

# SKELETON ZERO VERSION

## NEW LEGAL INSTRUMENT (CONVENTION) ON THE USE OF AUTOMATED VEHICLES IN TRAFFIC

# General overview

# Work in between the sessions (September-November)

- Seven online meetings
- Small group of people
  - Finland, France, Germany, Greece, Luxemburg, Malta, Netherlands, Poland, Portugal, Sweden, Switzerland, UK, OICA, GE.3 secretariat, academic representation
- Lively discussion
- Skeleton 0-version
- Q&A
- (Preamble)

# The 0-draft for the skeleton

- Aims to present the basic structure for a new convention
- Contains suggestion of possible chapters and articles
  - In a short describing manner, no actual contents of the Articles
- Is rather compact (35 Articles at the time being)
- Is not complete
- Contains more questions than ready answers
- Aims to bring together work done by relevant parties
  - WP.1 2018 and 2022 Resolutions form the basic starting point for further discussions

# General principles

- The draft aims to address issues that concern road traffic safety in the context of road transport automation
  - Compare with the introductory words of the existing Conventions
- The draft aims to the Convention that is binding on the Contracting Parties.
  - However, the the draft will also aim to identify the various requirements/responsibilities of various players on the field.
  - These concern especially: Automated Driving Systems, human beings in various roles relating to automated driving, companies/other entities.
- The scope of the draft does not cover ADAS
- The draft regards ADS as 'one', to the extent possible

# Contents of the skeleton

# Convention chapters

- Chapter I: General provisions
- Chapter II: General functional requirements for ADS
- Chapter III: Additional functional requirements for ADSs issuing transition demands
- Chapter IV: Human roles and the basic responsibilities of the humans
  - Using automated vehicles that can be driven by the human/where there is a responsible human inside the vehicle
- Chapter V: Operational duties for entities responsible to ensure the safe behavior of the automated vehicle while the ADS is engaged
  - Safety requirements are laid down in Chapter II and Chapter III
- Chapter VI: Additional requirements for remote management
  - Mostly concerning automated passenger and freight transport services
- Chapter VII: Other provisions
- Chapter VIII: Final provisions

# Chapter I: General provisions

- Preamble?
- Article 1: Scope of the Convention?
- Article 2: Definitions
- Article 3: Obligations of the contracting parties
- Any other Articles in this Chapter?



# Chapter II: General functional requirements for the automated driving systems?

- Article 4: Basic safety related capabilities required of the automated driving systems?
- Article 5: ADS interaction with vehicle users?
- Article 6: ADS interaction with other road users?
- Any other articles in this Chapter?

# Chapter III: Additional functional requirements for the ADSs issuing transition demands?

- Article 7: ODD of the automated vehicle?
- Article 8: ADS interaction with the drivers?
- Article 9: Dynamic control of the vehicle?
- Any other articles in this Chapter?

# Chapter IV: Human roles and the basic responsibilities of the humans?

- Using automated vehicles that can be driven by the human /where there is a responsible human inside the vehicle
- Article 10: Describing situations when the human has the dynamic control?
- Article 11: Describing situations when the human is a “user in charge”?
- Article 12: General responsibilities of the user of a vehicle with ADS?
- Article 13: Responsibilities of the “user in charge” when using ADS issuing transition demands?
- Article 14: Non-driving related responsibilities of the “user in charge”?
- Article 15: Activities other than driving allowed for the “user in charge”?
- Any other articles in this Chapter?

# Chapter V: Operational duties for entities responsible to ensure the safe behavior of the automated vehicle while the ADS is engaged?

- Safety requirements for the ADSs are laid down in Chapters II and III
  - Article 16: Entity responsible for the behavior of the automated vehicle?
  - Article 17: General operational duties for the safe behavior of the Avs?
  - Article 18: Information responsibilities (towards the users?)?
  - Article 19: Data recording requirements to understand the performance of the ADS and to (nationally) determine liabilities relating to dynamic control?
  - Article 20: Cyber security and software updates?
  - Any other articles in this Chapter?

# Chapter VI: Additional requirements for remote management?

- Mostly concerning automated passenger and freight transport services /No responsible human inside the vehicle
- Article 21: Entity responsible for remote management (remote management provider?)?
- Article 22: Requirements for situations where there is no responsible human inside the vehicle?
- Article 23: Additional requirements for the systems used for the remote management (adding to the requirements established in Chapter II)?
- Article 24: Duties of the remote management providers?
- Article 25: Duties of remote agents?
- Article 26: Safe behavior of passengers in vehicles with remote management?
- Any other articles in this Chapter?

# Chapter VII: Other provisions?

- Article 27: Vehicle registration?
- Article 28: Issues relating to data sharing?
- Article 29: Information on human behavior and functioning of automated vehicles?
- Article 30: Driving permits?
- Any other articles in this Chapter?

# Chapter VIII: Final provisions

- Article 31: Ratification process
- Article 32: Notifications
- Article 33: Entry into force
- Article 34: Amendments to the Convention
- Article 35: Dispute solving
- Any other articles in this chapter?

# Possible next steps



# This is only the beginning...

- Continue the work in between the official GE.3 meetings by the drafting volunteers
- Develop the contents of the draft Convention towards legal text
  - Chapters, articles as well as paragraphs
- Continue deeper discussions on various issues and also feed discussions within GE.3 official meetings
- Submissions to the WP.1?