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The New Car Safety Rules of the GSR in light of the GDPR: An Unnecessarily Tangled Web

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Abstract:

The new EU General Safety Regulation introduces new car safety measures, including the introduction of a mandatory event data recorder (EDR). The introduction of the EDR gives rise to data protection concerns. This commentary argues that although it is applaudable that the EU legislator has incorporated data protection rules in the General Safety Regulation, it is unnecessarily overcomplicating matters. A simplified approach is proposed.

Keywords: data protection, vehicle safety, event data recorder, General Safety Regulation, GDPR.

1. Introduction

In 2018 a self-driving Uber test vehicle collided with a pedestrian, who died from her injuries. Camera footage from inside and outside the Uber, together with data on the vehicle's driving behaviour, proved essential in reconstructing the accident (NTSB, 2019). Although the vast amount of information available on this crash might have seemed unusual, it could soon become the norm. This is because from 2022 onwards, vehicles will need to be equipped with an Event Data Recorder or EDR (Article 6 General Safety Regulation (EU) 2019/2144; hereafter: GSR). Such an EDR collects data on, for instance, the vehicle's speed and braking from a period just before, during and after a collision. These data could be useful to the public prosecutor, parties in civil law cases and national

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authorities (e.g., road authorities). However, EDRs also give rise to significant data protection concerns.

In order to identify these data protection concerns, we will first give a general overview of the GSR and the foreseen functions of EDRs. Next, we discuss the relationship between the General Data Protection Regulation (Regulation (EU) 2016/679, hereafter: GDPR) and the data protection articles from the GSR. In addition, the data protection issues left unresolved by the GSR will be addressed. We conclude by welcoming the attempt the European legislature has made to preserve the data protection rights of drivers and others, but note that the approach chosen is more complex than would have been necessary to achieve the goals of both the GSR and the GDPR.

2. The General Safety Regulation

In an effort to lower the number of road fatalities to zero by 2050 (the so-called Vision Zero, European Commission, 2018), the European Union has laid down new vehicle safety requirements in the GSR. From the 6th of July 2022 (Article 19 GSR), new vehicles will have to be equipped with systems such as an alcohol interlock installation facilitation, a driver drowsiness and attention warning, advanced driver distraction warning, an emergency stop signal and an event data recorder (art. 6). With these new requirements, the EU aims to prevent 24,794 fatalities and 140,740 serious casualties in road traffic over a sixteen-year period (Commission Staff, 2018).

The GSR introduces the Event Data Recorder as a mandatory feature in all new vehicles (Article 6(1)(g)). The EDR could contribute to reaching the goal of Vision Zero as it records data from crashes, which not only helps accident investigators in establishing the cause of an accident, but also enables the detection of weak spots in the road safety ecosystem and vehicle design. The investigation of the fatal Uber accident illustrates the importance of EDRs: the data from the vehicle's EDR proved an indispensable source of information on the functioning of the vehicle and the circumstances under which the accident took place, leading to the identification of shortcomings in the vehicle's software and subsequently to changes to improve the vehicle's safety (NTSB, 2019).

The EDR is defined as 'a system with the only purpose of recording and storing critical crash-related parameters and information shortly before, during and immediately after a collision' (Article 3(13)). This period of 'shortly before, during and immediately after a collision' is not further specified in the GSR. The GSR does specify which data the EDR should, at a minimum, record: 'the vehicle's speed, braking, position and tilt of the vehicle on the road, the state and rate of activation of all its safety systems, 112-based eCall in-vehicle system, brake activation and relevant input parameters of the on-board active safety and accident avoidance systems (...)' (Article 6(4)(a)). The EDR should not be capable of recording all possible data. For instance, the GSR states that an EDR should not be capable of recording and storing the last four digits of the vehicle indicator section of the vehicle identification number (Article 6(5)). Recorded data can be shared with national

authorities, on the basis of Union or national law, for the purpose of accident research and analysis (Article 6(4)(d)).

3. Data Protection issues of the GSR

This section demonstrates that data protection was considered when the GSR was written. To further appreciate these efforts, it is necessary to examine the EU data protection lex generalis, the GDPR, which applies to any processing of 'information relating to an identified or identifiable natural person' (art 4(1) GDPR). Since the GSR-required systems monitor vehicle drivers - until the dawn of completely autonomous vehicles, natural persons - the GDPR applies. Aside from rights and obligations, it also establishes a number of principles, the most significant of which - purpose limitation and data minimisation – are considered in the following paragraphs.

Firstly, however, it is necessary to consider the principle of lawful processing. This means that processing can only be permitted if there is a legal basis under GDPR Article 6(1). It is stated in Article 6(1)(c) that a legal obligation can give such lawfulness. This means that any processing required to comply with the GSR has a legal basis. The systems mentioned above, however, also assess whether drivers have the 'physical and mental ability' and are 'in a fit physical and mental condition to drive' (Article 8(3) 1968 Convention on Road Traffic). This concerns health data, and therefore processing thereof is prohibited (Article 9(1) GDPR). Article 9(2)(g) GDPR provides an exception to this restriction where there is a basis in Union or member state legislation. However, this exception states that the law in question must 'provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject'. As a result, careful examination of the GSR is required.

In this section, we will look at how the data protection provisions from the GSR relate to these principles set out in the GDPR. In the first subsection, we will shortly describe four relevant clauses separately. The focus will be on analysing how well they protect the data protection rights of drivers and others whose data is being processed. In the next subsection we will discuss how these clauses clash with each other; even if, separately, they make sense.

3.1 GDPR-relevant Articles

First, Article 6(3) stipulates that 'Driver drowsiness and attention warning and advanced driver distraction warning systems shall be designed in such a way that those systems do not continuously record nor retain any data other than what is necessary [for] the purposes for which they were collected [...]'. This is wholly in line with the principle of data minimisation as laid down in Article 5(1)(b) of the GDPR. As such systems will often continuously videorecord the driver (and possible passengers), this adherence to data protection principles is laudable. Article 6(3) goes on to state that data 'shall not be

accessible or made available to third parties at any time'. This again limits any possible infringements which could result from the systems, and should be welcomed. Finally, it notes that '[data] shall be immediately deleted after processing.' It must be remarked that deletion itself is a processing operation as stipulated in article 4(2) of the GDPR and as such deletion *after* processing is not possible. Nitpicking aside, the goal of data minimisation is crystal clear.

Next are two clauses on ensuring anonymity. Article 6(4)(c)(ii) on Event Data Recorders reads that: 'the way in which they are capable of recording and storing data shall be such that [...] the data that they collect is anonymised [...]'. This is closely related to Article 6(5): 'An event data recorder shall not be capable of recording and storing [any] information which could allow the individual vehicle itself, its owner or holder, to be identified.' As already explained in more detail above, EDRs record an impressive amount of data to be analysed in the event of a crash or collision. As such, they also potentially present a great risk in terms of data protection. These clauses are aimed at mitigating these inherent risks, and do so uncompromisingly by simply anonymising all data (see further preamble 10 of the GSR). In this manner, it becomes impossible to trace back the data to, for instance, the driver of the vehicle. This not only benefits the driver and passengers but also investigators analysing the crash. After all, if personal data is being processed in their work, the GDPR might form a bureaucratic hurdle for them, but this clause ensures that they can work unhindered. Furthermore, it allows them to share any possible results widely, which will further enhance road safety.

The last of the four articles which is relevant for data protection is 6(4)(d): 'the data that [EDRs] are capable of recording can be made available to national authorities, on the basis of Union or national law, only for the purpose of accident research and analysis, including for the purposes of type approval of systems and components'. This clause defines a clear and limited purpose for the processing of personal data in EDRs; this is essential and we will return to this in more detail below. Furthermore, it specifies that a legal basis for processing can only be found in a law and that the only recipients are national road safety authorities. This only leaves Article 6(1)(e) of the GDPR on tasks carried out in the public interest by official authorities as a ground for processing. It thus keeps the lid on e.g., any insurance companies who might be interested in the data.

In general, these obligations on EDR manufacturers seem quite exhaustive and demanding. Data protection concerns are addressed in a variety of ways that seem attractive. At the moment, however, some concerns remain as the requirements for the data which EDRs need to collect are also vague and non-exhaustive. Such a technology-neutral approach to legislation was earlier adopted for the GDPR, but is out of place in a regulation aimed at a specific technology. In the words of Hildebrandt and Tielemans (2013): 'The point is not that legislation should always be technology-proof, but that technology specific legislation is only enacted if there is a necessity to address or to redress the impact of a technology on the substance of a legal right.' As the GSR lists predominantly vague and non-exhaustive requirements concerning the EDR, the manufacturers of vehicles and EDR are left in the dark on what specific data protection measures they should take. More specific legislation

on this point would enhance legal certainty for these parties as well as for the users of vehicles. We therefore propose that in addition to the above, a clear limit should be set on the types of data to be collected. Furthermore, the period for which data should be stored should be made explicit. These two requirements would enhance the clarity of the law, and make it more practical for car manufacturers to implement.

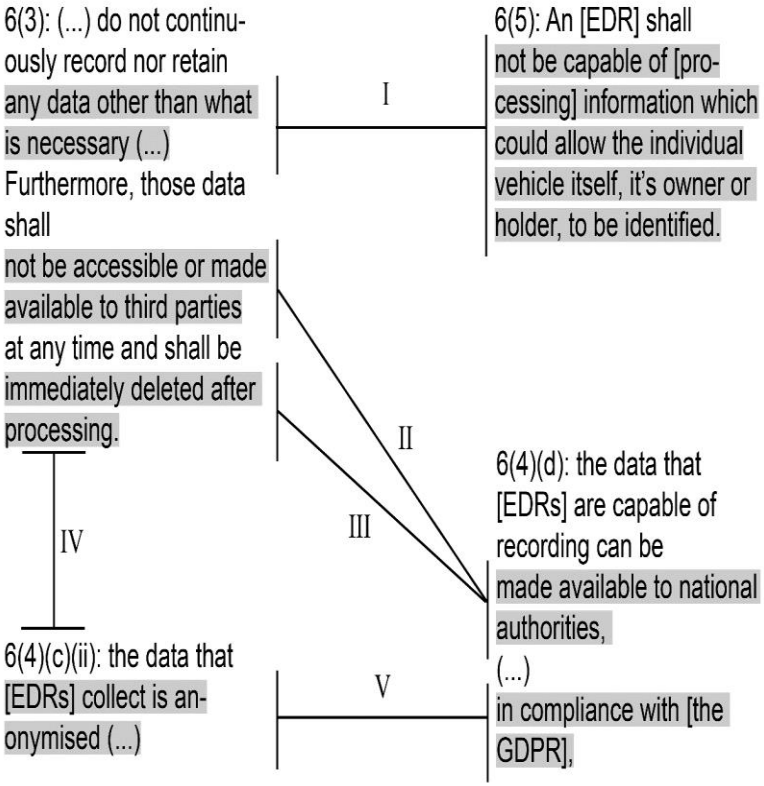

Figure 1: Internal clashes in the GSR relating to personal data processing.

3.2 Internal clashes

Although each of the articles mentioned above are in line with the GDPR, the GSR is internally contradictory when it comes to data protection. A closer look at Articles 6(3), 6(4) and 6(5) GSR reveals several clauses that are either incompatible with one another or give rise to questions that are being left unanswered. As the regulation shall apply from summer 2022 onwards, these questions need to be answered swiftly.

A first question arises out of Article 6(3) and Article 6(5) (see Figure 1, line I): Article 6(3) states that only necessary data related to the driver drowsiness and attention warning and advanced driver distraction warning systems can be recorded, to which Article 6(5) adds that any other information which could allow the individual vehicle itself, its owner or holder, to be identified should not be recorded by the EDR. Moreover, according to recital 14 GSR, any processing of personal data, such as information about the driver processed in event data recorders or information about the driver's drowsiness and attention or the driver's distraction, should be carried out in accordance with the GDPR. At a first glimpse, this seems very straightforward. Any data showing the driver's face or other features identifying the driver cannot be recorded by the EDR. However, the Uber accident discussed above has shown the importance of having in-vehicle camera footage of the driver in order to establish which factors have contributed to an accident (NTSB, 2019). Therefore, it can be argued that this data is necessary within the meaning of Article 6(3). If it is not allowed to record data on the driver's drowsiness and attention or the driver's distraction, this could undermine the purpose of the EDR. After all, its sole purpose is recording and storing critical crash-related parameters (Article 3(13)).

More problems arise concerning Article 6(3) in relation to Article 6(4)(d) (see Figure 1, line II and III). Article 6(3) reads that: 'those data [relating to the driver drowsiness and attention warning and advanced driver distraction warning systems] shall not be accessible or made available to third parties at any time and shall be immediately deleted after processing.' Note that this data can be qualified as 'critical crash-related parameters and information' (Article 3(13) and as 'relevant input parameters of the on-board active safety and accident avoidance systems' (Article 6(4)(a)), which means that these data should be recorded by the EDR. Art. 6(4)(d) states that the data that is recorded by EDRs can be made available to national authorities, so apparently national authorities are not considered third parties. What *should* be considered third parties remains unclear. More fundamental is the question how these data can be made available to national authorities if Art. 6(3) demands that they should be deleted after processing?

Even though these data should be deleted after processing, Article 6(4)(c)(ii) GSR requires all the data collected (which is included in the definition of processing of Article 4(2) GDPR) to be anonymised (see Figure 1, line IV). So, the EDR should anonymise all data, which are then immediately deleted. Moreover, Article 6(4)(d) requires, in line with recital 14 GSR, that data can be made available to national authorities in line with the GDPR (see Figure 1, Line V) . However, the GDPR explicitly states that it does not apply to anonymised data (recital 26, Article 2(1) in conjunction with 4(1) GDPR). This causes friction: how can

anonymised data be shared in line with the GDPR whilst the GDPR does not apply to anonymised data?

So, although each individual article of the GSR is in line with the GDPR, a tangled web of data protection is woven within the GSR. A web so entangled, as shown in Figure 1, that it becomes unclear what data protection measures manufacturers of vehicles and EDRs should take concerning the EDR. The internal clashes which we have outlined diminish legal certainty: Should that data related to the driver drowsiness and attention warning and advanced driver distraction warning systems be recorded, and if so, anonymised; how can deleted data be made available to external parties; how to share anonymised data in line with the GDPR even though the GDPR does not apply to these data? As a result, the potential of the EDR might not be fully utilised. As it contributes to road safety and the realisation of Vision Zero through the collection of data on road traffic accidents, clarity concerning the protection of the data recorded is an essential factor in realising the full potential of the EDR for road safety. Especially considering new developments concerning advanced driver assistance systems or ADAS and self-driving technology, the EDR can provide vital information for establishing and solving safety-critical shortcomings of these new technologies, illustrated by the Uber accident. But how can this data protection web surrounding the EDR be untangled?

4. Conclusion: stop trying so hard…

In the GSR, the European legislator has tried to bring data protection into the realm of vehicle safety regulations. Although we applaud this effort, it seems that they have overcomplicated things. This has led to the GSR being internally inconsistent: it strives for complete anonymity, but also encourages the collection of all available data and it requires data to be deleted immediately after processing whilst also allowing for that data to be shared. How to untangle this web? The GDPR could be an answer to this question by providing a framework for the processing of personal data which offers sufficient protection to those using a vehicle. Therefore, we propose that it should be relied on more in the context of the collection of vehicle data.

The European legislator has already taken steps to incorporate the GDPR in the GSR. Recital 14 of the GSR states that 'any processing of personal data, such as information about the driver processed in event data recorders or information about the driver's drowsiness and attention or the driver's distraction, should be carried out in accordance with [the GDPR]'. In addition, Article 6(4)(d) GSR limits the purpose of processing of personal data to 'accident research and analysis, including for the purposes of type approval of systems and components.' This provides a clear purpose limitation in the sense of Article 5(1)(b) GDPR. Therefore, recorded personal data should also be expeditiously deleted when the purpose has been fulfilled (Article 5(1)(e) GDPR) i.e., the crash analysis has been completed. The data protection requirements from Articles 6(3), 6(4)(c)(ii) and 6(5) GSR thus convolute matters needlessly and should be disregarded. We therefore conclude that untangling the web could be relatively straightforward.

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