

START– Booth No. 01

PEGASUS METHOD

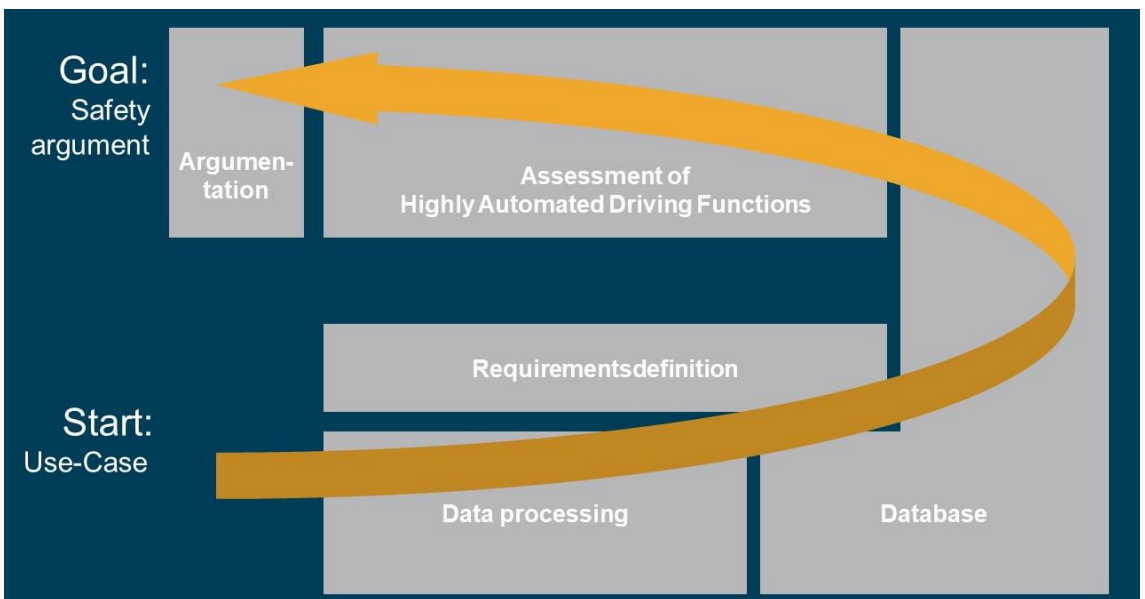


Safeguarding automated driving functions

How do we achieve a generally accepted and uniform approach for testing highly automated driving functions?

The aim of PEGASUS is the development of a method that contributes to the safeguarding of highly automated driving functions, which is intended as a blueprint for later series development of such systems. Due to the high degree of networking between the various subprojects and their work packages within the PEGASUS project, the following overall method is developed

- ➔ Requirements Definition: On the basis of knowledge (laws, standards, etc.)
- ➔ Data Processing: Deriving Scenarios from Data and Knowledge
- ➔ Database: Processing and Preparation of Data for the test instances in the common Database
- ➔ Assessment of Highly Automated Driving Functions: Testing and Evaluating the highly automated driving function with various test instances
- ➔ Argumentation: Creating a safety argumentation with a safety statement based on test results



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START

01	PEGASUS Method
REQUIREMENTS & CONDITIONS	
02	Framework for Safeguarding
03	V-Model and Process Analysis
04	The Highway-Chauffeur
05	Scenario Description and Knowledge-Based Scenario Generation
06	Driver Takeover Capability in Real Traffic
07	Critical Scenarios in Simulator Studies
08	Criticality Metrics
09	Impact Analysis
10	Identification of Challenging Scenarios for Highly Automated Driving
11	Social Acceptance for HAD (L3)
12	Challenges of a Scenario-Based Approach

BASICS FOR TESTING

13	Functional Decomposition
14	Scenario Formats
15	Scenario Data Base

BASICS FOR TESTING

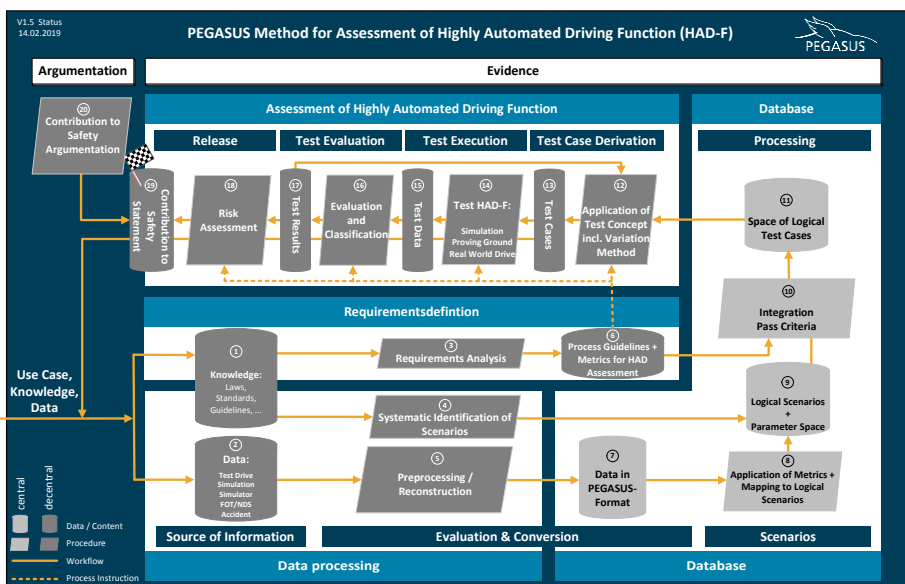
16	Test Concept
17	Test Automation
18	Test Execution Interfaces
19	HD Maps

TESTING & SAFEGUARDING

20	Sensor Models
21	Software-in-the-Loop
22	Verification
23	Tool Chain
24	Generic and Risk Assessment
25	Localization and Collision Avoidance
26	Mobile Traffic Acquisition
27	Field Tests

GOAL

28	Safety Statement
29	Safety Argument
30	Reflection
31	Integration of PEGASUS Tools into UNECE-Certification
32	Embedding PEGASUS Results



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