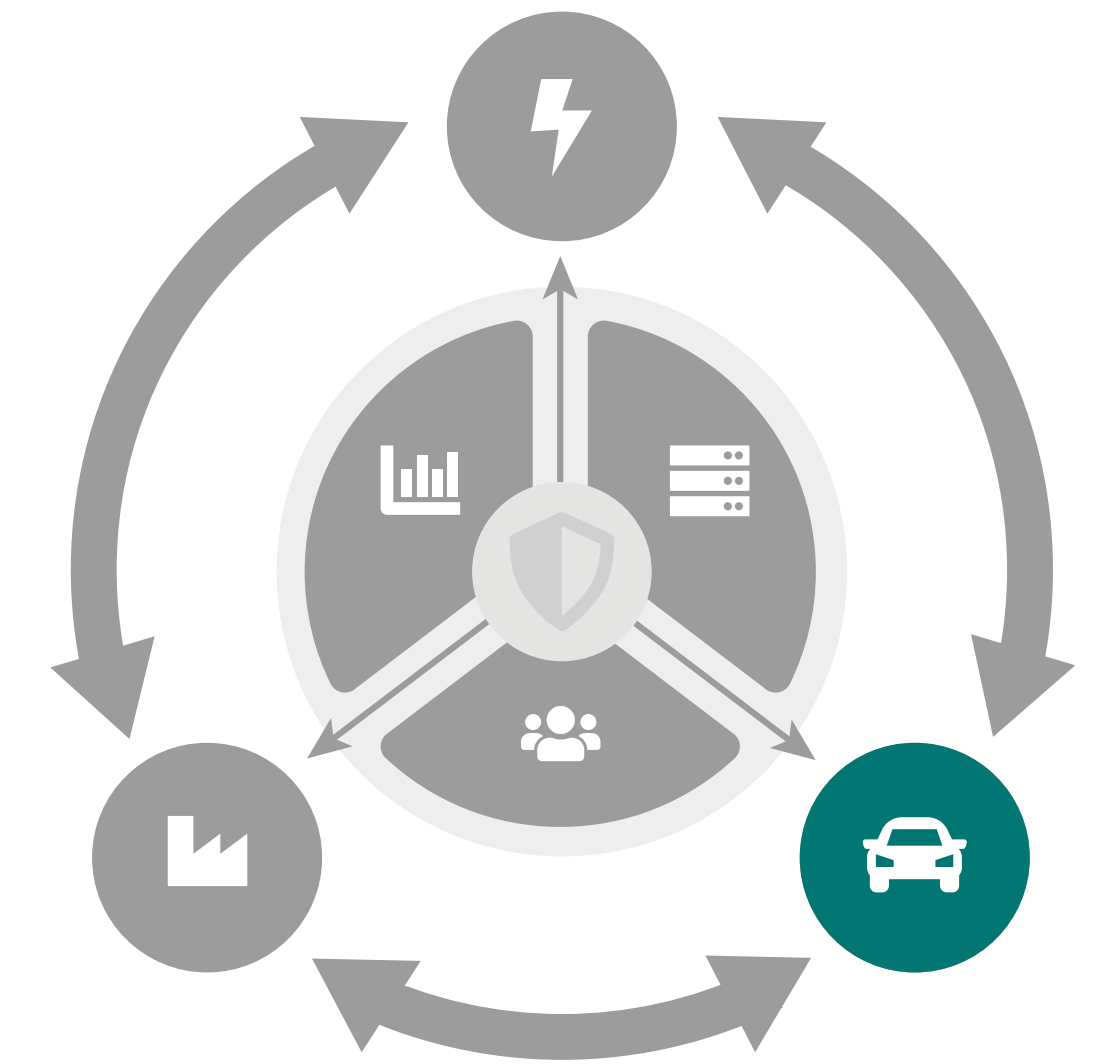




Modeling the legal framework for IT-Security in the mobility domain

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Motivation and Research Questions

- Distributed and complex, possibly also inconsistent legal framework for IT security in the mobility domain
 - Multiple levels of regulation
 - Mobility-specific and general simultaneously
- Semi-automatic formalization of relevant legal requirements for architectural design decisions regarding privacy and IT-Security
- ➔ What are the legal requirements and possible inconsistencies in mobility-specific IT-security law and how can these be formalized?

Impact

- Facilitation of the practical application of the law (e.g. for software architects) and the jurisprudential debate through a clear legal framework, which allows a appropriate security assurance.
- Advice to the legislator to develop a clear and consistent law focused on end-to-end-security.

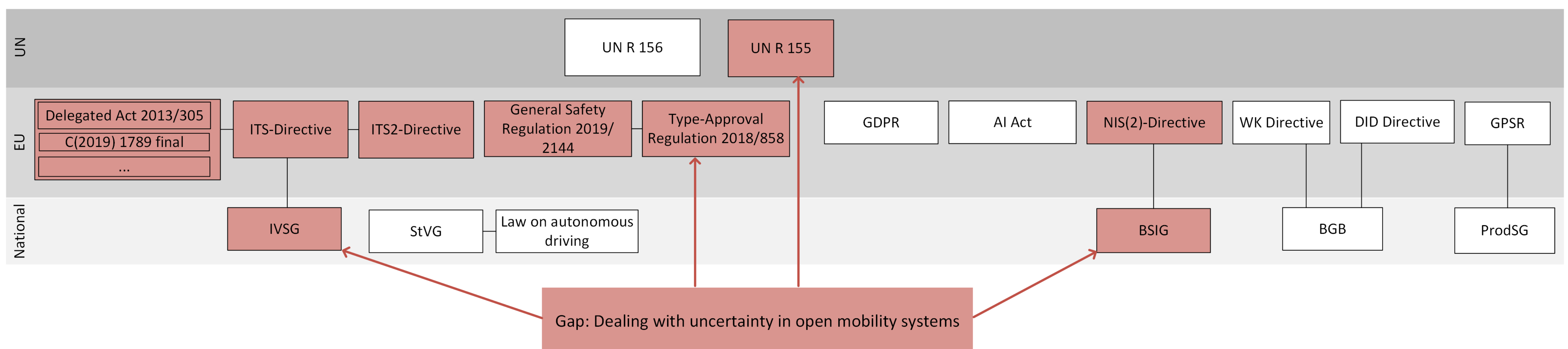
Research Activities and Results

Research Methods:

- Horizontal and vertical modeling of the legal framework
 - Evaluating the applicability of the individual laws
 - Elaboration of the interrelationships
- Consolidating definition and description of key terminology and methodologies

Results:

- Development of a concept of **resilience** for dealing with uncertainty
- Analysis of the legal framework for **safety and security updates** for vehicles
- Regulatory gap for **end-to-end security in open systems** such as ITS → knowledge transfer necessary:



Publications

- Die Resilienz als neue Anforderung des Rechts der Daten- und IT-Sicherheit. PhD thesis 2025.
- Kostenfreie ISO-Normen für alle? Zulässigkeit und Bedeutung von Verweisen auf private Normung im IT-Recht. In: InTeR 2024.
- IT-Sicherheit in offenen Infrastrukturen ½. In: RDV 2022/2023.
- Grundlagen für ein gesetzliches IT-Sicherheitsrisikomanagement: Ansätze zur Vereinheitlichung von Rollenmodell, Risikomanagement und Definitionen für das IT-Sicherheitsrecht. In: CR 2022.

links to:

