

Architectures for cooperative systems - the EU approach

Role of the **Communication Architectures**

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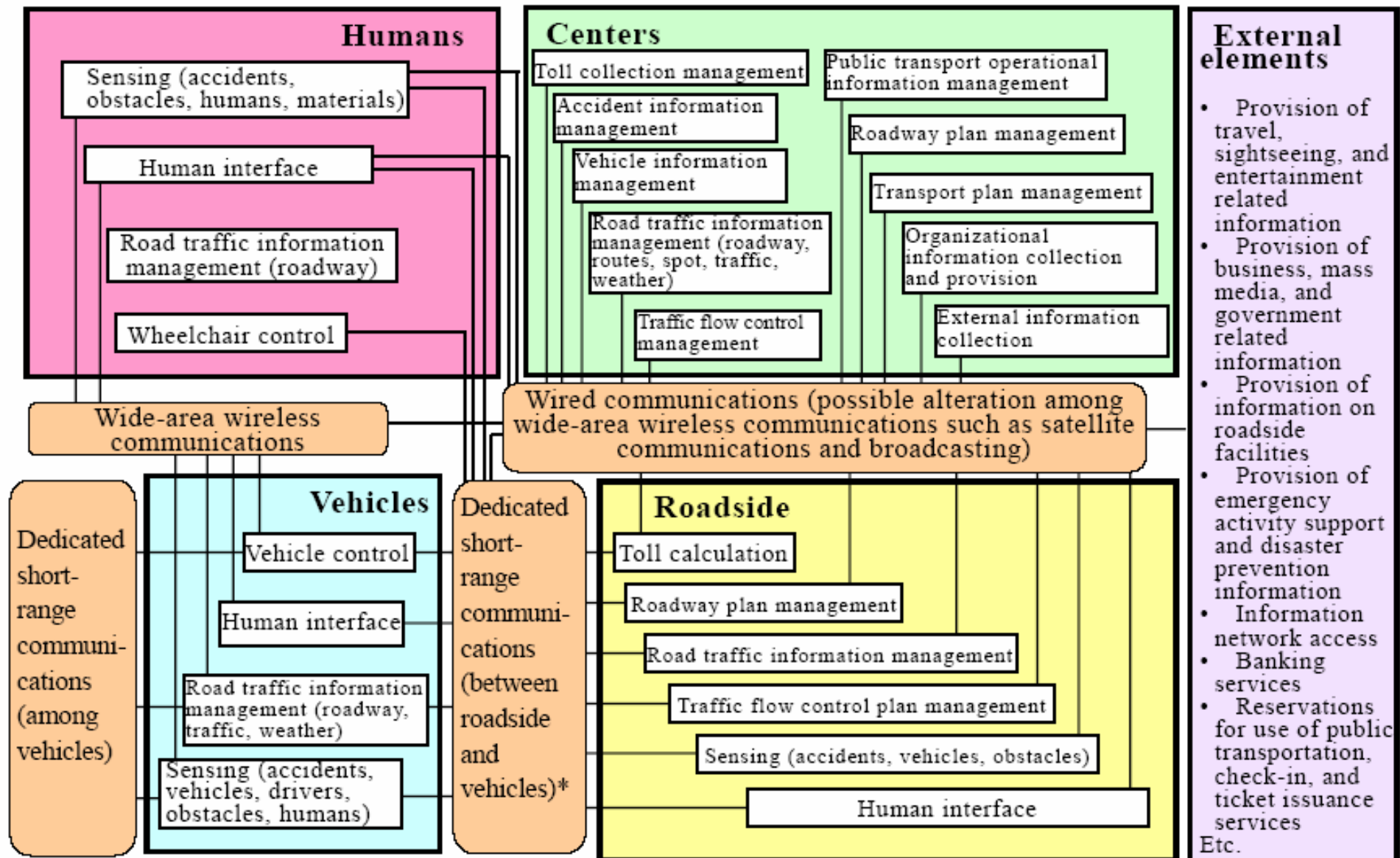


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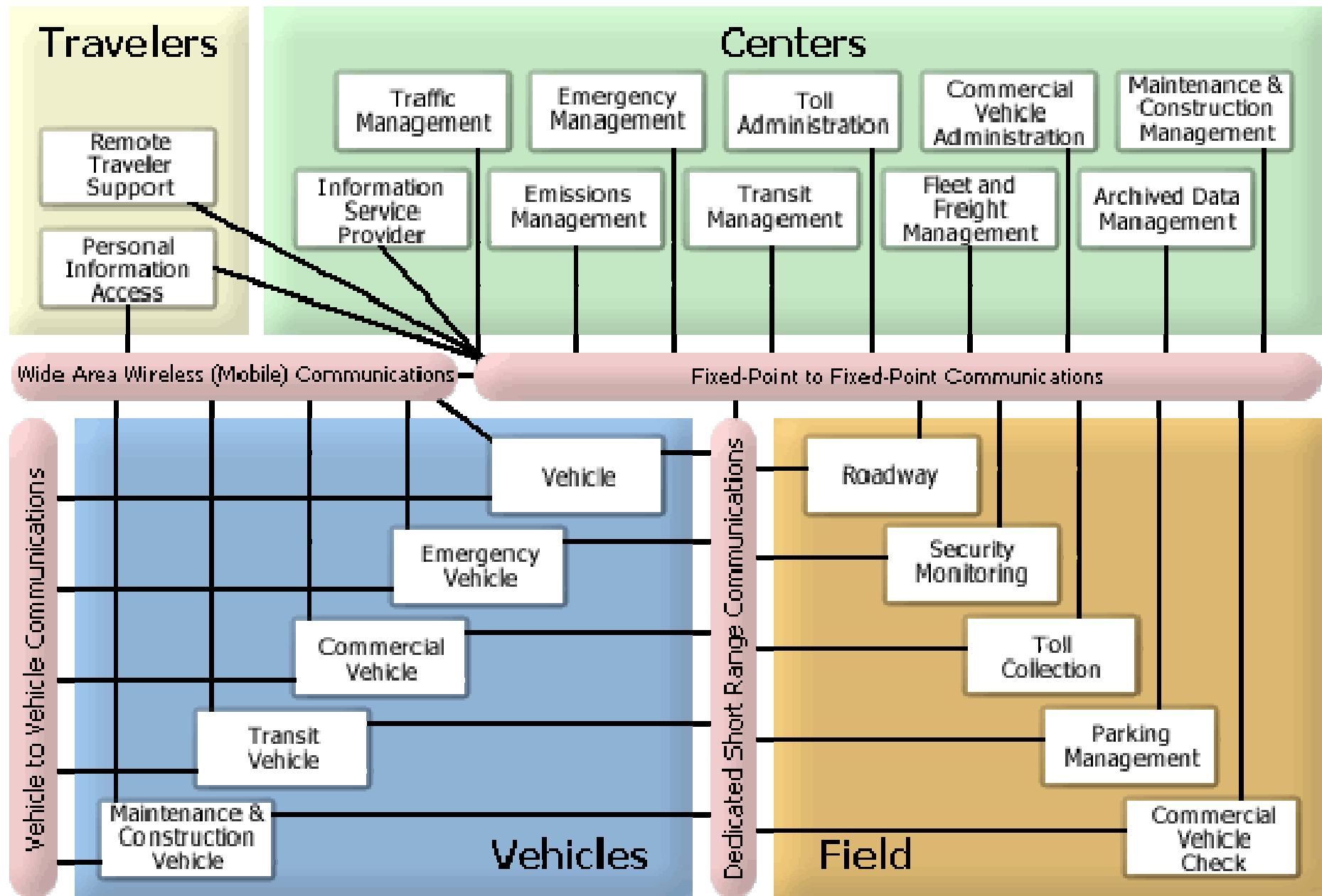
- Current top level architectures
- ITS standards
 - ITS Architecture Standards
 - CALM communication architecture
- eSAFETY: CVIS, SAFESPOT, COOPERS,...
- European High-Level architecture



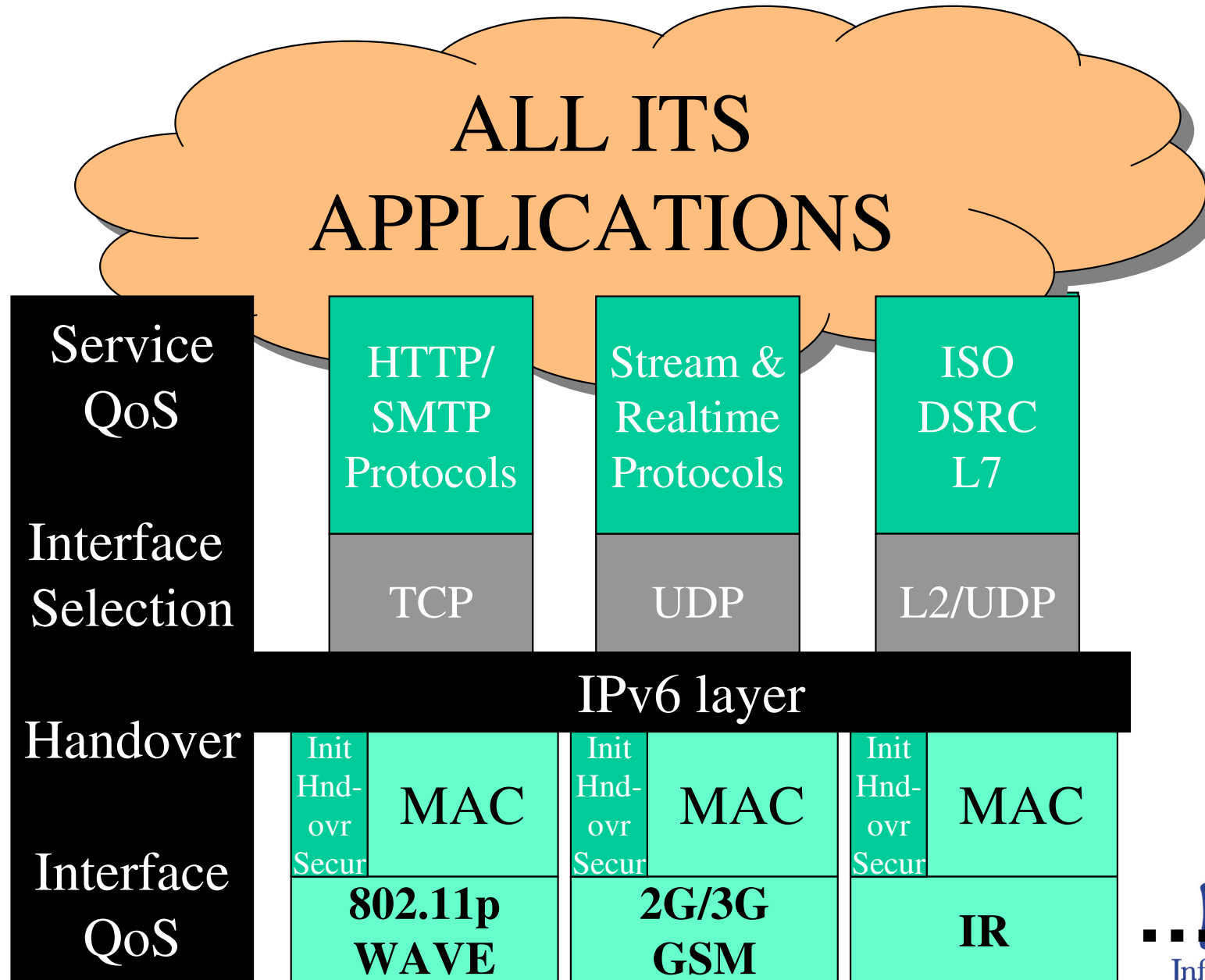
US Architecture



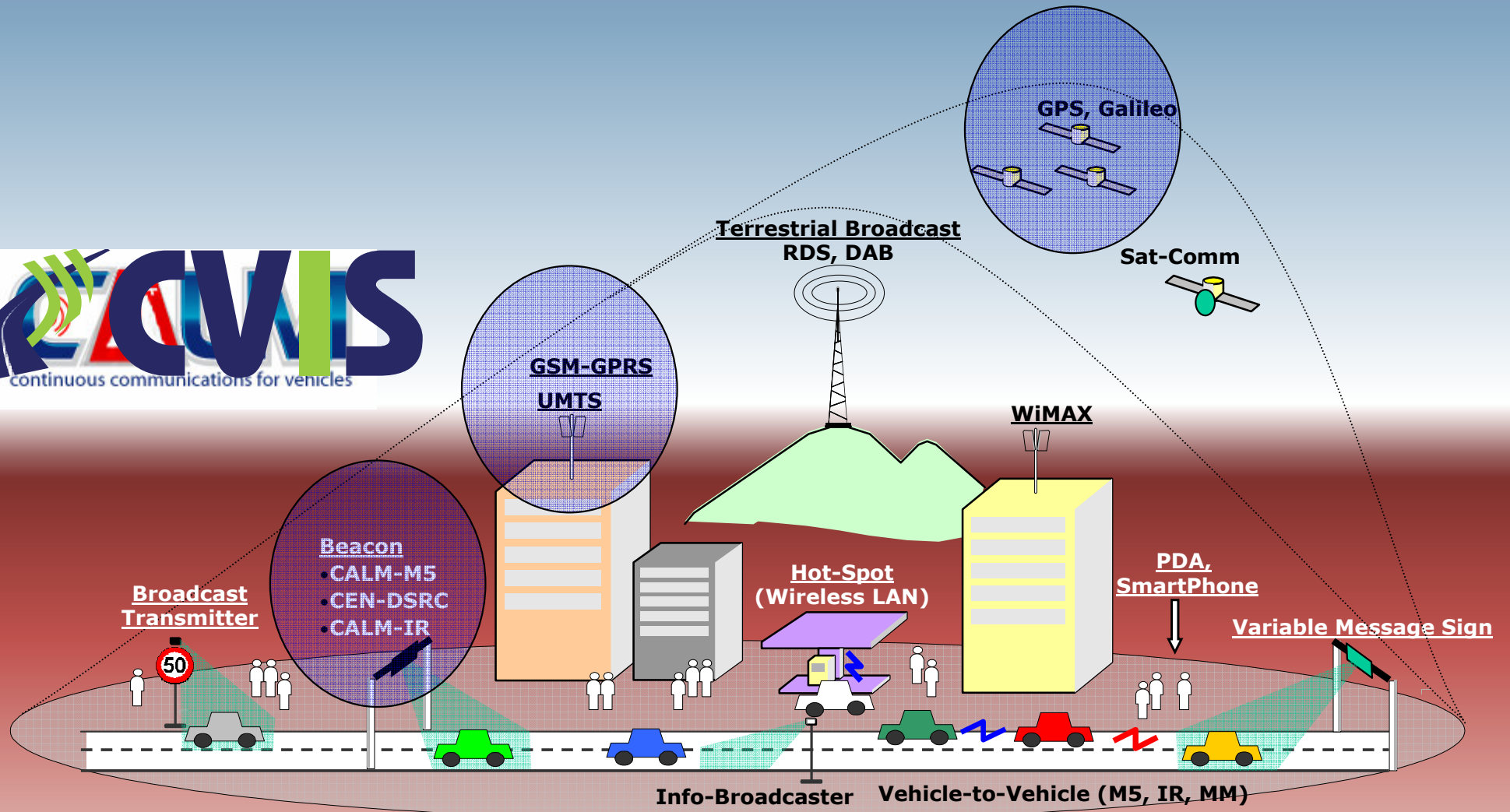
Japan Architecture



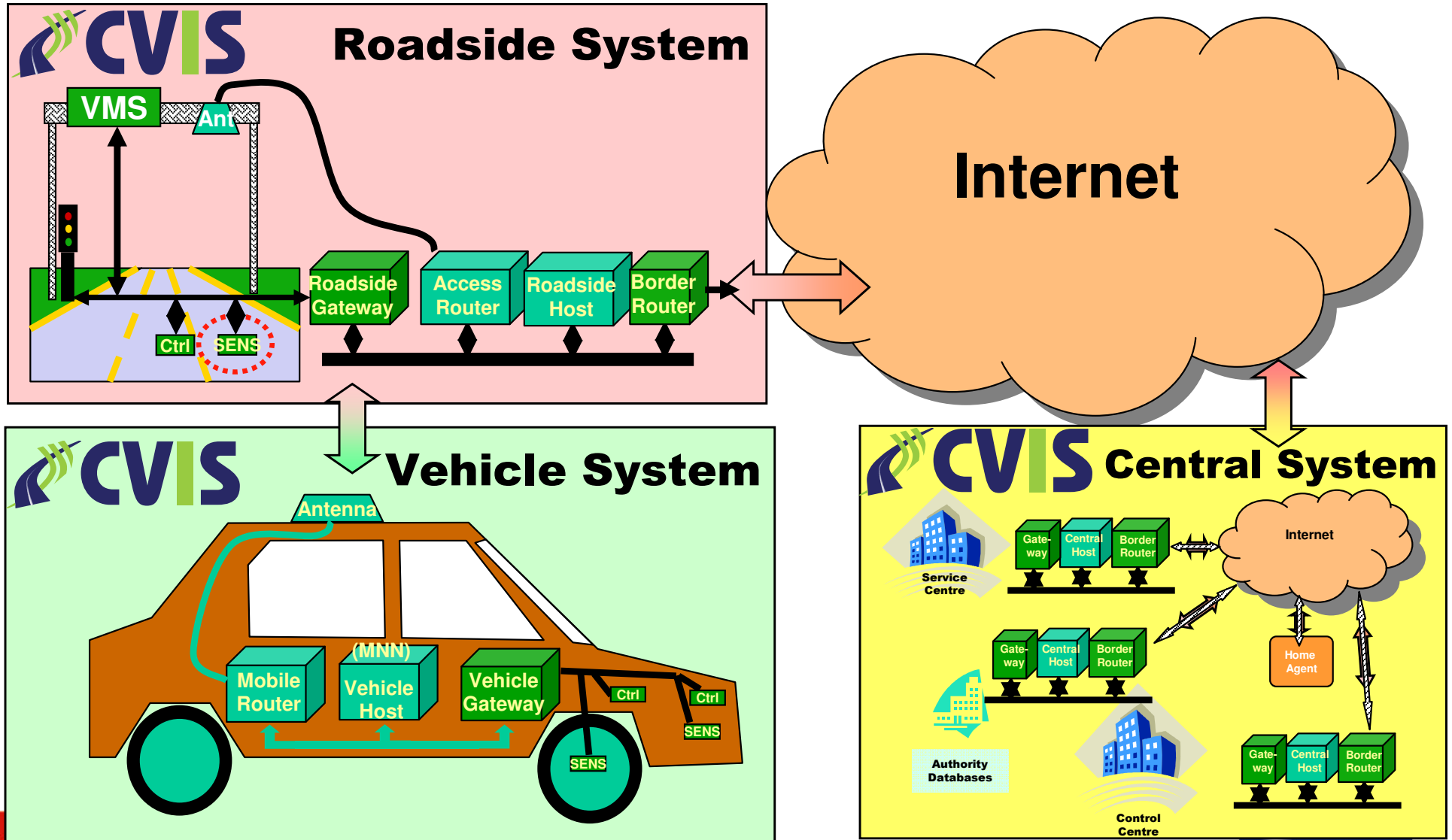
CALM architecture



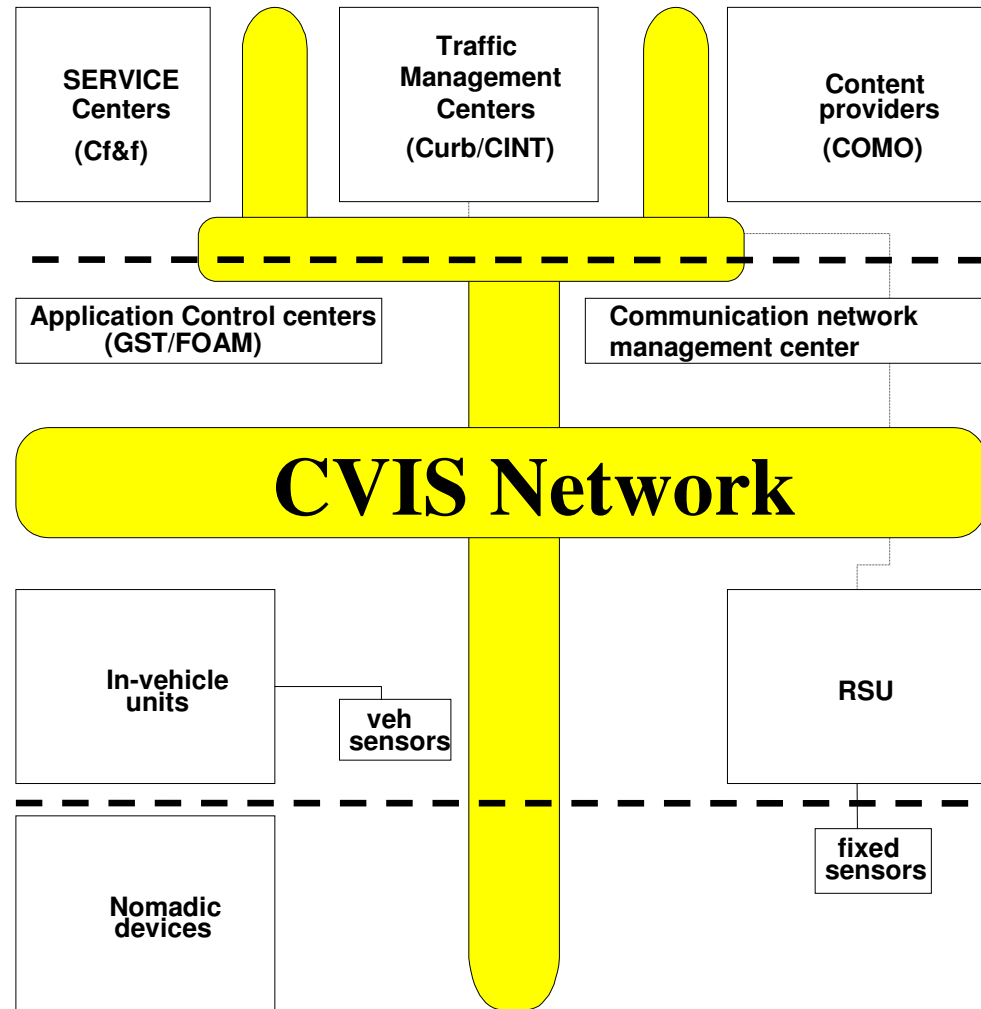
Communications



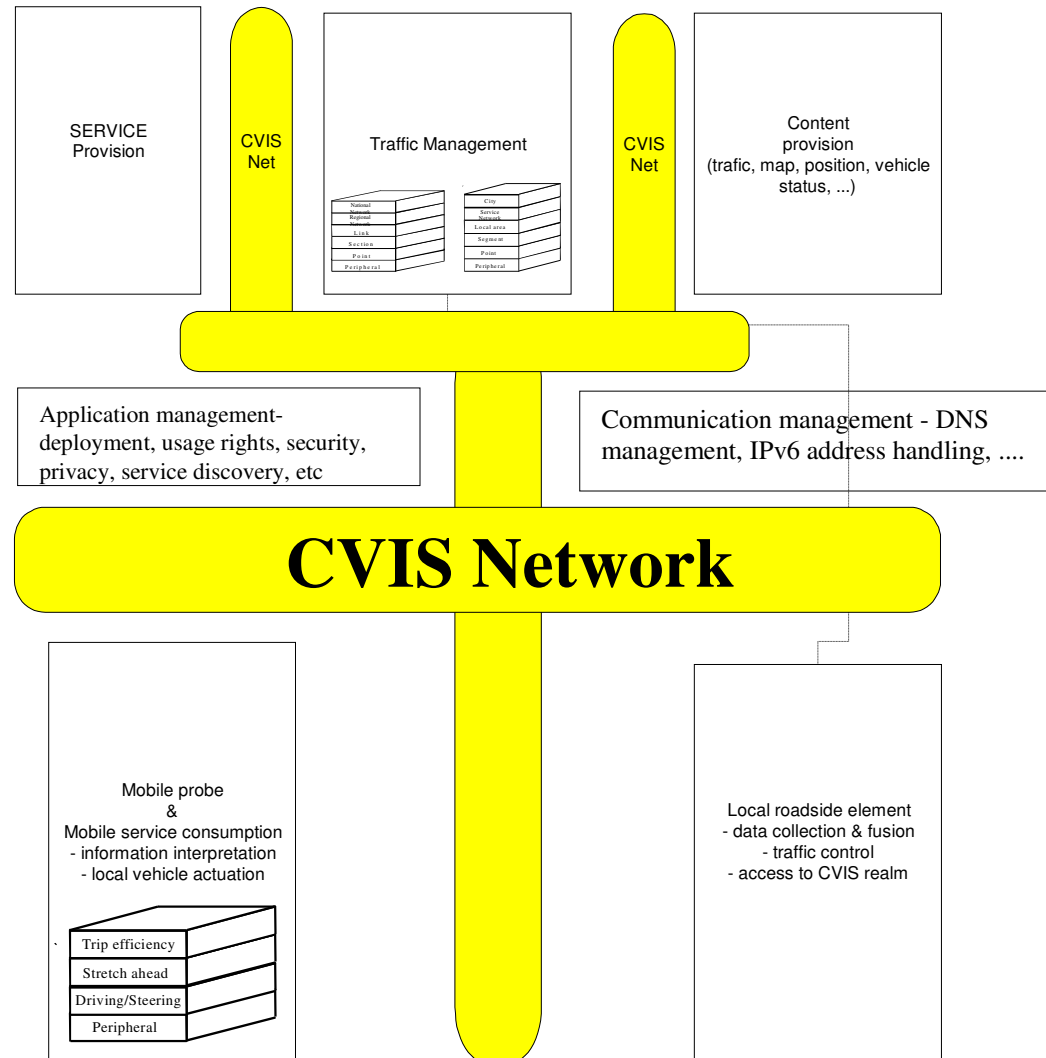
CVIS system architecture



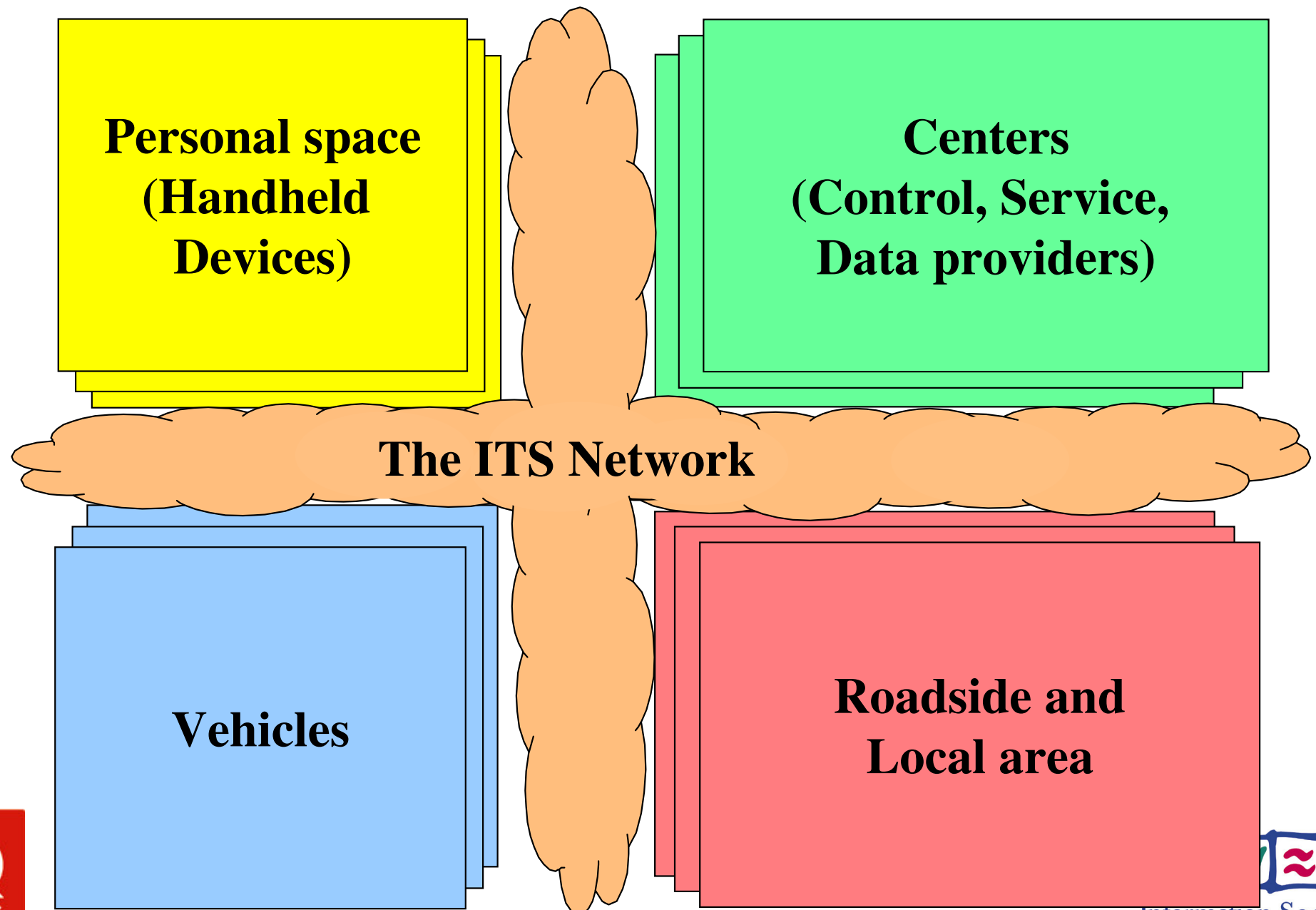
Physical High-level



Functional High-level



European Architecture



ITS design advice

- Cooperative systems needs communications
 - Focus on **end-to-end connectivity**
- Central system interoperability is needed
 - **Connect** the huge amount of **information**
- Multimodal aspects
 - Handheld (nomadic) devices must be connected



Summary

- Conundrum
 - ITS Architectures are needed to guide developments
 - Once put on paper, immediately outdated
- What to do?
 - Top-level architectures should be as technology-independent as possible
 - Architecture description standards and tools should be used
 - Revision should happen continuously

