

Update on ETSI Work Item on FRMCS System Architecture

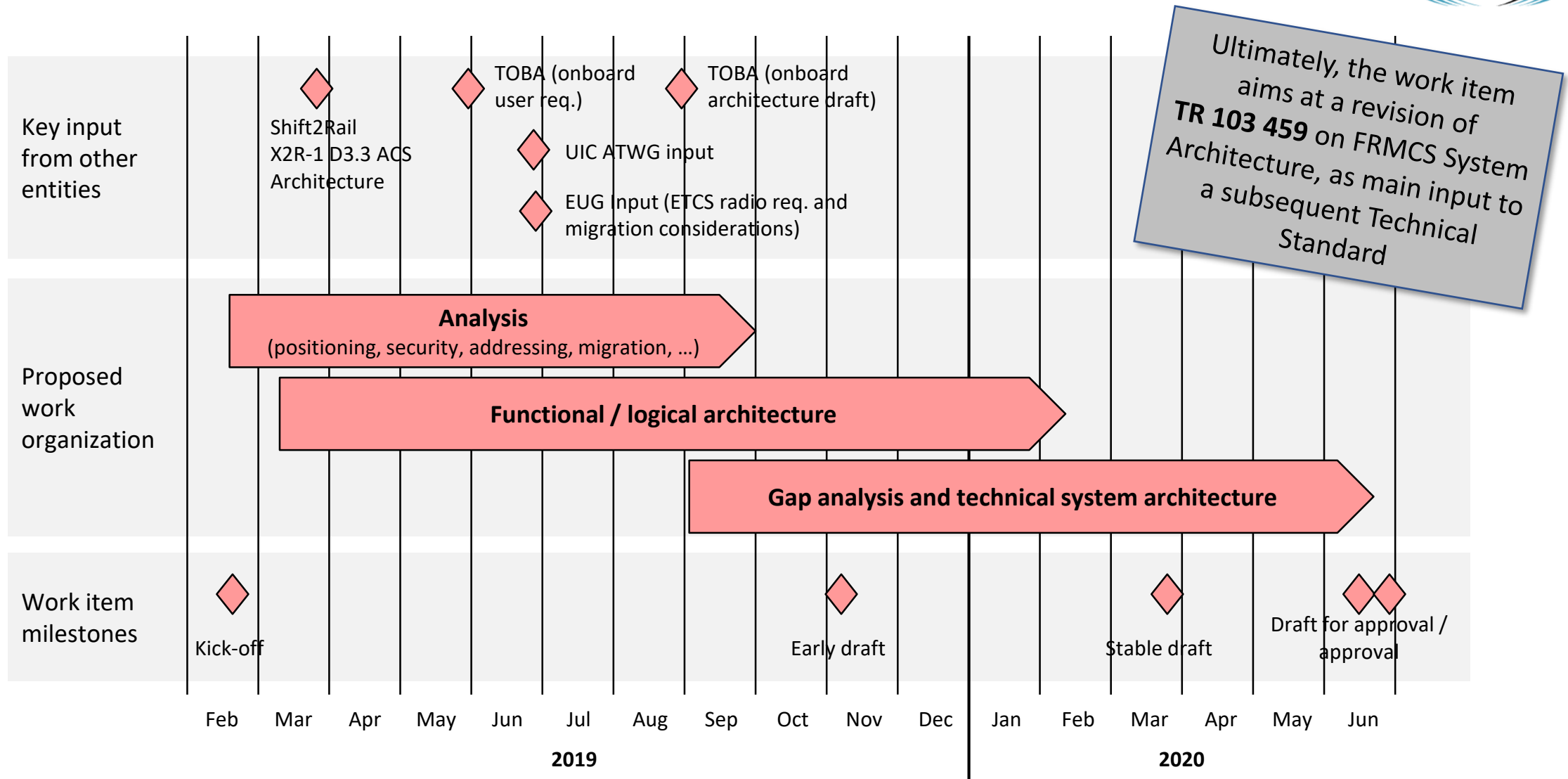
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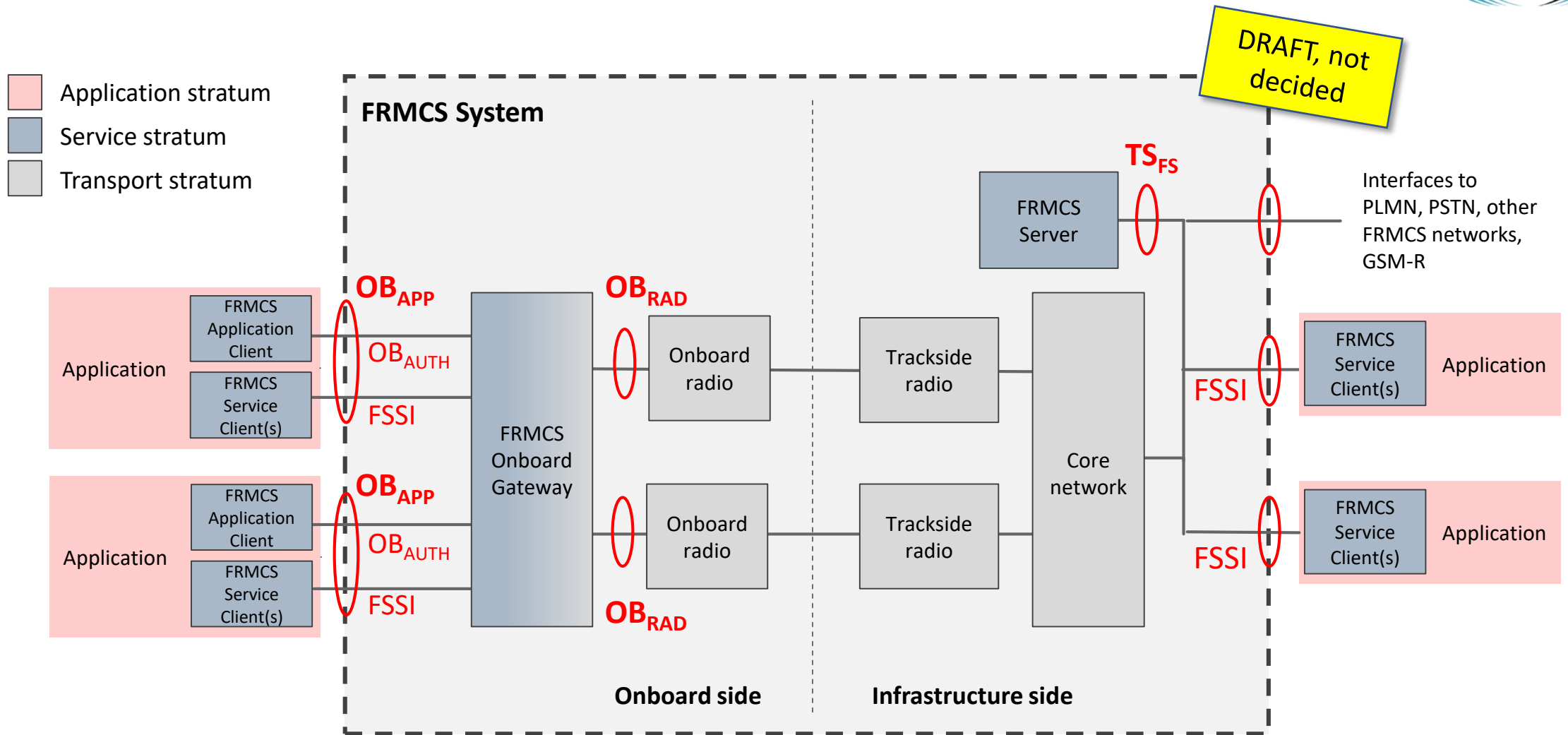
Rapporteur of the ETSI Work Item on FRMCS System Architecture

CCRCC – The ERTMS conference, Valenciennes, October 15-17, 2019

Timeline and Main focus of the Work Item *



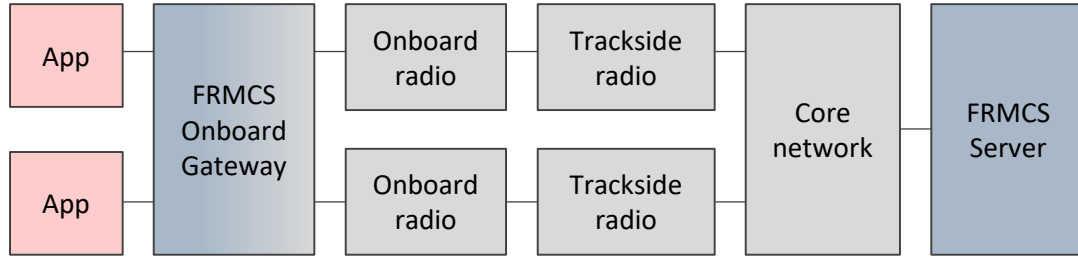
Current Logical FRMCS Architecture Considerations *



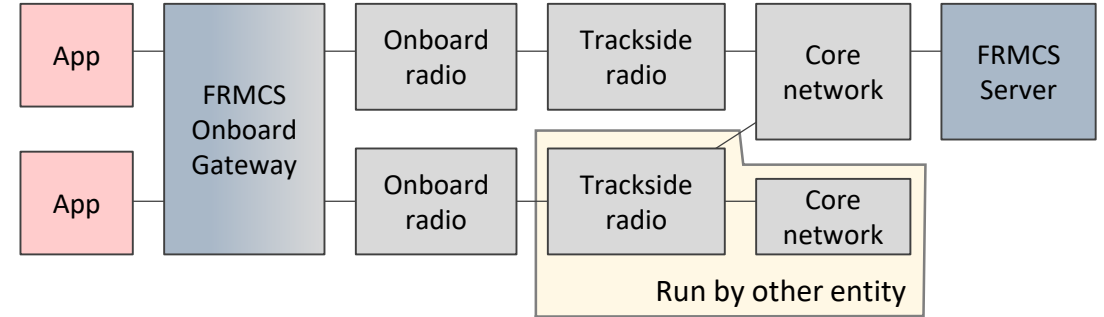
Different Deployment Scenarios Considered *



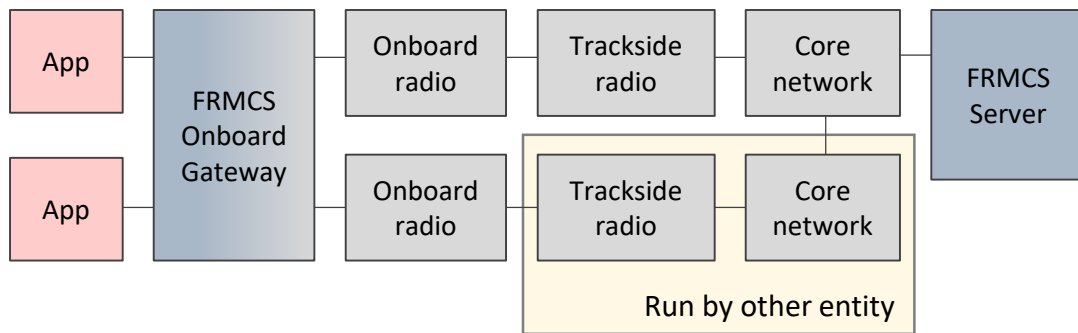
Scenario 1 – Multiple transport domains operated by railway infrastructure manager



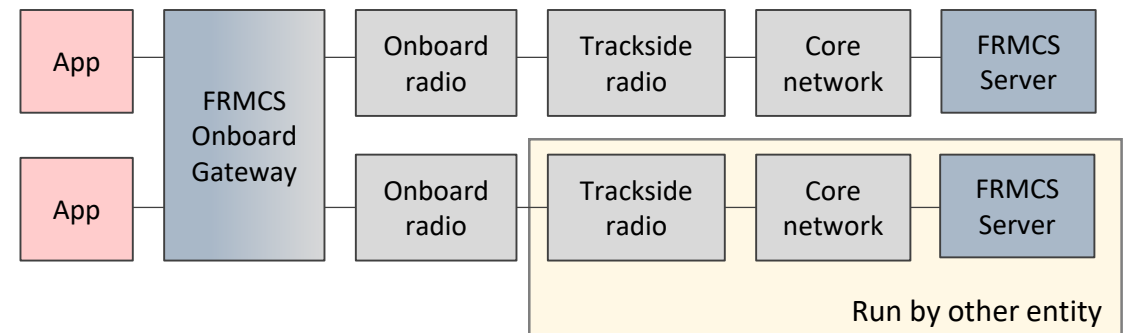
Scenario 2 – Additional transport domain operated by other entity (MOCN approach)



Scenario 3 – Additional transport domain operated by other entity (roaming approach)



Scenarios 4 and 5 – Multiple transport and service domains (e.g., border crossing scenario)

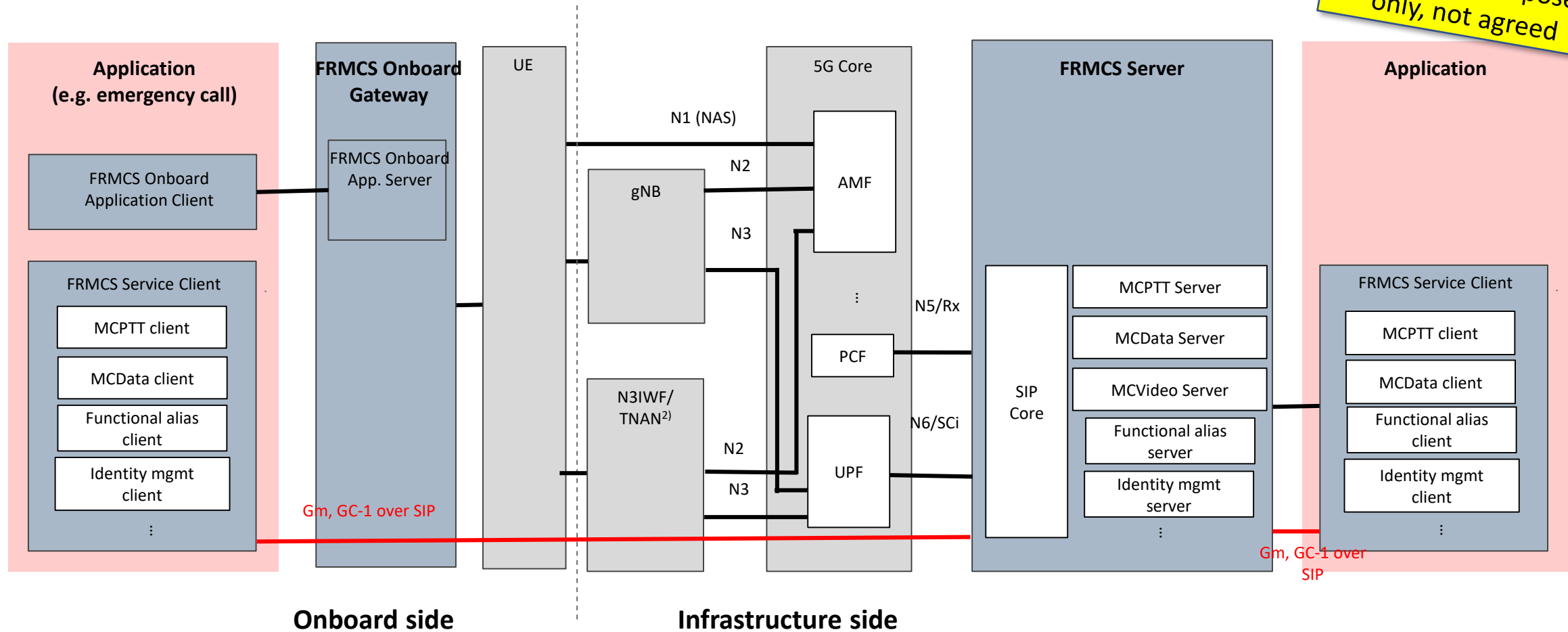


- Application stratum
- Service stratum
- Transport stratum

Exemplary Mapping of 3GPP Building Blocks to Logical FRMCS Architecture *



Example for illustration purposes only, not agreed



Important Aspects for the FRMCS Work in ETSI



- **Timely input from other bodies** is essential, e.g.
 - **Requirements from other bodies** (e.g., UIC FRS) should be stable in time for consideration in ETSI
 - The **onboard migration variants** discussed in UIC TOBA and other bodies should be concluded soon, as these have an impact on what is to be specified in ETSI (e.g., conversion functionality)
- As a key challenge w.r.t. the FRMCS architecture appears to be the **handling of scenarios with multiple transport domains**, the the exact requirements on such scenarios should be elaborated in more detail
- A key expected output of the ETSI FRMCS work will be the **specification of relevant onboard interfaces**, as input to, e.g., UNISIG
- ETSI members who are not yet part of ETSI Railway Telecommunications Committee are **welcome to join the work on the FRMCS System Architecture in ETSI**