Moderators:

Felice Ferrari (ERA)

Hartwig Schuster (UNISIG)

Vladimir Kampik (UNISIG)

Klaus Mindel (UNISIG)

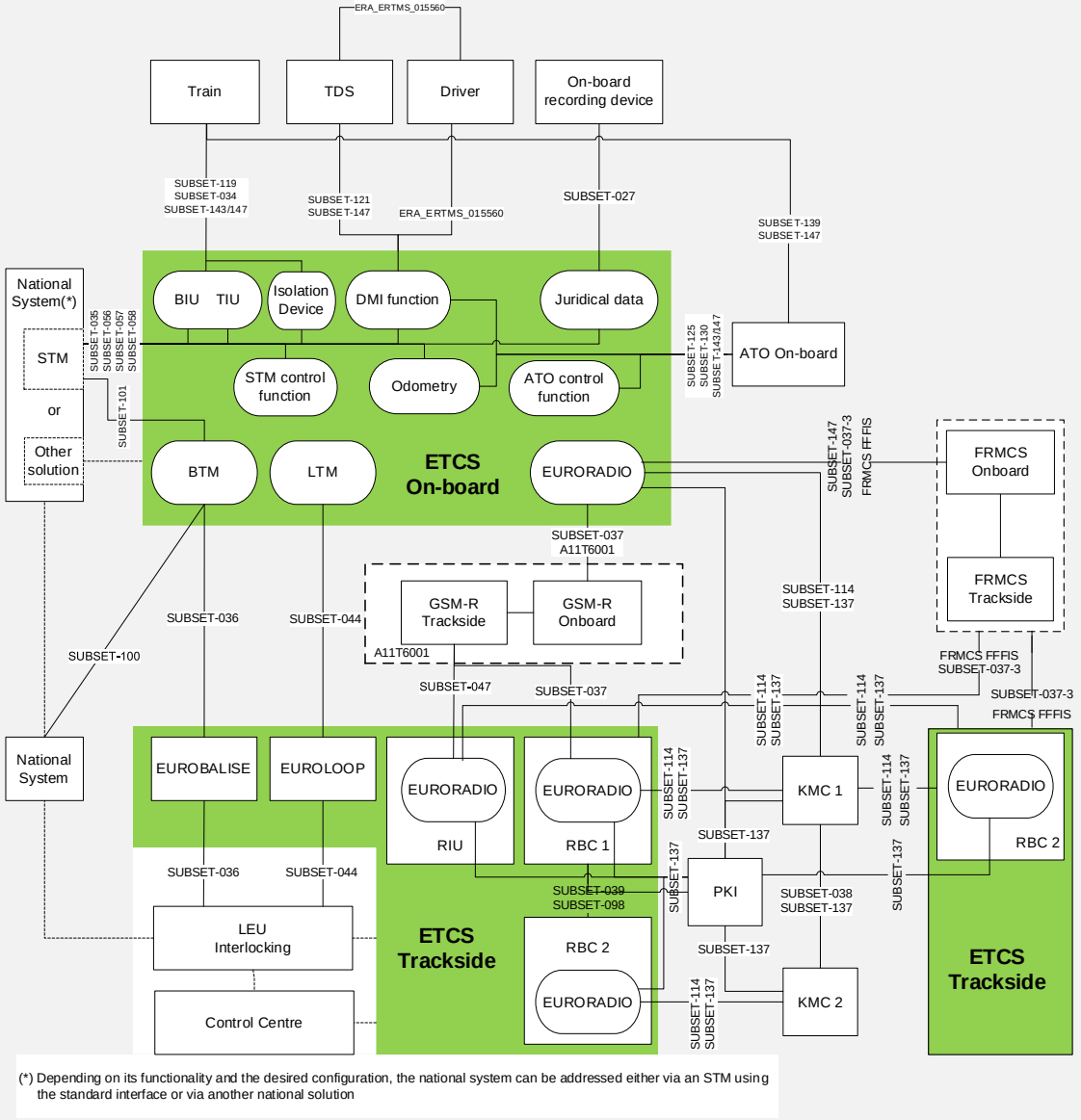
Agenda:

- 15 min for presentations to introduce the subject
- 35 min for three working groups to discuss topics regarding
  - Overall system architecture
  - Trackside architecture
  - On-board architecture
- 30 min (10 min per group) to present results of their work

Workshop 3:
On-board and trackside architecture as foreseen in the TSI CCS 2022

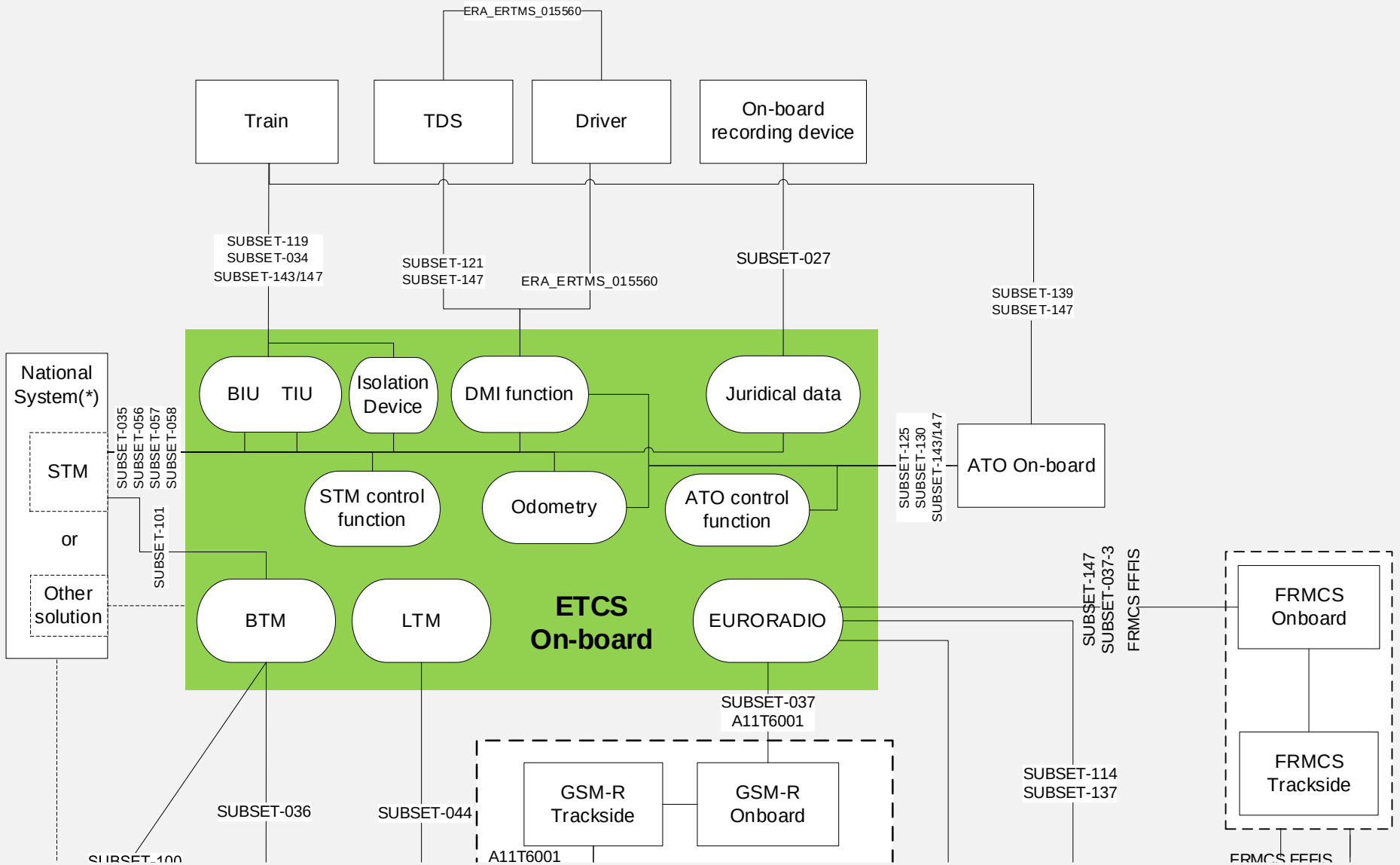
ERTMS 2022 CONFERENCE

ERTMS/ETCS (System) Reference Architecture (Subset-026)



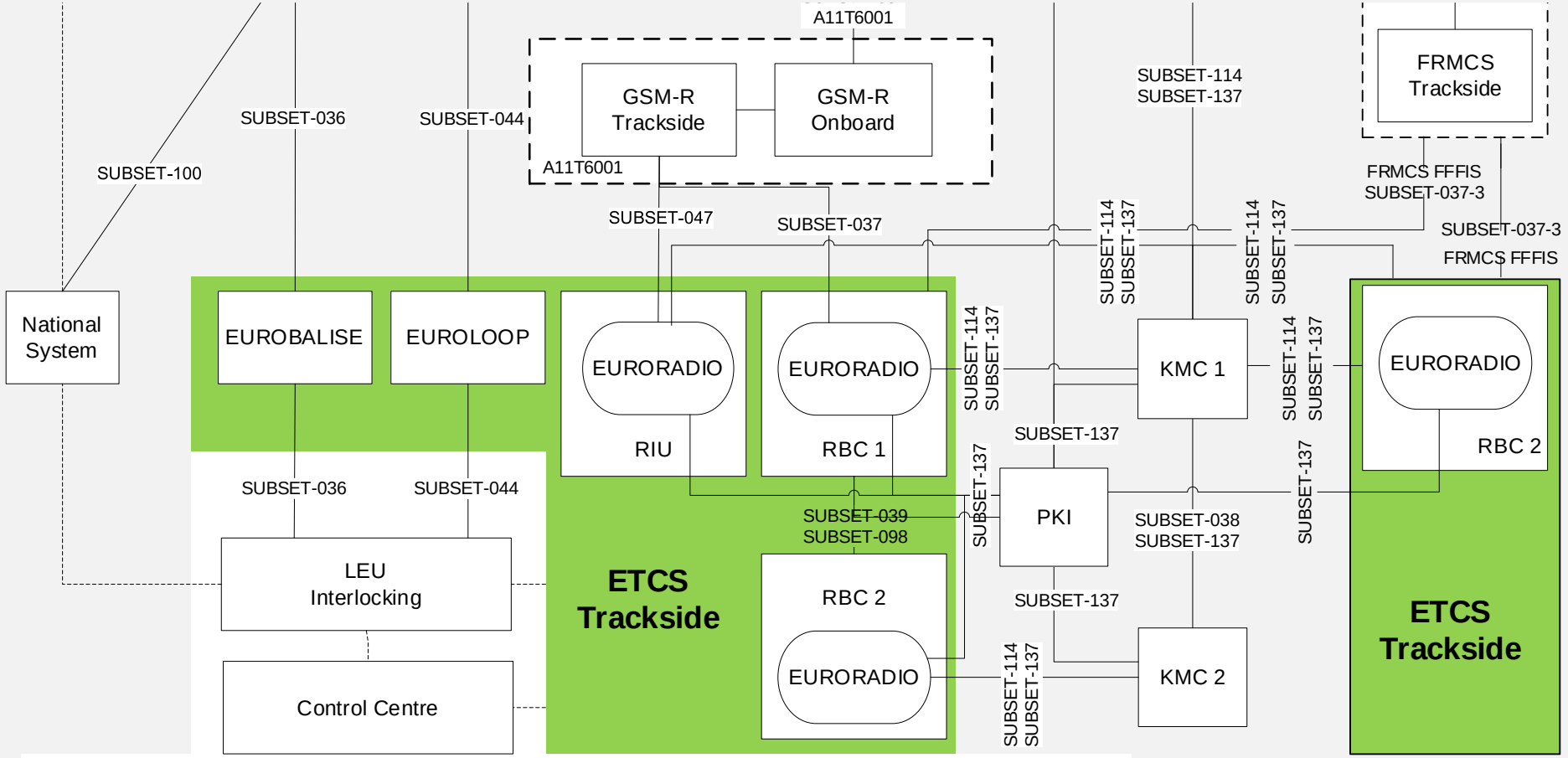
ERTMS/ETCS (System) Reference Architecture (Subset-026)

On-board part



ERTMS/ETCS (System) Reference Architecture (Subset-026)

Trackside part



(*) Depending on its functionality and the desired configuration, the national system can be addressed either via an STM using the standard interface or via another national solution

ERTMS/ETCS (System) Reference Architecture (Subset-026)

Topics:

1. How to migrate an interlocking solution with national ATP to an ETCS L2 solution? Which interfaces of the ETCS reference architecture are concerned? How to avoid any impact on the on-board?
2. Which interfaces in the new reference architecture are the most challenging ones in terms of implementation, and which ones are the most important ones from economical point of view?

Workshop 3:
On-board and trackside architecture
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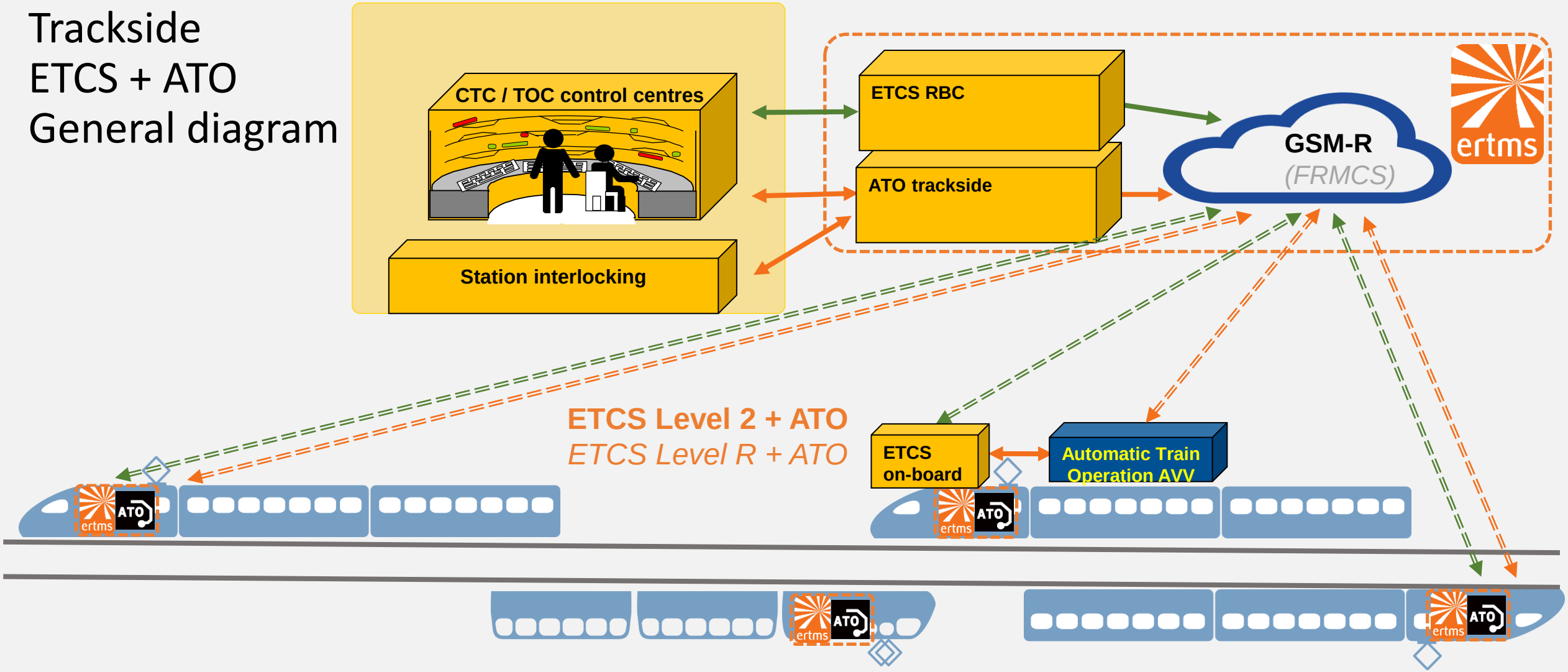
Trackside
ETCS + ATO
General diagram

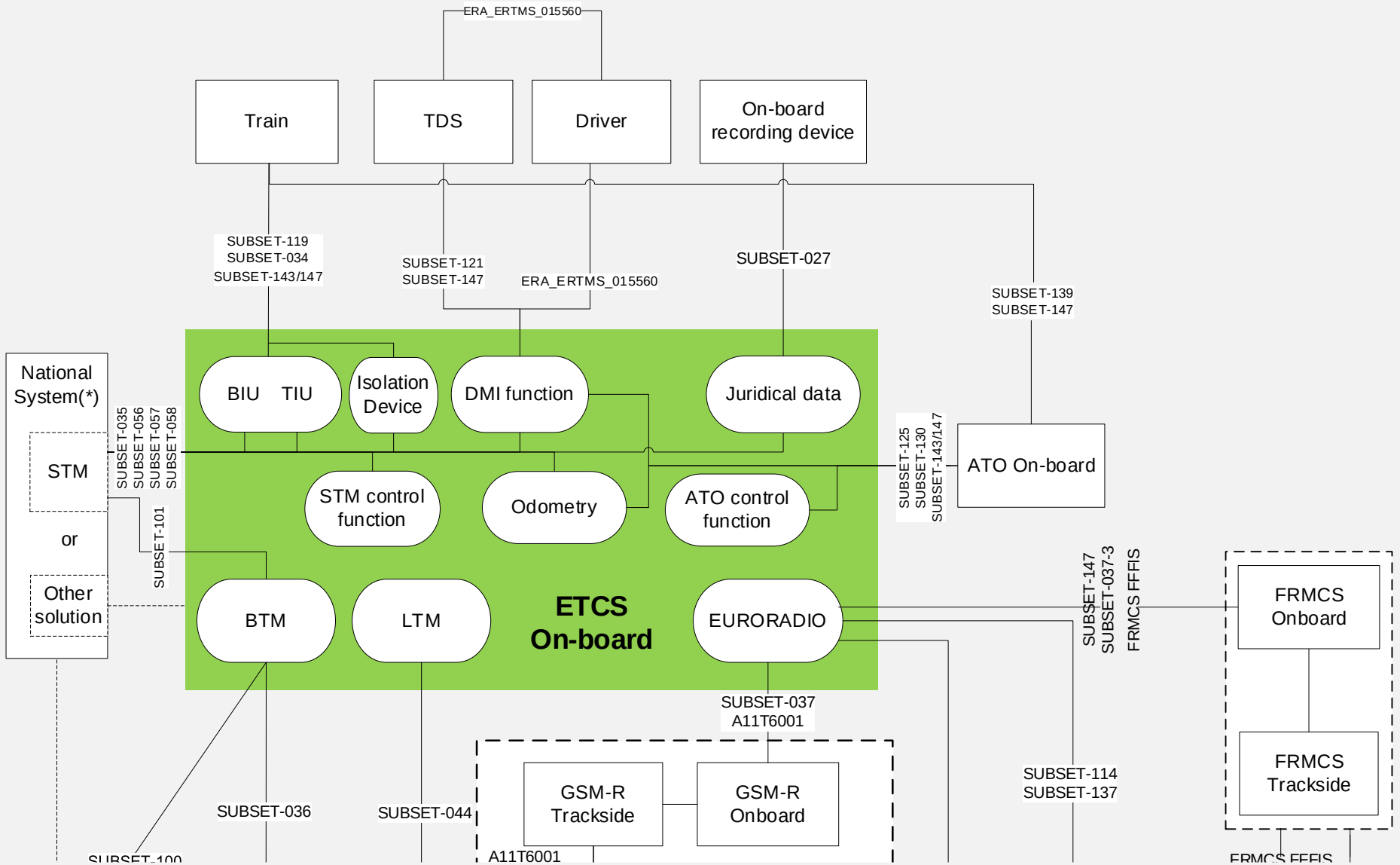


Trackside Architecture

Topics:

1. What is necessary to implement ATO on the trackside? What is the impact on the On-board?
2. Which interfaces are concerned, if an ETCS L1, L2 or L3 trackside implementation is chosen?

On-board Architecture



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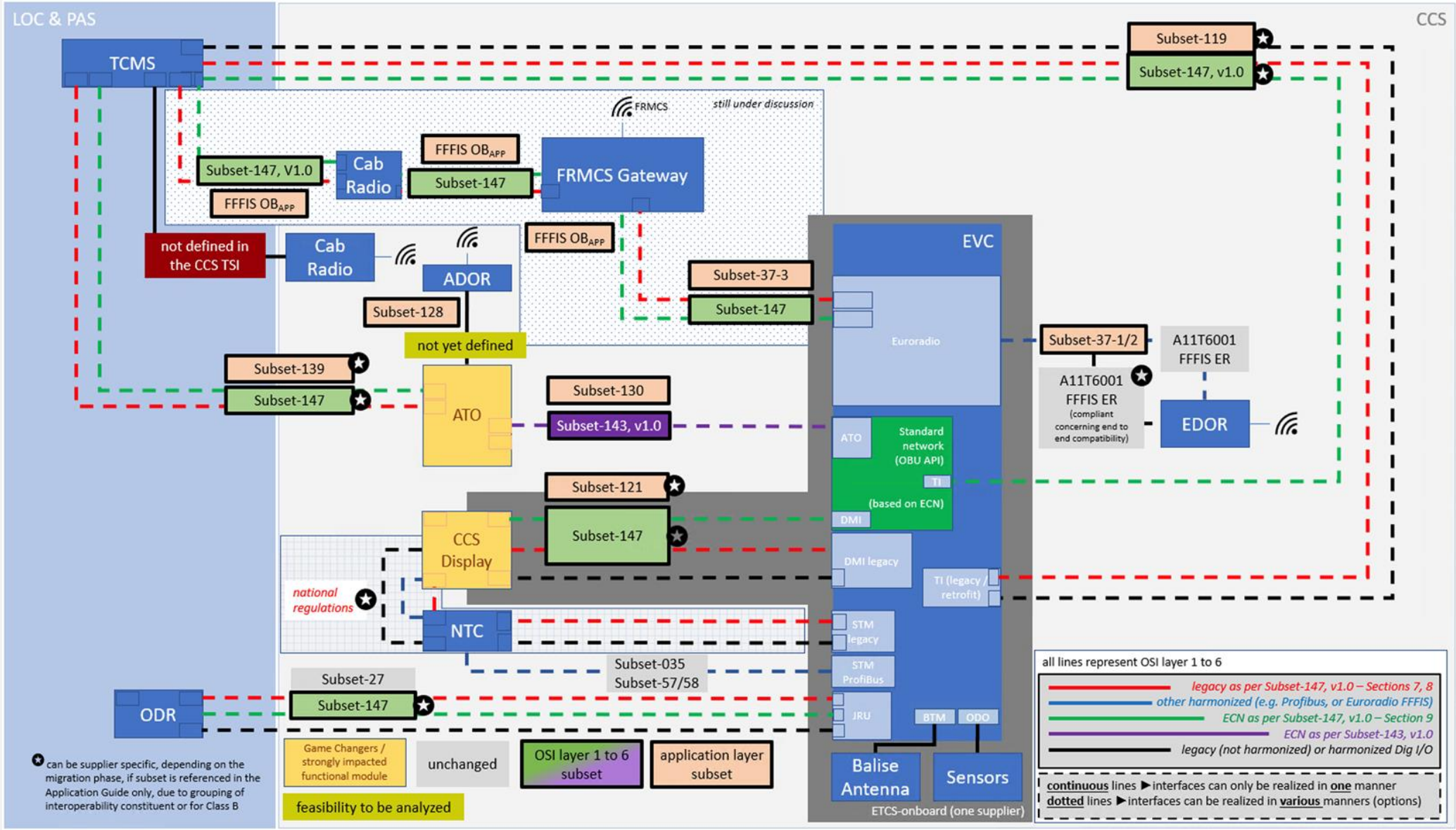
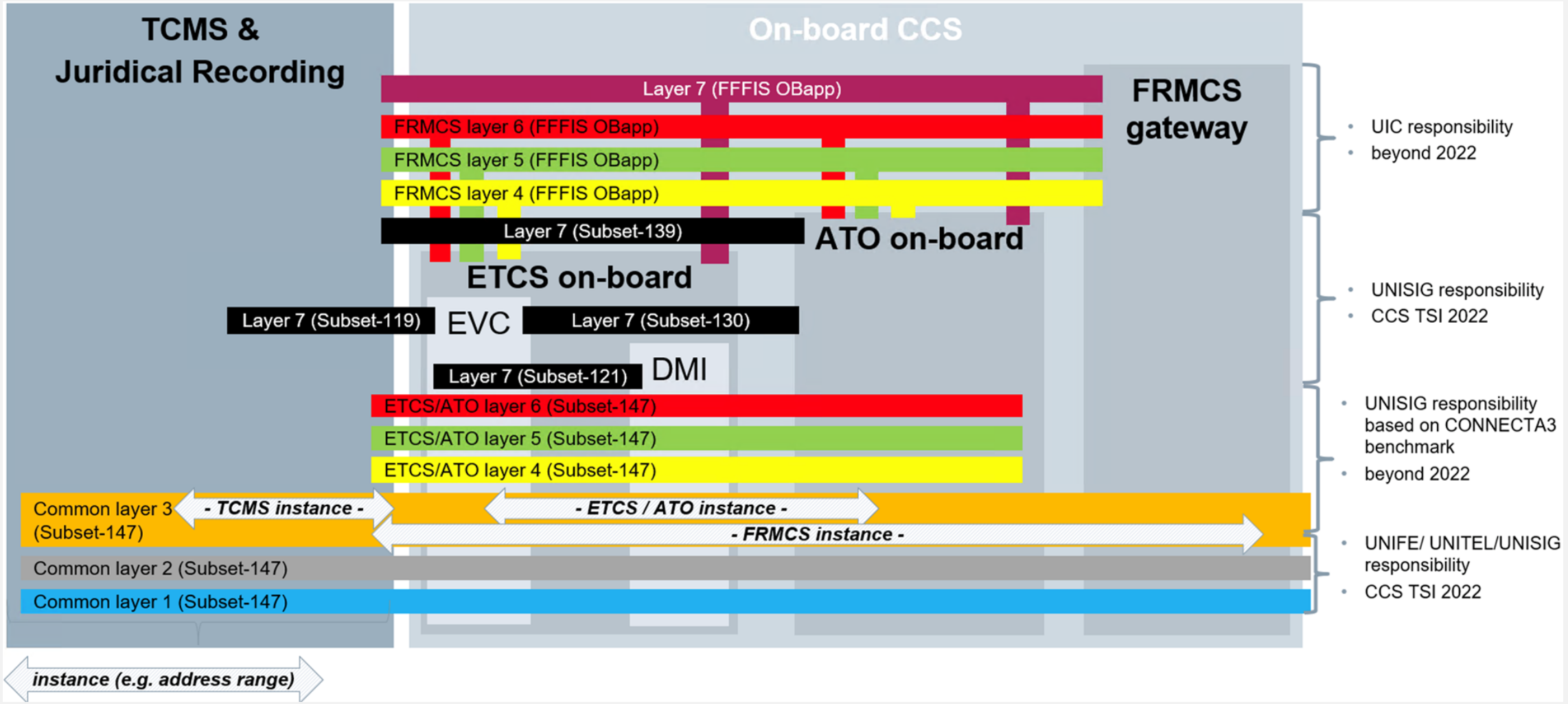
On-board Architecture



On-board Architecture



On-board Architecture

Topics:

1. The new CCS TSI will introduce an new standardised interface between TDS and EVC. Which kind of challenges do you see regarding the introduction of such an interface?
2. The CCS TSI introduces a certain level of modularity. Would you regard this as beneficial from NoBo, IM, RU or supplier perspectives?