second-hand vehicles. All those who participated in the survey were planning to buy a second-hand car in the following six months or had bought a second-hand car in the previous 24 months. All respondents were also in a position to influence the purchasing process themselves when buying a new or used car.

Consumers were screened to ensure they met the criteria of the target population based on the first questions in the questionnaire. Consumers that did not meet the requirements for the target population were not able to participate in the research.

Following the screening questions, respondents were asked questions about the details of their purchase or planned purchase of a second-hand car (which type of vehicle did they buy, via which channel, why a second-hand car, and which criteria played a role in the final decision). After this set of questions, the focus was finally turned to Car-Pass: their awareness of Car-Pass, which role they see for Car-Pass in the purchasing process, and how did it influence their opinion of the second-hand market?

At the end of the questionnaire, respondents were given the opportunity to take part in an (online) brainstorming session in the 'Car-Pass lounge', an online platform/forum where consumers from the target population could discuss the subject with one another. Thanks to this platform, we were able to gather qualitative input from consumers to supplement the results from the questionnaire.

B. Stakeholder interviews

To get a full picture of the impact that Car-Pass has had on the used car market, it was important that not only consumers were interviewed, but stakeholders were also given a voice. A two-pronged approach was used for the stakeholder interviews:

- on the one hand, 1.5-hour, face-to-face interviews were conducted during which selected stakeholders were asked about the impact that Car-Pass had had on the market;
- on the other hand, they took part in an online survey.

Face-to-face interviews

	Date	Type of organisation	Organisation	Participants
1	03/02/2016	Federal authorities	Federal Public Service Economy Economic Inspectorate	Dirk Piselé Yolande De Ceuster Rudi Smets
2	03/02/2016	Lease company	LeasePlan	George Schenck Bart Van Kerkhoven Christophe Van Parijs François Roland
3	09/02/2016	Federal authorities	Federal Police, Vehicle Crime Unit	Fabien Osaer Joseph Ascone
4	09/02/2016	Inspection authority	Autosécurité	Olivier Goies
5	11/02/2016	Importer	d'Ieteren My Way	François Vander Eecken Christian Moons Nico Bois d'Enghien Yves Sprumont
6	17/02/2016	Brand dealer	Beerens/Belcar	Koen Van den Bergh David Andries
7	23/02/2016	Independent car dealer	Autosan	Erez Can
8	23/02/2016	Tyre centre	Qteam	Frank Lambrecht
9	24/02/2016	Fast Fit	Auto5	Olivier Renard
10	24/02/2016	Independent car dealer	Dex	Joost Huys
11	26/02/2016	Brand dealer/Federation	Garage Veys/TRAXIO	Carl Veys
12	26/02/2016	Online B2B auction	Cars on the Web	Johan Meyssen Pieter Behets
13	29/02/2016	Independent car dealer	Soco	Danny Bultot
14	01/03/2016	Lease company	Vancia Car Lease	Guy Hannossette
15	01/03/2016	Lease company	Alphabet	Erik Swerts
16	02/03/2016	Automobile association	Flemish Automotive Association	Wim van den Hende
17	03/03/2016	Independent car dealer	Garage Grommen	Yves Grommen
18	03/03/2016	Fast Fit	Carglass	Barbara Delvoye Roland Happtinger Jody Blokken
19	04/03/2016	Brand dealer	Garage Ost	Elsy Van Assche
20	24/03/2016	Federation	TRAXIO	Philippe Decrock
21	24/03/2016	Brand dealer	Garage Vandecasteele	Xavier Vandemeulebroeke
22	24/03/2016	Independent car dealer	Bavaria Motors	Charles Vermeulen
23	25/03/2016	Brand dealer	Kalscheuer	D. Regnier
24	08/04/2016	Consumer association	Test-Aankoop The Federation of Belgian Exporters of New and Second-Hand Vehicles	Leo Muyshondt
25	written	Federation		Pierre Hajjar

A general discussion guide was drawn up in advance that served as a guideline for each interview. General questions were supplemented with more specific ones, depending on which questions were relevant for the person in question.

The discussion guide comprised two main parts:

- A glimpse at the past: effects of the Car-Pass on the second-hand market for light vehicles in the period from 2006 to 2016

In this part of the interview, questions were asked about how the market for second-hand vehicles had evolved, both on the domestic and foreign markets, and the extent to which Car-Pass has affected these developments.

After that, the questions homed in on trends in mileage fraud. Of interest here was not only mileage fraud in Belgium: the situation in neighbouring countries and possible mileage fraud on imported vehicles were also considered relevant.

Finally, the results of the consumer interviews were checked against stakeholder opinions, and stakeholders were asked what they believed consumer perceptions of the second-hand market were.

- A view of the future: how can the Car-Pass be even more useful for the sector and consumers?

In this part of the interview, respondents were sounded out about the opportunities for the future that Car-Pass may have. Stakeholders were asked, among other things, about what they believed would be useful expansions to Car-Pass, and how Car-Pass could add value for other parties in the market.

Online interviews

Apart from the selected stakeholders with whom we conducted face-to-face interviews, we tried to reach as many additional stakeholders as possible via online interviews. By doing so, we obtained an impression of the views that stakeholders have of the second-hand market that was as comprehensive as possible.

All in all, we wrote to 1,756 respondents who were operating in the market for buying and selling second-hand vehicles. Of those who took part in the online survey, 443 respondents started completing the questionnaire, and 273 individuals effectively completed the survey in full. This equates to a response rate of 15.55%. The survey showed that the respondents were mainly brand dealers that sell new as well as used cars, and are operating in both the B2B and B2C markets.

C. Data analysis

The findings of the consumer and stakeholder interviews were corroborated as far as possible using data analysis. We would like to thank the following organisations for making their data and statistics available to us:

- Autoscout24
- Car-Pass
- FEBIAC
- FPS Mobility and Transport
- GOCA
- KBC Autolease
- Macadam
- Mercedes-Benz Nearly New Car
- Volvo Selekt

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E. Supervisory committee

To be able to conduct this study, we relied on the intensive supervision of representatives from the sector. Representatives from various parties within the sector guaranteed diversity in the supervisory committee. We thank the following persons for their meaningful contribution:

Name	Organisation	Position
Bart Dreessen	Nearly New Car (Mercedes-Benz)	Manager Quality & Operations
Daniel Labours	TRAXIO	General Secretary
Danny Smagghe	Touring	Spokesperson
Jan Devos	KBC Autolease	Remarketing Manager & Rental
Jean Thomas	Macadam	CEO
Kris Peeters	Garage Wittockx (Opel)	General Manager
Michel Peelman	Car-Pass	Managing Director
Vincent Hancart	Autoscout24	Country Manager

F. Key assumptions

- Key assumptions
 - The definition of ‘premium makes’ in the samples = Audi, Bentley, BMW, Jaguar, Land Rover, Lexus, Mercedes-Benz, Porsche
 - The definition of ‘non-premium makes’ in the samples = Alfa Romeo, Chevrolet, Citroen, Fiat, Ford, Honda, Hyundai, Kia, Mazda, Mini, Nissan, Opel, Peugeot, Renault, Saab, Seat, Skoda, Smart, Suzuki, Toyota, Volkswagen, Volvo