

Audi UK
Audi Customer Service
Via email only: customer.services@audi.co.uk

6th December 2017

Dear Sir/Madam,

RE: Infotainment systems, software licenses and telematics units

We write regarding the lack of clarity and information given to customers who rent cars but who have no understanding about whether manufacturers, rental companies, and other customers can access their data.

As cars become more connected, the amount of data they collect and store increases. With the General Data Protection Regulations soon to come into force, we believe it is imperative that manufacturers minimize the amount of customer data cars generate and the volume of data they collect and process. Further manufacturers must take responsibility for customer data and ensure its safety and security. The issue we wish to highlight in particular relates to infotainment systems in rental cars, however, we further refer to and make recommendations in relation to other data which may be generated by rental cars and processed by manufacturers and third parties.

There is a lack of clarity as to who is responsible for data held on infotainment systems. We do not believe this impedes our recommendations and in fact makes it more urgent that they are implemented by manufacturers. Given conflicting responses from rental companies and manufacturers, we have referred the question as to whom is the data controller to the Information Commissioner. Therefore, whether or not you believe manufacturers are data controllers, we make the following recommendations:

Infotainment systems

Infotainment, connectivity and electronics within a car are growing as cars become more connected with the wider infrastructure and the move towards autonomous vehicles. Whether or not you class a particular rental car as "connected," even the most basic infotainment systems offer such capabilities as allowing devices to connect via Bluetooth, and more feature rich units have built-in satellite navigation systems. These functions enable rental cars to store information including:

- Bluetooth Connectivity (Phone identifier)
- GPS navigation (location data)
- Music streaming (e.g. Spotify account information)
- SMS texting (message history)
- Hands-free calling (call history)
- In-car internet (search and browsing history)
- Wifi (identifiers such as mac address, DNS data and leases such as DHCP)

We at Privacy International have rented cars from several rental companies across Europe including Enterprise, Hertz and Europcar. We are concerned that on every occasion personal data remained on the infotainment system of the car we rented identifying previous users' names and locations they have visited.

When seeking to understand who is the data controller with respect to data held on the infotainment system, one car rental company, Enterprise, told us, in relation to renting a Nissan Qashqai, that:

This information is not processed by us in the course of providing the car hire services. It is the vehicle user's choice and responsibility to use and remove any data via the infotainment options available in each vehicle.

*The Nissan Quashqui [sic] rented was equipped with the Nissan Connect2 infotainment system. This unit was active during your rental; however Enterprise does not have access to this and is not the controller of this data. **Nissan is the data controller.***

We also note that in corresponding with, Enterprise, in relation to the Nissan Qashqai, we were informed that Enterprise:

...attempted to contact Nissan to see if they would have access to any other information contained in the telematics or infotainment unit, Nissan has not provided a response.

We contacted Nissan. The response from Nissan lacked clarity in relation to whether they considered themselves a data controller. They stated:

*Nissan Qashqai is not a connected vehicle and therefore there is **no way to get access to the above data** outside of the vehicle. Some data may be stored within the vehicle's navigation system as follows:*

- Camera images are not stored;
- Previous vehicle position is not stored
- Mobile phone data only appears once a phone is Bluetooth paired

- Navigation history, stored locations, stored POIs are stored
- Bluetooth data: if they are not removed a driver may retrieve previously connected phone

In the event that a driver wishes to have their data deleted, there is the option, via the Settings Menu, to carry out a factory reset as follows:

System > Factory Settings > Yes

*As this is a rental company fleet vehicle, **Nissan does not have access to or control of a vehicle to carry out such reset after each rental customer and would expect the customer or rental company to carry out any necessary resets.** Once a rental company returns a used rental vehicle to Nissan, our dealers are asked to carry out this factory reset, so any residual data would be deleted. Even if information remained on the system when a vehicle was returned to Nissan (before a further factory reset was carried out), Nissan would have no access to individual drivers' details to be able to link any telephone or satellite navigation information to a particular driver.*

It is apparent that there is no clear answer as to who is the data controller in relation to data on the infotainment system. This may be further complicated by the vehicle specification and whether the infotainment system can be accessed remotely or not. We have referred this issue to the Information Commissioner's Office, however we welcome your input if you wish to respond to us on this point.

Nevertheless, we maintain that manufacturers must ensure there are clear and simple ways for customers to remove their data from the infotainment systems.

Recommendation 1: We request that manufacturers provide clear information as to what data is or could be held on the infotainment systems that is accessible to subsequent users and what data is or could be held on the infotainment system that is accessible to those with the technical means to access it.

Recommendation 2: We request that manufacturers create the equivalent of a "delete button" or easy to find "factory reset button" which makes it easy and simple for customers to delete and erase all their data on infotainment systems in rental cars. Clear and simple instructions must be provided as to how to use this.

The risk

Using just a phone identifier, it is possible to link this to other information held regarding an individual such as their social media account. We note that in Baltimore a car owner tracked down teenagers who took his car for a joy ride, using the phone

device names which had been paired with the the owners' Jeep's Connect system, together with searching Instagram.

There are additional security risks in leaving data on the infotainment systems. In the 2016 McKinsey report "Monetizing car data" it states:

One of the key risks of the digital in automotive is the threat of a purposeful attack that compromises sensitive information or menaces the safe operation of a vehicle. Among the threats posed by attackers are targeting and disabling a vehicle's safety systems, exploiting navigation/positioning information, and using a vehicle's infotainment system as a gateway to wiretap apps and gain access to personal information.

The report notes that potential attackers include sophisticated state-sponsored adversaries, criminals looking for customer data, disgruntled customers, or competitors attempting to disrupt business.

The infotainment system is going to hold increasing amounts of data. Looking to the future, the McKinsey report noted:

Let us think about car infotainment systems: today they are mainly engineered to allow for audio and basic interactive content to be provided to a driver who is fully concentrated on the critical task of driving. How would the car infotainment change, once fully autonomous vehicles are on the market and drivers/riders have the freedom to devote themselves to other tasks? How much more content and how many movies and virtual reality videogames could be sold if drivers could enjoy them while riding in their autonomous vehicles?

More broadly, full autonomy might be the main enabler for certain use cases, such as offering virtual-reality movies or games to drivers/riders. Further, full autonomy may increase the value of some use cases (e.g. selling a larger number of features and products to drivers through the car as platform) while possibly decreasing the value of others (e.g. providing driving-style related tips and suggestions).

...

Safety and practicality-related considerations, however, lead us to believe that a seamless integration between external devices and the car's infotainment system will become paramount to deliver more complex offers to drivers and passengers. Whether the apps and software enabling these offerings will

reside in the car's systems or will mirror what is installed in the customers' handheld device is still an open topic for industry players.¹

Software licenses

We note that in relation to the Nissan Qashqai there are around 161 software licenses. We have requested these from Nissan and are awaiting a copy. These licenses should be easily available to customers from a manufacturer, as per the terms in the licenses.

Recommendation 3: We recommend that all software licenses be published on manufacturers' websites where they are easily accessible to customers who wish to review them.

Telematics unit

The telematics unit is a vehicle telematics system which combines telecommunication and informatics. It has two-way communication that sends, receives and stores information. It can include:

- Turn by turn navigation
- Remote access
- Notification of vehicle collision
- Vehicle location by GPS
- Control of vehicle speed
- Vehicle diagnostics and maintenance notifications

In our questions to rental companies and manufacturers we sought information regarding telematics units. The responses have not been particularly illuminating and it appears there are a variety of practices in relation to whether cars have a telematics unit, what this might be referred to and whether car rental companies turn them on.

We believe that as manufacturers seek to collect increasing amounts of data from car owners (including, by extension, rental customers), perhaps bypassing rental companies, there needs to be a clear indication to customers who will largely be unaware that this form of collection can take place.

Recommendation 4: Provide details to customers regarding what data can be generated and processed as a result of the telematics unit; what data manufacturers can remotely access; and what third parties may also have access to or be able to gain access to this data.

¹ Monetizing car data, New service business opportunities to create new customer benefits, Advanced Industries, September 2016

Recommendation 5: Fit cards with a rental service mode, that automatically erases data after a period of time.

Data collection

Beyond the telematics unit and the infotainment system, a large and varied amount of data can be collected about individuals who rent cars. It is currently unclear what data is collected; how it is collected and by whom. We realise that some information is collected remotely by manufacturers, some data may be collected by dealerships when they service the car and some by other third parties. There is a lack of clarity relating to this echo system. We therefore make recommendations in light of this:

Recommendation 6: Adopt data minimization practices to reduce the volume of data generated, collected and processed.

Recommendation 6: Segregate the infotainment and control mechanism (telematics unit).

Recommendation 7: Provide detailed information to customers provided when cars are can rented and accessible on manufacturers' websites which set out in detail:

- Types of data that may be generated and processed by manufacturers and/or third parties;
- Retention and deletion periods;
- Methods by which individuals can exercise subject access rights in relation to this data.

Recommendation 8: Engage with the Data Protection Authorities to ensure compliance with General Data Protection Regulations.

Conclusion

We kindly request that you respond to this letter with your responses to our recommendations.

We enclose a copy of our letter to the ICO and to car rental companies.

If you have any questions, please do not hesitate to contact us.

Kind regards,

ANCE – The European Consumer Voice in Standardisation
Campaign for a Commercial-Free Childhood
Consumer Action
Consumer Federation of America
Consumer Watchdog
EPIC
Hermes Center for Transparency and Digital Human Rights
Norwegian Consumer Council
Privacy International