FEDERATION INTERNATIONALE DE L'AUTOMOBILE
REGION I - EUROPE, THE MIDDLE EAST AND AFRICA

WHAT EUROPEANS THINK ABOUT CONNECTED CARS

www.mycarmydata.eu

#mycarmydata

Table of Contents

Executive summary

Europeans say "It's MY data" when it comes to connected cars

FIA Region I commissioned a public survey in 12 European countries to analyse consumer attitudes toward vehicle connectivity. The study shows a clear disconnect between the data tracked and what citizens are willing to accept. Europeans overwhelmingly want to control their data and decide with which service provider to share it.

In the survey, 76% of respondents expressed interest in connected cars, be it because they owned one (6%), would buy one next (18%) or were simply interested (52%). Improved safety was the number one reason why consumers would buy a connected car, with better fuel efficiency and less congestion in second and third place, respectively.

Meanwhile, 90% of survey respondents believed that vehicle data belongs to the vehicle owner or driver. An overwhelming 91% wanted the possibility to switch off connectivity. A further 76% wanted to decide when and for how long consent to access car data should last. In the case of sharing data during a breakdown, 92% felt that they should get to choose who repairs the car. Respondents felt comfortable sharing their breakdown data with local garages, insurance providers, automobile manufacturers and Automobile Clubs.

With connected cars, drivers are most concerned about the disclosure of private information (88%), commercial use of personal data (86%), vehicle hacking (85%) and vehicle tracking (70%), all of which is possible with today's connected vehicles. 95% of people surveyed believed that there was a need for specific legislation to protect their rights concerning vehicle and driver data.

In light of this survey, FIA Region I supports key consumer principles concerning car data:

Data protection
Legislation should ensure that drivers retain ownership of the data and give informed consent on how it is used.

Free choice
Drivers should have the right to choose their preferred service provider.

Fair competition
A variety of service providers should have the right to develop safe products and functionalities.

Introduction

In this survey, a connected car was defined as:

> *“A car equipped with Internet access that can send and receive data on the vehicle’s status, condition and user preferences. Smartphone applications, car diagnostics and parking recommendations can use the vehicle data and be displayed on the vehicle’s dashboard screen.”*

SURVEY OBJECTIVE

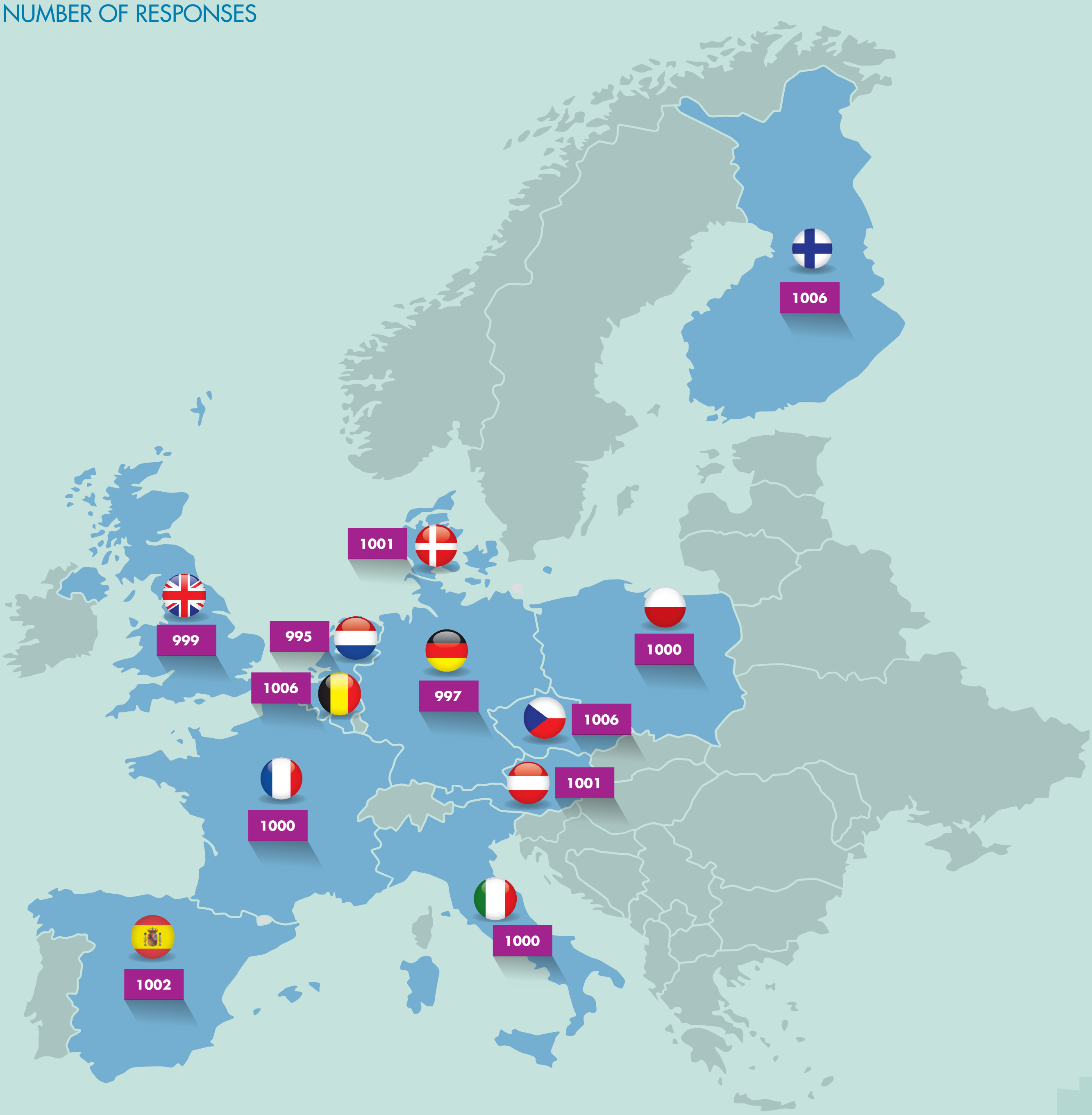
FIA Region I investigated European consumer awareness regarding connected vehicles and sensitivity regarding sharing vehicle data. The study aimed to identify consumer awareness, acceptance, willingness and readiness to share data. It also examined personal experience, needs and expectations regarding connected vehicle services.

METHODOLOGY

Research Now performed the survey on behalf of FIA Region I in a representative sample of 12 European countries. The countries were: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, The Netherlands, Poland, Spain and The UK.

The data was collected via online questionnaires lasting around 10 minutes from September to mid-October 2015. In total, 12,000 questionnaires were collected with a sample of 1,000 respondents per country. The target group included women and men, aged between 18 and 70 years old, who live in a car-owning household and travel by car (personal or company car, used both for professional and private trips) on a regular basis (at least once a week).

NUMBER OF RESPONSES



Section 1

Connectivity awareness

Today, there are many new cars equipped with connectivity features that have the ability to track and transmit data concerning the car and its driver. However, many consumers have seemingly not yet heard of this technology. Even if they are aware of connected vehicles, it is uncertain whether or not they understand what a connected car can do. In this section, consumer awareness, understanding and interest in connected cars was examined.

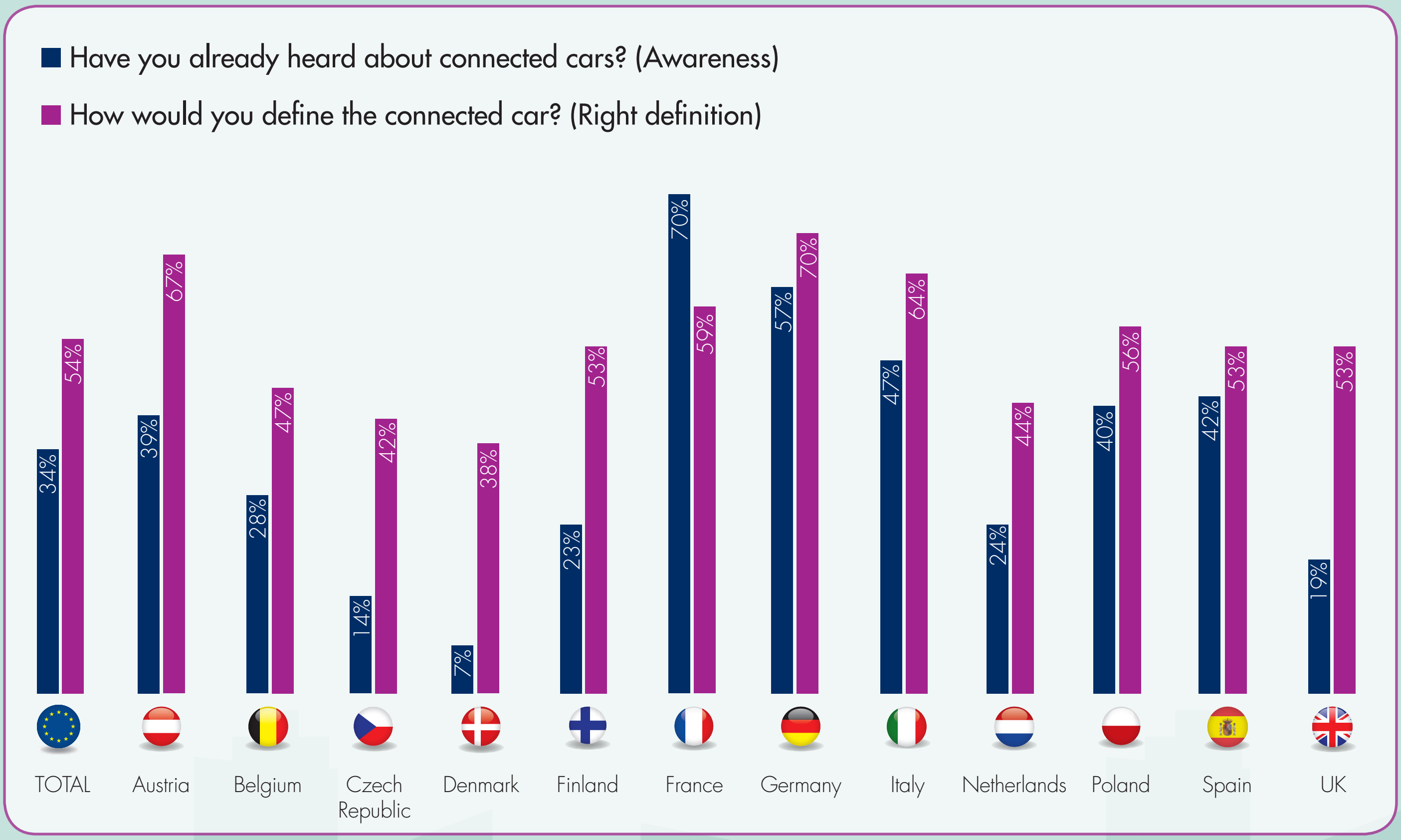
AWARENESS VERSUS UNDERSTANDING

Roughly 33% of Europeans surveyed have already heard about connected cars. However, there is a huge disparity between countries. French, German and Italian consumers claimed to be the most educated on connected vehicles, while the lowest awareness was found in the UK, the Czech Republic and Denmark.

In France, 70% of respondents claimed to have knowledge about connected cars, while only 59% gave the correct definition.

The likelihood that someone had heard of connected cars was higher among:

- Men
- 35-54 year olds
- Company car owners
- Members of a Motoring Club
- Those that spend at least 5 hours per week in a car
- Drivers of newer cars
- Heavy Internet users
- People with higher levels of education



INTEREST IN CONNECTED CARS

In the study's sample, 6% of consumers already owned a connected car. An overall average of 18% stated that their next car will be connected. Italian, Spanish and French drivers were the keenest on adopting the technology. An additional 52% of drivers were interested in connected cars, but lacked information about connected services or did not have an intention to buy a new car. In the total sample, 24% were reluctant to own or buy a connected car, with the most hesitant consumers in Austria, Denmark, Finland and the Netherlands.

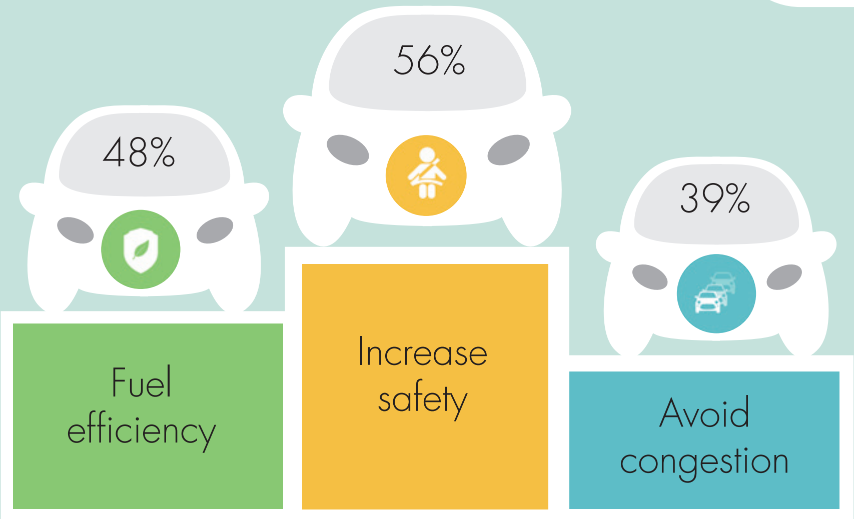
REASONS TO BUY A CONNECTED CAR

When buying a non-connected car, safety, fuel consumption and running costs are the key factors that influence purchasing decisions. When it comes to connected cars, consumer interest remains consistent and new functionalities do not overtake traditional interests. Safety and fuel consumption remain top priorities, with improved traffic flow as the third most commonly cited reason to buy a connected car.

How important would you consider the following connectivity functionalities when buying a car?

#1	Vehicle theft tracking	44%
#2	Emergency assistance	35%
#3	Navigation with real time traffic information and prediction	35%
#4	Breakdown Support	31%
#5	Maintenance	29%

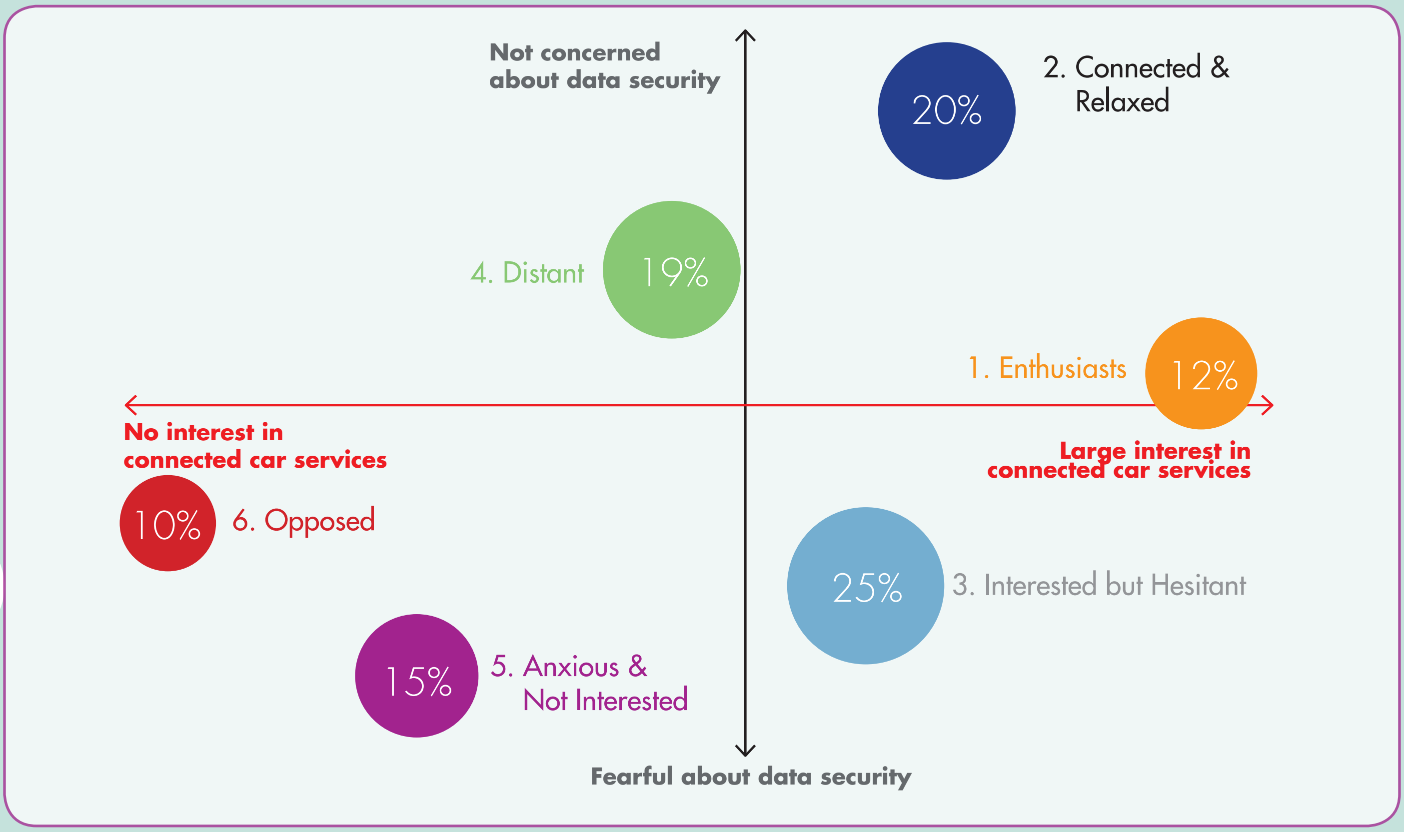
For which feature(s) would you be willing to buy a connected car (3 choices maximum)?



TYPOLOGY

From the responses that were given, six distinct approaches to connected cars emerged with well-defined opinions. These opinions are divided into Enthusiasts, Connected & Relaxed, Interested but Hesitant, Distant, Anxious & Not Interested and Opposed. The figure below outlines where these types fall on a scale of interest in connected cars versus concern about data security.

OPINIONS ABOUT CONNECTED CARS



1. Enthusiasts - **12%**

- Are fond of cars and of high tech
- Are interested in all the functionalities offered by connected cars
- Either already own a connected car or intend to buy one soon
- Are willing to use all the features that will improve their driving experience
- Are ready to share their personal or vehicle data, even if they are concerned about data security and disclosure of personal information

2. Connected & Relaxed - **20%**

- Consider the connected car as a way to be always connected to the Internet
- Are equally interested in entertainment features and car-related features
- Are more confident than the other groups about data safety
- Feel that benefits from the connected features are much more important than concerns about data security

3. Interested but Hesitant - **25%**

- Are the largest and oldest group
- Use the Internet and own more devices than the average
- Tend to be more interested in all the functionalities of the connected car
- Feel more concerned about data protection
- Are reluctant to share personal data

4. Distant - **19%**

- Are mostly younger than other groups with lower interest in cars
- Show interest in connected cars, even if there is no intent to buy one
- Are mostly interested in features that will allow them to reduce their fuel consumption or to avoid traffic jams
- Are ready to share their data in case of breakdown or for remote car diagnostics
- Appear less worried about data security
- Support a time limit to consent to access car data

5. Anxious and Not Interested - **14%**

- Are not interested in connectivity features, except for car efficiency or safety
- Do not have any interest in an in-vehicle Internet connection
- Feel very concerned about data security
- Are uncomfortable to share their vehicle data except in case of breakdown
- Are not ready to share personal data
- Will read the entire policy detailing their rights when buying a connected car
- Prefer to give access to data on a per ride basis

6. Opposed - **10%**

- Have lower academic achievement
- Are less connected and mobile in their daily life
- Are not interested at all in connected features when buying a car
- Are not ready to use connected car functionalities or to share their data
- Are slightly more concerned than average about data security

Section 2

Sharing vehicle data

Once general understanding and interest in connected cars was assessed, the focus shifted to examine the conditions in which consumers would feel comfortable interacting with connected vehicles. The goal was to identify how, when and with whom consumers feel comfortable using connectivity features.

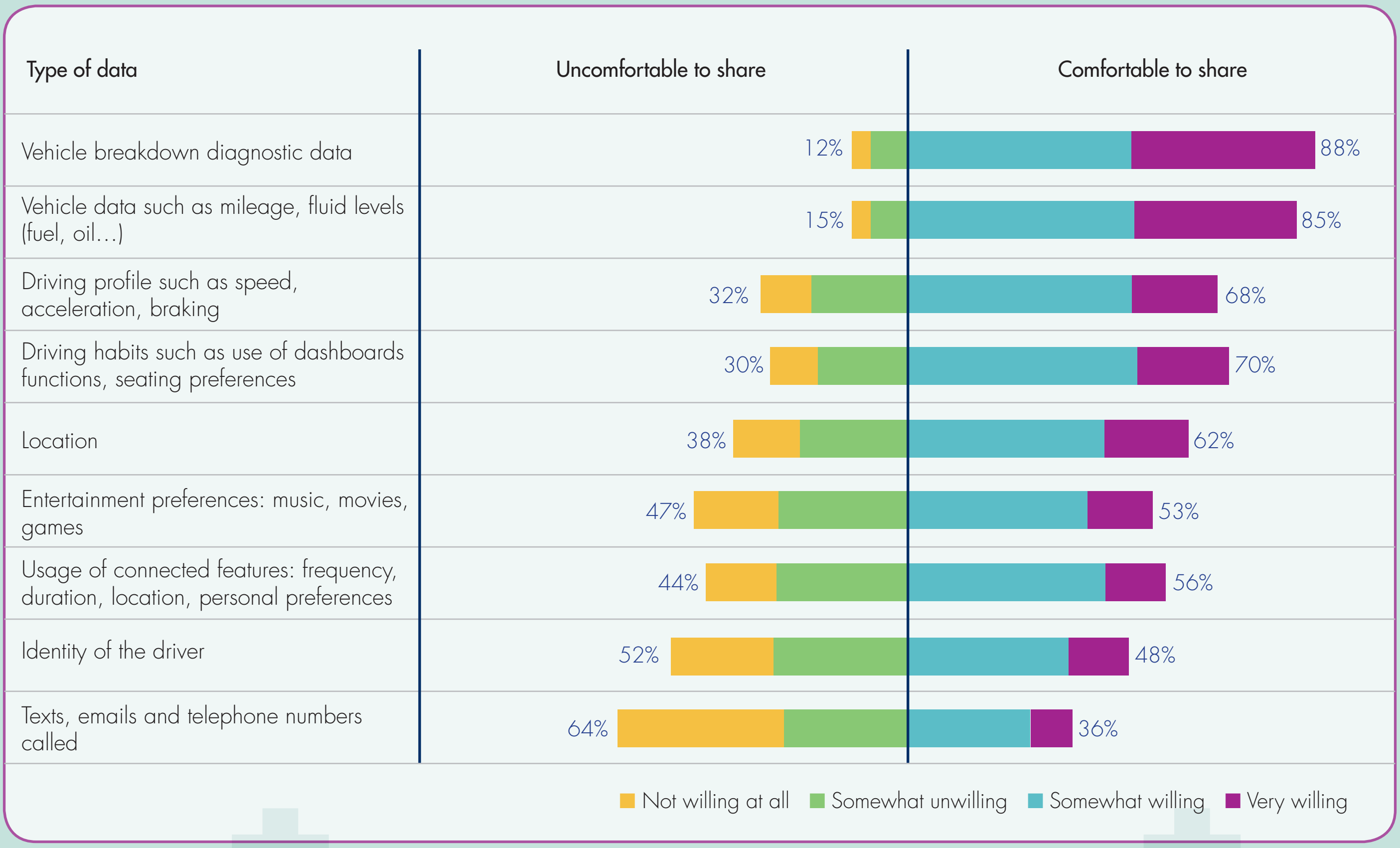
"IT'S MY DATA"

Overwhelmingly respondents felt that the data generated by the car should be owned by the driver or owner of the vehicle (90%). Almost all drivers wanted the possibility to switch off all communication from their vehicle (91%).

COMFORT LEVELS WITH SHARING CAR DATA

When it came to sharing vehicle data, consumers were overall willing to share vehicle data, although this preference was highest concerning traditional repair, maintenance and technical information. The acceptance to share information generated by their car also depended on context. They were more reluctant to share driver profiles and personal data, such as entertainment preferences, usage of connected features and identity. The below figures represent the types of information that drivers would be willing to share.

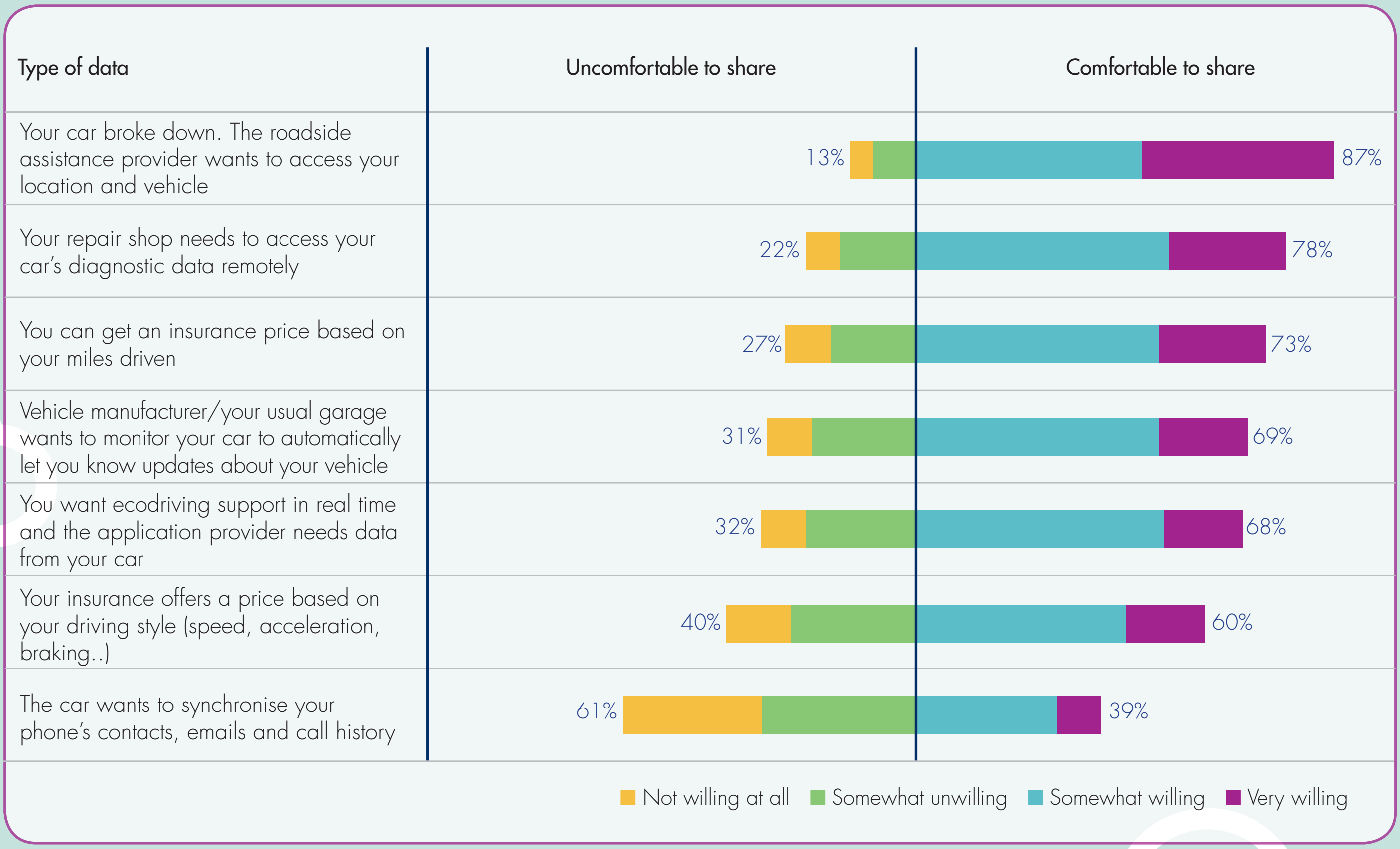
How comfortable are you sharing the following vehicle data?



The survey also investigated situations when drivers would be willing to share their vehicle data. Unsurprisingly, when in need, for example due to a breakdown, consumers were much more willing to share their data. Meanwhile, when it came to sharing personal information there was a big drop in comfort levels.

Consumers from France, Italy, Spain and The UK are overall more open to share data whatever the situation, whereas those from Austria, Denmark, Finland and Germany are more reluctant.

How willing would you be to share the information generated by your car in each of the following situations?



Two thirds of the respondents would agree to share anonymous data. Drivers stated that sharing personal data should give them a direct benefit, for example enhancing their driving experience or increasing their safety or a monetary benefit such as discount rates or coupons.

CHOICE IS IMPORTANT TO CONSUMERS

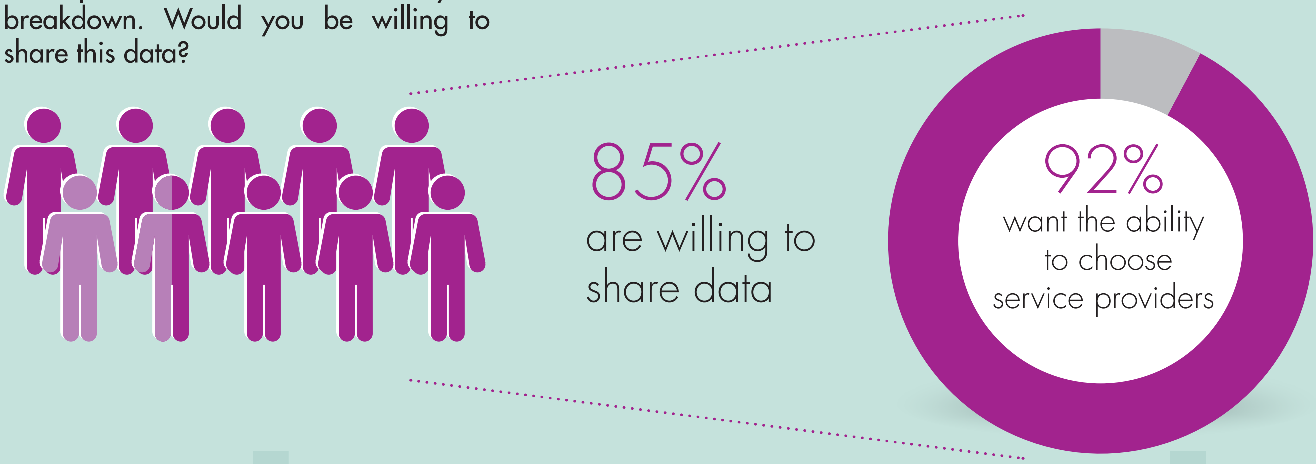
In the case of a breakdown, 85% of respondents said that they would be willing to share vehicle data. In this subset, 92% cited a desire to choose with whom they share the data. When asked about which providers they felt comfortable sharing breakdown data, local garages, insurance providers, automobile manufacturers and Automobile Clubs were the top contenders. If a respondent was already a member of an Automobile Club, they were 30% more likely to choose the Club to share data.

The likelihood that someone was comfortable to share vehicle data was higher among:

- Men
- Company car drivers
- Those that are aware of connected cars
- Owners of newer cars (less than 5 years old)
- People that spend more than 2 hours a day on the Internet
- People spending more than half hour a day on social media
- Italians, the Spanish and Austrians

The car you are driving has broken down. A button in the vehicle allows you to call for help and send information about your breakdown. Would you be willing to share this data?

If yes, how important is it to you to be able to choose your service provider?



Section 3

Concerns about data sharing

The survey also examined aspects where drivers are hesitant about connected cars. Drivers showed that they have concerns about the duration for consent to access data. There are also fears on what could be done with the data. There was strong support for legislation to protect consumers for vehicle data.

ACCESS TO CAR DATA NEEDS A TIME LIMIT

In the survey, consumers clearly felt that consent to access vehicle data should be for a limited time or even on a per ride basis. Very few respondents would accept that a one-time consent to access their data would be valid throughout the lifetime of the vehicle.

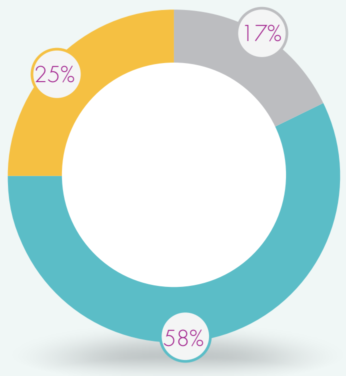
TENSIONS WITH DATA SECURITY

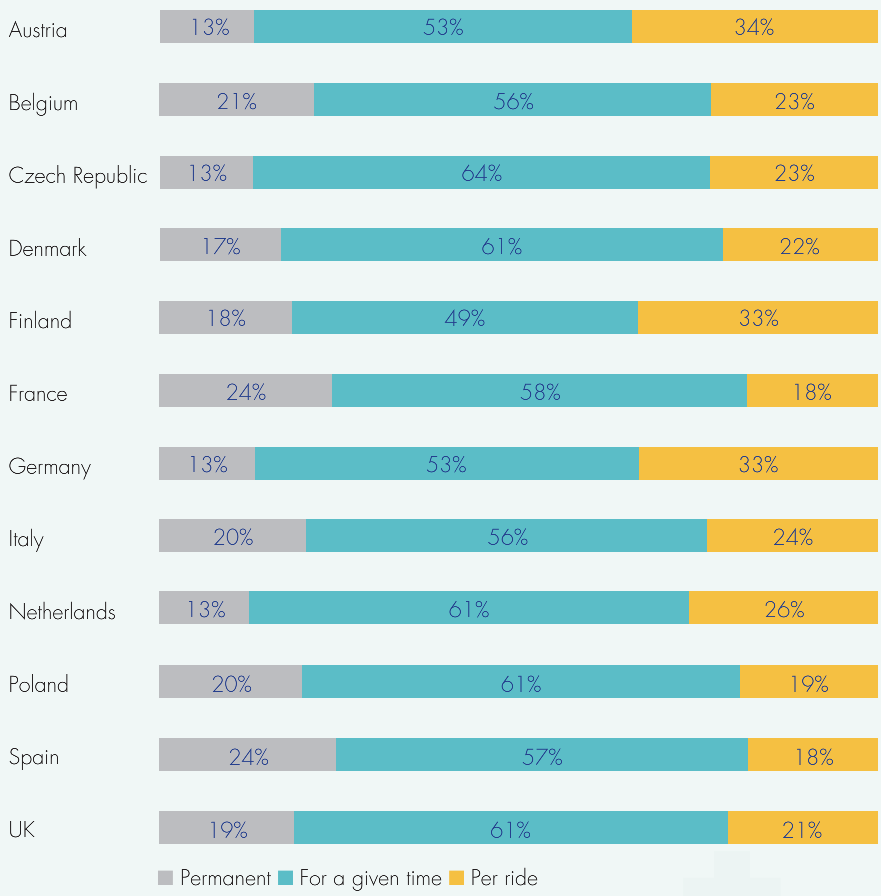
Respondents expressed a significant fear that their private data would be disclosed to third parties or used for commercial purposes. There were further fears of tracking location and even hacking the vehicle to interfere with driving.

Your consent of access to car data should be? (Permanent / For a given time / Per ride)

76%

believe that access to car data should be limited in time





Who was more likely to be concerned with what aspect of data sharing?

Disclosure of private information 88%
- Higher among those who give the wrong definition of connected cars, older car drivers, more prevalent in the Czech Republic and Poland

Car vehicle tracking 70%
- Higher among 18-34 year olds, driving less than 2 hours a week, driving more than 35,000 km/year, spending more time on social media, more prevalent in the Czech Republic, Denmark and the Netherlands

Hacking your vehicle to interfere with your driving 85%
- Higher among drivers of a personal car, more prevalent in Poland

Commercial use of your personal data 86%
- Higher among drivers of personal cars, those who give the right definition of connected cars, driving less than 2 hours a week, older car drivers, spending less time on social media, more prevalent in the Czech Republic

CONSUMERS WANT LEGISLATION TO PROTECT USER DATA

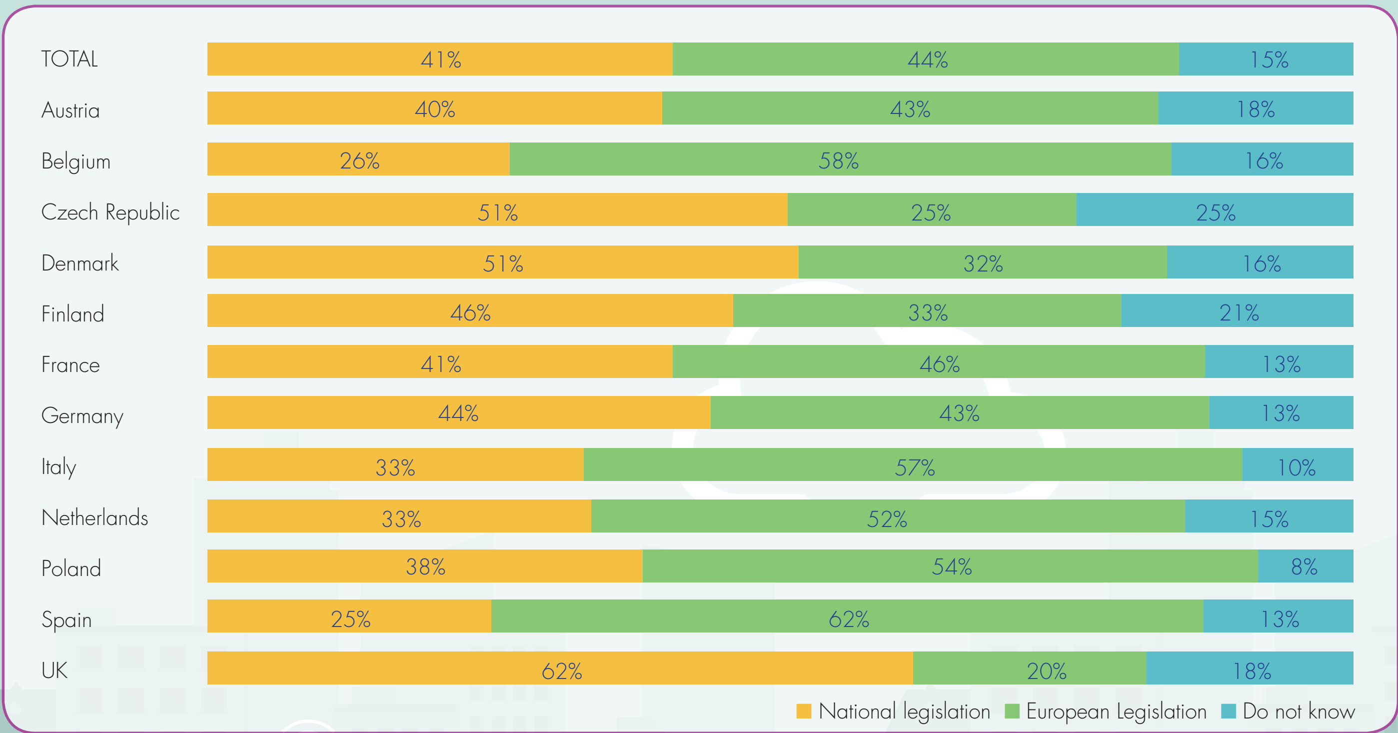
An overwhelming majority of consumers called for legislation to protect user data with connected cars. There was some indecision as to whether this should be European or national legislation, but a small preference for European legislation was seen.

Do you think there is a need for a specific legal framework to protect consumers' rights to their vehicle and driver data?

95%

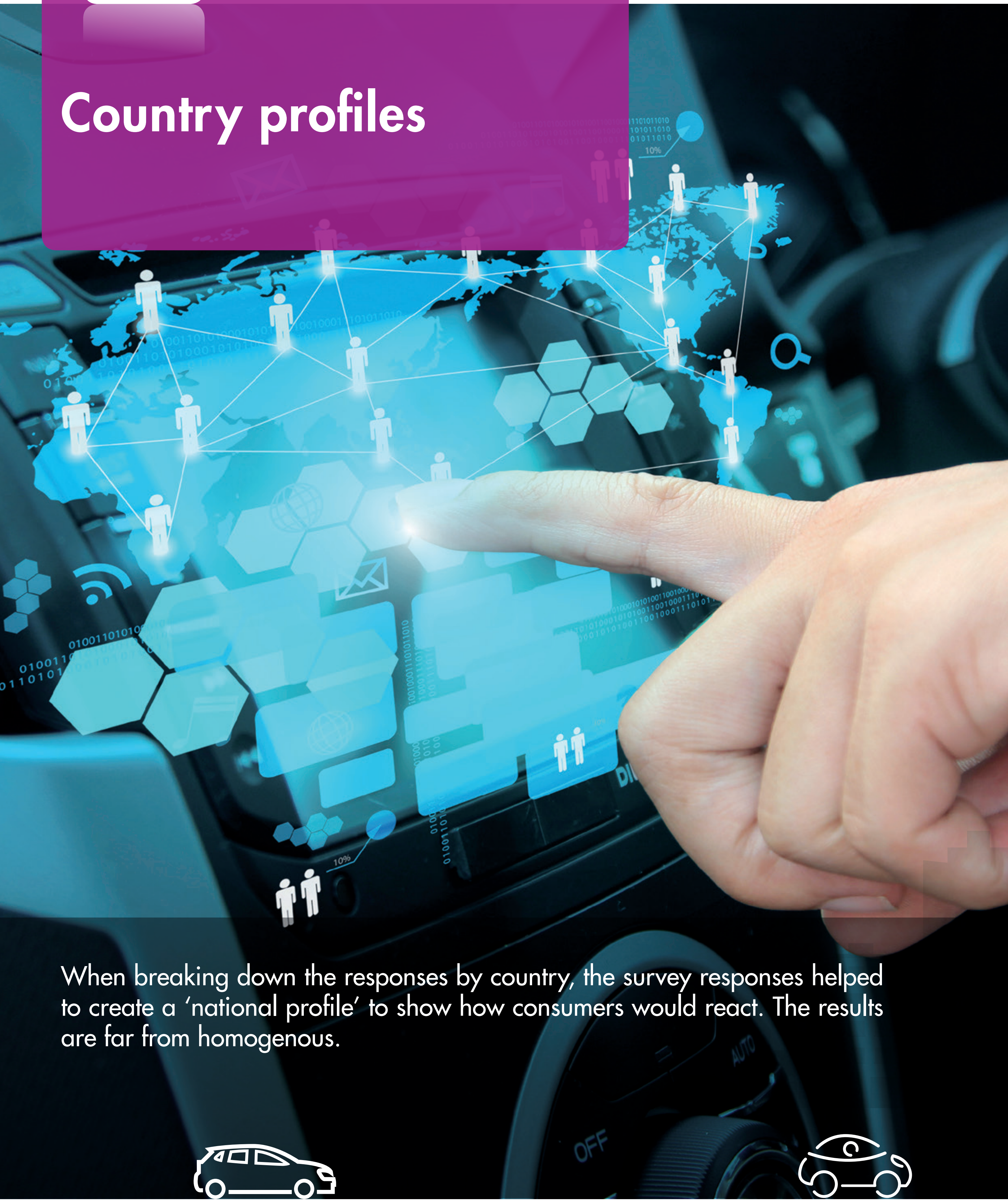
want legislation to protect user data when it comes to connected vehicles

According to you, who should define the legal framework to access vehicle data?



Section 4

Country profiles



When breaking down the responses by country, the survey responses helped to create a 'national profile' to show how consumers would react. The results are far from homogenous.

Compared to the European average, drivers in Italy, Spain, France and the Czech Republic are more enthusiastic about connected cars. Falling in the middle, drivers from Poland, Germany, Belgium and the UK showed moderate interest and also some hesitation. Drivers in Austria, Denmark, The Netherlands and Finland are the most reluctant about connected cars when compared to the European average.

AUSTRIA

Austrians are more likely to have heard of connected cars and many of them give the right definition, but they show a lower interest in connectivity services. It is one of the most reluctant countries. For those willing to share data, it would be important to be able to choose their service provider. Austrians feel very concerned about the security of their data, and are even more attached than other Europeans to the ownership of their data. They strongly support a specific legislation on data protection and prefer European over national regulation.

BELGIUM

Belgians show average awareness, understanding and interest in connected cars. When it comes to the reasons why they would want connectivity, they show higher than average interest in vehicle maintenance. Belgians feel more comfortable than other countries to share information about mileage, their driving habits and usage of connected features or telephone activities. They feel more concerned than other countries about the security of the data and have a strong need for a specific legal framework, although they are less interested in being able to shut off all communication.

THE CZECH REPUBLIC

Czech drivers are less likely to have heard of connected cars, but show a very high interest in connected car services, especially for vehicle theft tracking. They feel more comfortable than other countries to share information about vehicle breakdown diagnostics, driver profile and usage of connected features. In the Czech Republic, drivers are significantly more ready to let their vehicle manufacturer or local garage monitor their car to automatically notify them when repair or maintenance is needed. They are more concerned than other countries about security of data and have a strong need for a specific legal framework.

DENMARK

The Danes have the lowest awareness and knowledge of connected cars and a lower overall interest than other Europeans. Danish drivers are not enthusiastic about buying a car, they are less interested in all car features. They feel less comfortable than others to share information about vehicle breakdown diagnostics and mileage data. Conversely, they would feel slightly more comfortable to share the identity of the driver than the average. Danish drivers feel less concerned about disclosure of private information, commercial use of personal data and hacking to interfere with their driving. They see a clear need for a specific legal framework and generally favour national legislation.

FINLAND

The Finnish have a low awareness of and interest in the connected car. Only a few already own a connected car or intend to buy one. A higher proportion of Finns are not interested in any of the connectivity functionalities when buying a car. In Finland, drivers feel the least comfortable to share any vehicle data, whatever the situation. The Finnish feel concerned about the security of vehicle data, and are more attached to data ownership than other Europeans.

FRANCE

The French are very aware and quite interested in connected cars compared to the European average. A significant number of French people want their next car to be connected. They are keen on having connected features such as maintenance anticipation, emergency assistance or tracking in case of theft. French people are more open to sharing data, but more selective in choosing with whom they share it. They agree to share vehicle data to benefit from tailor-made insurance services and ecodriving advice. French people share the same concerns regarding data security and are also calling for legislation to protect their rights.

GERMANY

Germans have a high awareness and knowledge of connectivity, but are less interested in connected car services. Phone integration and entertainment features appear to be more important for Germans. Overall, they feel less comfortable than other countries to share information. They have more clearly defined opinions about sharing data, with the percentage of "very comfortable" and "very uncomfortable" higher than the European average. Germans feel more concerned than other Europeans about security of data and express a strong need for a specific legal framework. The reluctance and concerns of the German respondents about sharing their data correlates to the lower rate of social network users.

ITALY

Italians have a high awareness and understanding of connected cars. They have strong interest in connected services, even intending to buy one soon. They praised connected features more than the average European. Italians feel very comfortable sharing data. In all categories they are more willing than the average to share information, including for: breakdown diagnostics, fluid levels, driving habits and even mobile phone data. When it comes to driver profiles, they are 17% more likely to share the data compared to the European average. They are less concerned than any other country about data security, but support a specific European legislation on data protection.

THE NETHERLANDS

The Netherlands ranks in the bottom five countries when it comes to knowledge of connected services. The Dutch have a below average interest in connected car services, and are not currently considering buying a connected car. Dutch drivers are less comfortable sharing personal data, but more willing to share vehicle-related data. They would feel more at ease to share their driving habits and information for maintenance purposes. Dutch drivers are significantly less willing to get an insurance price based on miles or on their driving style. The Dutch feel as concerned as other Europeans about security of data and have a strong need for a specific legal framework.

POLAND

The Polish have an average awareness, understanding and interest in connected car services. They are very engaged when purchasing a car, but connectivity functionalities are not the main decision criteria when buying a car. In Poland, drivers feel more comfortable than in other countries to share information, especially about mileage, vehicle breakdown diagnostics or on their driving profile. Additionally, they would feel more comfortable to share their location, usage of connected features or their telephone activities. They feel more concerned than other countries about security of data and have a strong need for a specific legal framework.

SPAIN

The Spanish have a high awareness of the connected car, and the strongest interest in the countries surveyed. However, only slightly more than half of drivers that already own a connected car think they are well informed about it. The Spanish feel more comfortable to share their data than the European average. They will share vehicle data as well as more personal data such as driving habits, profile, even texts, emails and telephone numbers dialled. They are very interested in tailor-made insurance, and they are more willing than their European neighbours to share mileage and driving style with their insurance company. Even though they are open to share data, the Spanish are very concerned about data security and strongly support a specific European legislation. They see the pros as outweighing the cons.

THE UK

The British have a low awareness. They have an average understanding and interest in connected car services. Phone integration and social media apps are key features of interest, but they are less interested in telematics and concierge services. They would feel more comfortable to share their location, identity of the driver, entertainment preferences, or their telephone activity. Eco-driving support is also a strong motivation. They are ready to share data to get advice in real time. They feel more concerned than other countries about security of data and have a strong need for a specific legal framework, but prefer national legislation.

Conclusion

Consumers want the right to know what data they are sharing when they drive their car. Currently, only vehicle manufacturers have access to this data for specific vehicle models. Transparency needs to be introduced into the market. FIA Region I and its members across Europe have launched the My Car My Data campaign (**www.mycarmydata.eu**), to raise public awareness on vehicle data. The campaign calls for data privacy legislation, free choice of service providers for consumers and a fair after-market for connected vehicle services.

About FIA Region I

The FIA Region I office, based in Brussels, is a consumer body representing 112 Motoring and Touring Clubs and their 38 million members from across Europe, the Middle East and Africa. The FIA represents the interest of these members as motorists, public transport users, pedestrians and tourists. The FIA's primary goal is to secure a mobility that is safe, affordable, sustainable and efficient. With these aims in mind, the FIA Region I work focuses on Road Safety, Consumer Protection, Environmental Protection, and the promotion of Sustainable Motoring. www.fiaregion1.com

Brussels, January 2016

Photos: fotolia.com
Design: inextremis.be m5274

www.mycarmydata.eu

www.mycarmydata.eu

#mycarmydata / @FIA_Region_I

Rue de la Science 41,
1040 Bruxelles

+32 2 280 07 58

info.region1@fia.com

FEDERATION INTERNATIONALE DE L'AUTOMOBILE
REGION I – EUROPE, THE MIDDLE EAST AND AFRICA