Watching you watching the road: data protection implications of automated driving

Dr. Nynke Vellinga n.e.vellinga@rug.nl

Dr. Gerard Jan Ritsema van Eck g.j.ritsema.van.eck@step-rug.nl Twitter: @Gerard_RvE gerardrve.com





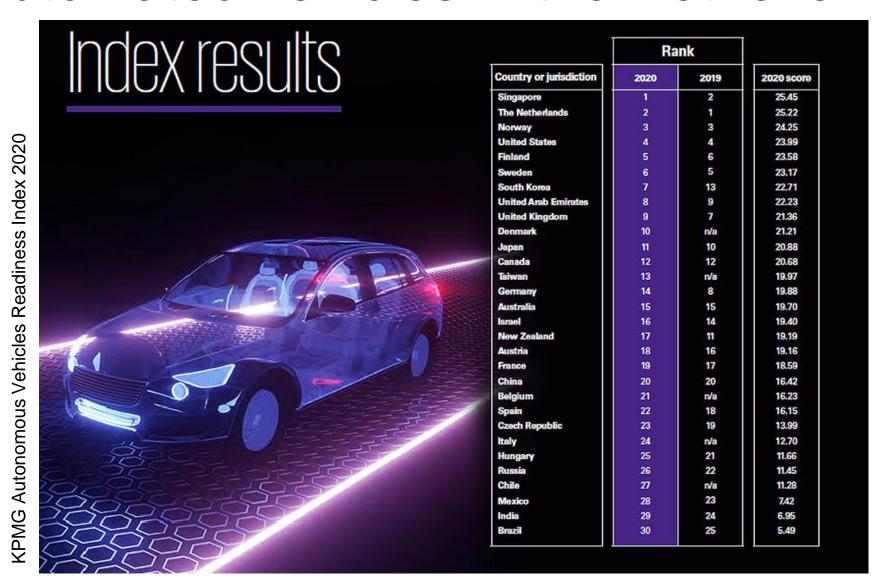
Ritsema van Eck, G. (2021). *Privacy and Participation in Public: Data protection issues of crowdsourced surveillance*. University of Groningen. https://doi.org/10.33612/diss.171025411



Vellinga, N. E. (2020). Legal Aspects of Automated Driving: On Drivers, Producers, and Public Authorities. University of Groningen. https://doi.org/10.33612/diss.112916838



Automated vehicles in the Netherlands





Automated vehicles in the Netherlands

Trials with self-driving vehicles on public roads:

- Permit required
- Since 2019 testing without a driver physically present in the vehicle allowed

Case law on Autopilot



Automated vehicles in the Netherlands





Why is data collected?

- Road safety
- Accident reconstruction



Video footage Uber crash March 2018 Tempe, Arizona



Balancing interests

Road safety

1.35 million road fatalities per year

Human fault caused or contributed to > 90% accidents

Right to life

EU type-approval

GSR (2022)

Privacy

Human right

Personal data protection

GDPR

Data minimization



What data is being collected?

- Information on the vehicle's state
- Location data
- Images from outside of the vehicle
- Images from inside of the vehicle
- Availability of the driver: eye movements, breathing, etc.



What about data concerning health?

- Special category of data: processing forbidden (art. 9(1) GDPR)
- ...but: Article 9(2)g GDPR provides an exception to this restriction if there is a basis in Union or member state legislation
- the legislation in question must 'provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject'

> legislation?



General Safety Regulation (EU) 2019/2144

(3): '(...) the safety performance of vehicles needs to be further improved as part of an integrated road safety approach and in order to protect vulnerable road users better.'



General Safety Regulation (EU) 2019/2144

Mandatory for new vehicles (art. 6 GSR):

- Event Data Recorder (EDR)
- Driver drowsiness and attention warning system:

 'a system that assesses the driver's alertness through vehicle systems analysis and warns the driver if needed'
- Advanced driver distraction warning system:
 'a system that helps the driver to continue to pay attention to the traffic situation and that warns the driver when he or she is distracted'

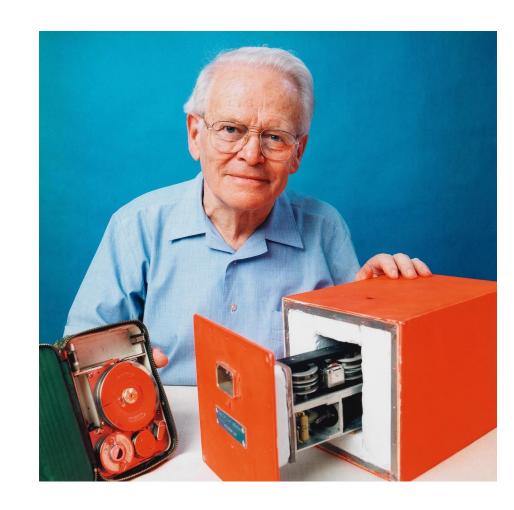


General Safety Regulation (EU) 2019/2144

Article 6(4)

Event data recorders shall meet the following requirements in particular:

(a) the data that they are capable of recording and storing with respect of the period shortly before, during and immediately after a collision shall include 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, with high level of accuracy and ensured survivability of data





GSR and Data Protection

Art. 6(4)(c)(ii) the data that they collect is anonymised (...)

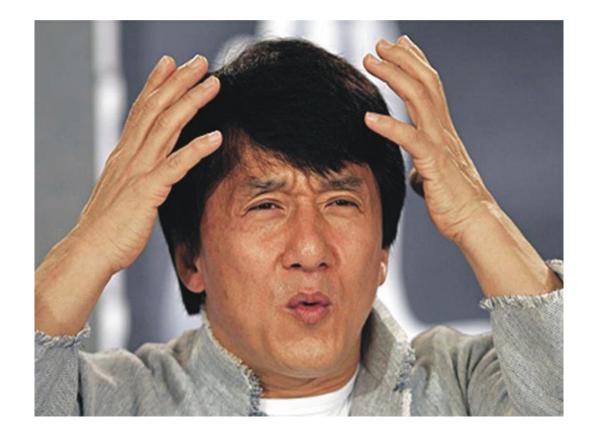
Recital (14) Any processing of personal data, such as information about the driver processed in event data recorders (...) should be carried out in accordance with with Union data protection law, in particular [the GDPR].





Event Data Recorders (EDRs)

- > 6(4)(a): Relevant input parameters
- > 6(4)(c)ii: is anonymized
- > 6(4)(d): made available in compliance with GDPR





6(5) An [EDR] shall not be capable of recording and storing (...) any other information which could allow the individual vehicle itself, its owner or holder, to be identified.

6(4)(d) the data that [EDRs] are capable of recording can be made available to national authorities, (...) in compliance with [the GDPR], over a standardised interface.

6(4)(c)(ii) the data that [EDRs] collect is anonymised (...)

6(3) (...) do not continuously record nor retain any data other than what is necessary (...) Furthermore, those data shall not be accessible or made available to third parties at any time and shall be immediately deleted after processing.



6(5)

RECTION PROVIDED III not be capable of ng (...) any other information individual allow the individual allow the individual allow the holder, the aentified.

6(4)(d) the data that [EDRs] are capable of the cap

6(4)(c)(ii) the data that [EDRs] collect is anonymised (...)

6(3) (...) do not continuously record nor retain any data other that office ecessary (...) Further edata shall named a departies at the shall be immediately deleted after processing.



6(5) An [EDR] shall not be capable of recording and storing (...) any other information which could allow the individual vehicle itself, its owner or holder, to be identified.

6(4)(d) the data that [EDRs] are capable of recording can be made available to national authorities, (...) in compliance with [the GDPR], over a standardised interface.

6(4)(c)(ii) the data that [EDRs] collect is anonymised (...)

6(3) (...) do not continuously record nor retain any data other than what is necessary (...) Furthermore, those data shall not be accessible or made available to third parties at any time and shall be immediately deleted after processing.



6(5) An [EDR] shall not be capable of recording and storing (...) any other information which could allow the

individual vehicle itse holder, to be identifie

6(4)(d) the data i pu' capable of record or made available to reauthorities, (...) in co with [the GDPR] over standardised interfact.

6(4)(c)(ii) the data that [EDRs] collect is mised (...)

not continuously

Ptain any data

That is necessary

nore, those data

accessible or

ble to third

y time and shall

processing.



Stop trying so hard...

APPROVED APPROVED

Recital 14

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]

Art. 6(4)

(...) accident research and analysis, including for the purposes of type approval of systems and components.



Thank you for your attention

Dr. Nynke Vellinga n.e.vellinga@rug.nl Dr. Gerard Jan Ritsema van Eck g.j.ritsema.van.eck@step-rug.nl Twitter: @Gerard_RvE gerardrve.com