



Cooperative ITS Corridor – Joint Deployment Operational Concept

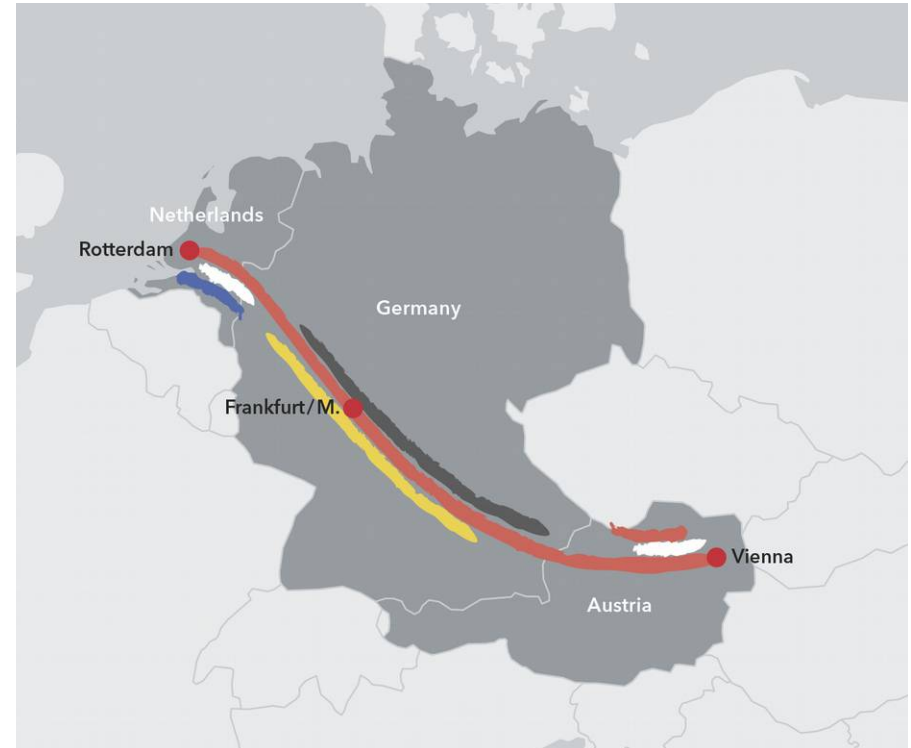
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C-ITS deployment and evaluation workshop
European ITS Platform and C-Roads Platform

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Introduction of the two first applications in the Cooperative ITS Corridor (NL – DE – AT)

- **Road Works Warning**
(Traffic centers and safety trailers send road works warning / information)
- **Improved traffic management by cooperative vehicle data**
(Vehicles send information about their position and speed)



Ministry of Infrastructure and the
Environment of the Netherlands



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für Verkehr und
digitale Infrastruktur



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bast
Bundesanstalt für Straßenwesen

Hessen Mobil as the road operator for the Federal State of Hessen has the responsibilities for the development of:

- The Roadside ITS Station (R-ITS-S)
- The Central ITS Station (C-ITS-S)
- The specifications for the public call for tenders for the national roll out in Germany
- *The operational concept for the German part of the project*
- Hessen Mobil is also responsible for the trial operation within the road maintenance service

Existing ITS Infrastructure

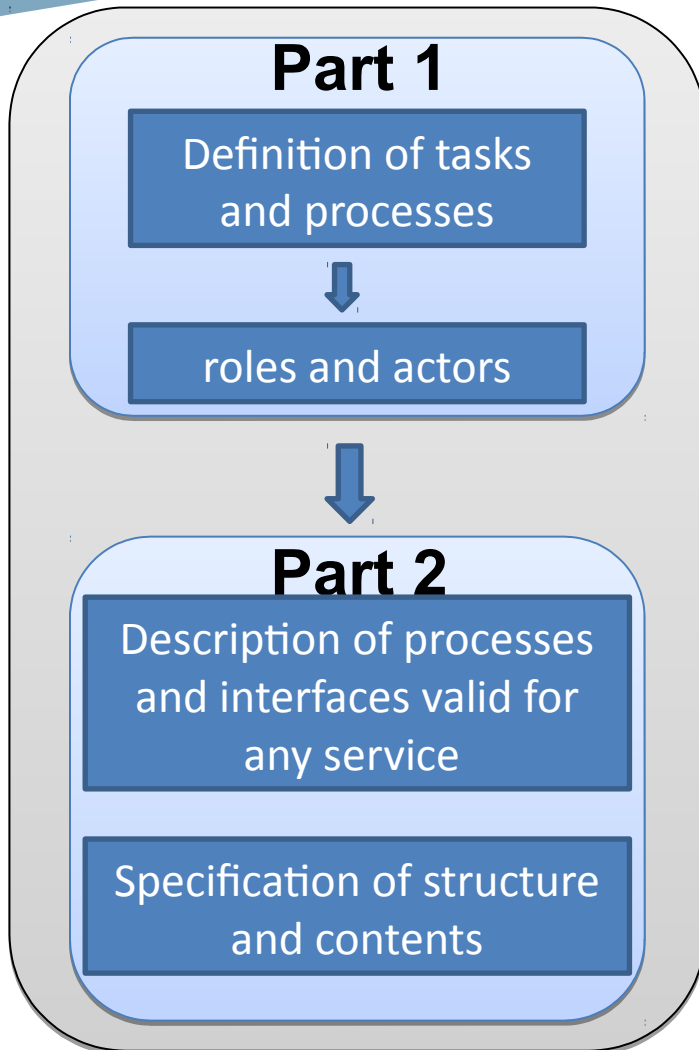
- 16 Federal States in Germany with heterogeneous framework requirements
- Few federal road operators have technical know how regarding cooperative technologies
- Few federal road operators have dynamic positioning of short term roadworks services in operation
- Many different types of Traffic Control Center and interfaces in operation

C-ITS Operation

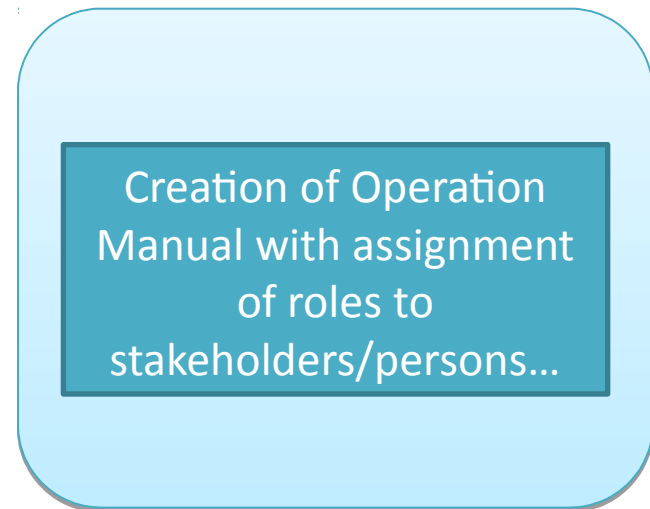
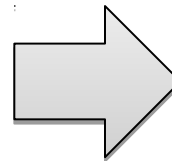
- Due to heterogeneous frameworks all federal road operators have different requirements for deployment of C-ITS Services
- Often the resources are missing to implement an operation of new systems
- On behalf of the Federal Ministry of Transport and Digital Infrastructure (BMVI) Hessen Mobil offers all interested federal states the full functionality of the first services via a central interface
- But: Decentralised operation is also an option
- Private Companies will join the central federal operation

In order to design and document the necessary process landscapes and role models for operation, four different perspectives are necessary:

- **Central Federal Operation**
- **Federal states with a decentralised operation**
- **Federal states with participation in the central federal operation**
- **Private companies with participation in the central federal operation**

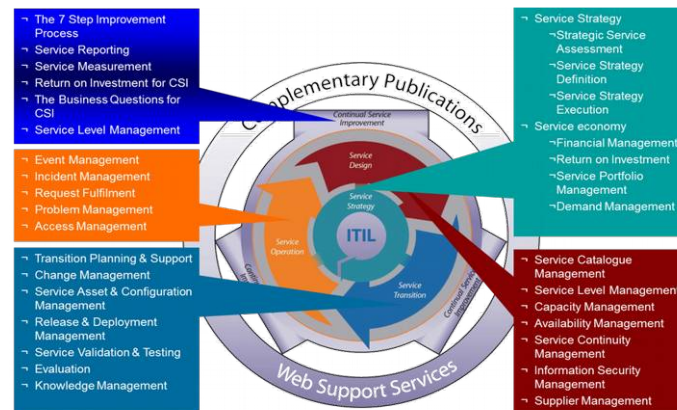


- **Part 1: Fundamentals**
- **Part 2: General operational concept**



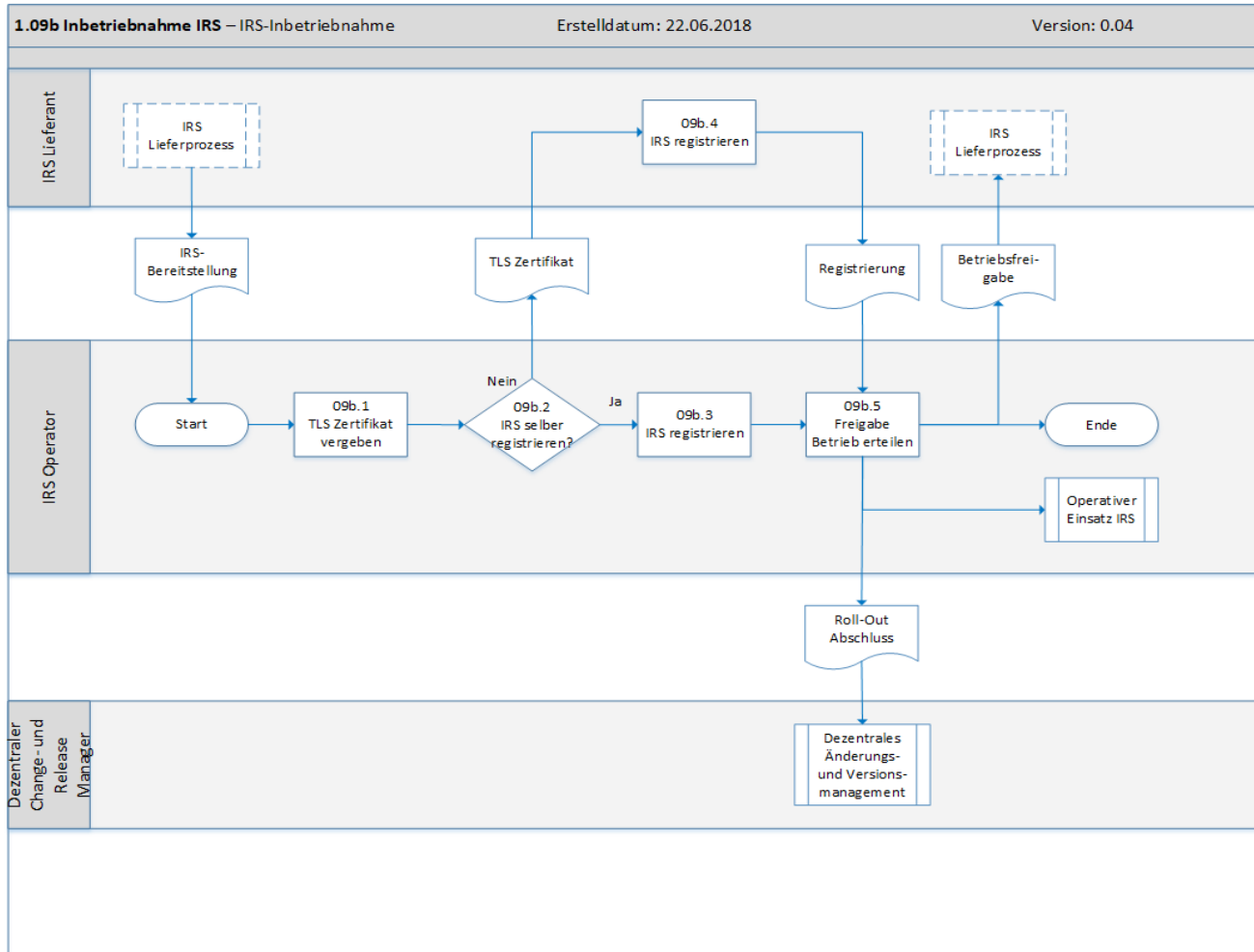
The general operating concept (Part 2)

- is based on the document “Framework to construct operational, concepts/manuals for cooperative systems” Part 1,
- is prepared according to the target group,
- has a modular structure and consists of various individual documents,
- is role-based,
- can easily be extended by new processes,
- serves as a blueprint for the operating manuals,
- is based on ITIL® V3.



| Prozesspool | Central federal Operation | Federal state (decentralised Operation) | Federal state (Participation in central federal operation) | Private companies (Participation in central federal operation) |
|---|---------------------------|---|--|--|
| Anderungs- und Versionsmanagement | X | X | X | X |
| Anforderungsmanagement | X | X | X | |
| Außerbetriebnahme ICS | | X | | |
| Außerbetriebnahme IRS | | X | X | X |
| Außerbetriebnahme zentrale Komponenten | X | | | |
| Compliance Management | X | | | |
| Eskalationsmanagement | X | X | X | |
| Finanzmanagement für IT-Services | X | X | X | |
| Inbetriebnahme ICS | | X | | |
| Inbetriebnahme IRS | | X | X | X |
| Inbetriebnahme zentrale Komponenten | X | | | |
| Kapazitätsmanagement | X | X | | |
| Konfigurationsmanagement | X | X | X | X |
| Lieferantenmanagement | X | X | X | |
| Notfallmanagement | X | X | | |
| Operativer Einsatz ICS | | X | | |
| Operativer Einsatz IRS | | X | X | X |
| Operativer Einsatz zentrale Komponenten | X | | | |
| Problemmanagement | X | X | X | X |
| Service Level Management | X | | | |
| Service Strategie Entwicklung | X | | | |
| Sicherheitsmanagement | X | | | |
| Störungsmanagement | X | X | X | X |
| Verfügbarkeitsmanagement | X | X | | |
| Zugriffsmanagement | X | X | X | X |

Example: Process Commissioning of an R-ITS-S



- **The design of an operational concept for C-ITS services forms the basis for a broad technical implementation with many different cooperative services**
- **The introduction of a small number of vehicle-infrastructure communication functions facilitates the design and implementation of the operational organisation with regard to the degree of complexity.**
- **The extension of the operational concept from an organisational point of view requires only little additional effort.**



Thank you for your kind attention Suggestions or Questions?

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