Rail Baltica

Rail Baltica CCS Engineering Services Supplier Meetings

Rail Baltica joint venture

Online
10 September 2020

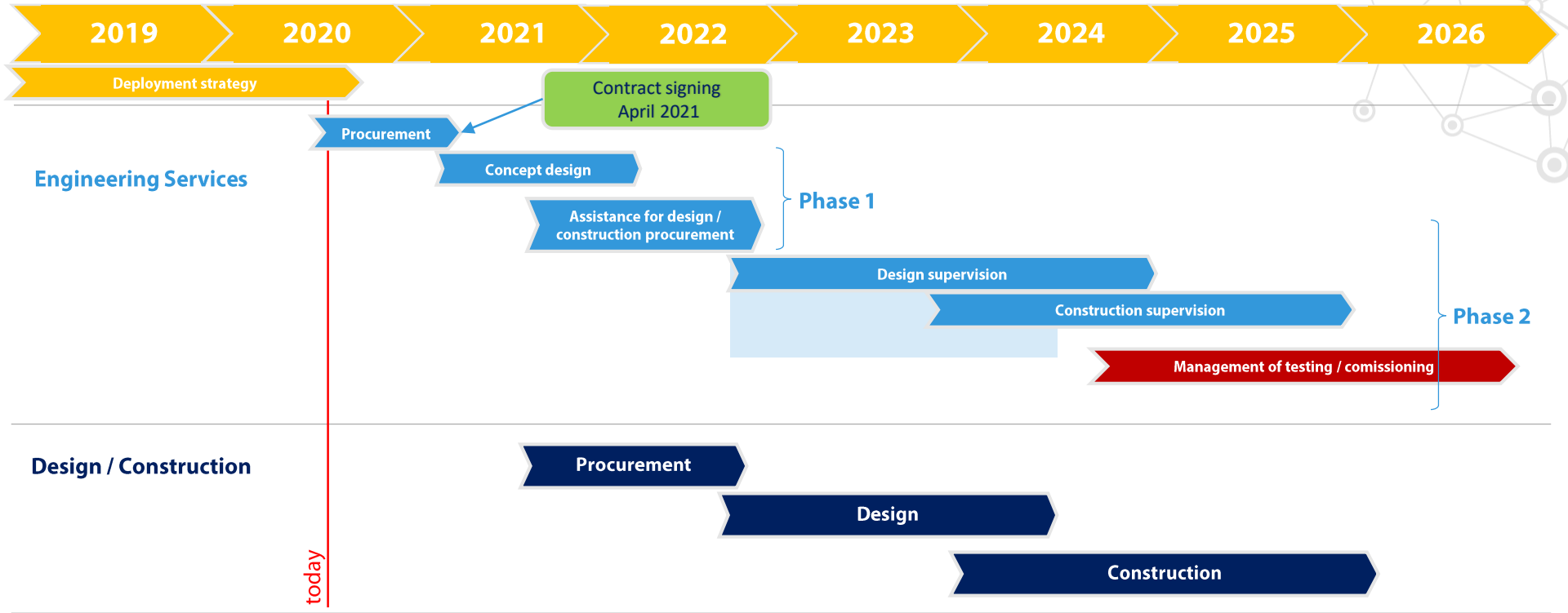
Co-financed by the Connecting Europe Facility of the European Union


Rail Baltica
Helsinki
Muuga
Tallinn
0:40 min
Pärnu
Pärnu
1 h
Rīga Central
0:08 min
Salaspils
Rīga Airport
0:45 min
Panėvežys
Panėvežys
0:37 min
Vilnius
Vilnius
Kaunas
Kaunas
0:38 min
3:27 min
Warszawa
Warszawa
Hamburg
Berlin
Rotterdam
Duisburg
Antwerpen
Wien
Milano
High Speed
Night Train
Freight
+ Regional
870 km greenfield railway infrastructure
1435 mm Double track
ERTMS Level 2
Electrified 2x25kV AC
Maximum length of freight trains: 1050m
Axle load 25t
Design speed: 249 km/h for passenger trains 120 km/h for freight trains
SE-C (Swedish) loading gauge

• Study on CCS subsystems procurement and deployment strategy

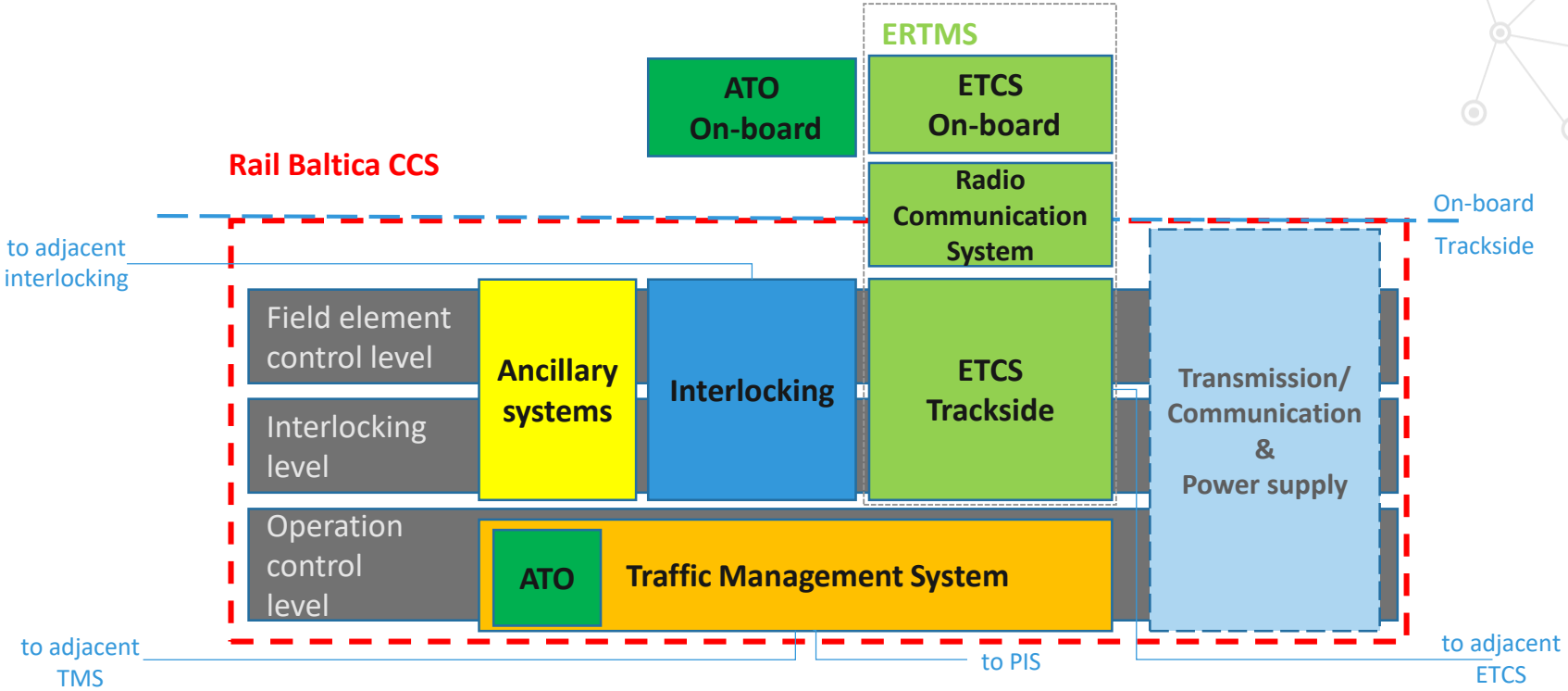
- Procurement of CCS-Engineering services is a next step towards the implementation of CCS subsystems for Rail Baltica line, which will be started after finalisation of Study on CCS subsystems procurement and deployment strategy, carried outcurrently by Ramboll.
- The study on CCS subsystems procurement and deployment strategy gives answers to following questions:
  - What is the generic CCS-solution for the Rail Baltica line as a greenfield ERTMS project?
  - What would be the most suitable procurement strategy (single/multiple suppliers, design/build/maintain, etc.)
  - What would be the most suitable CCS-Project deployment/putting in operation strategy on the entire Rail Baltica line?
- Final report will be delivered in October 2020

• CCS procurement and deployment timeline



Rail Baltica

• CCS subsystem: scope of supply



• CCS Subsystem: main characteristics

Traffic Management Evolution TD2.9

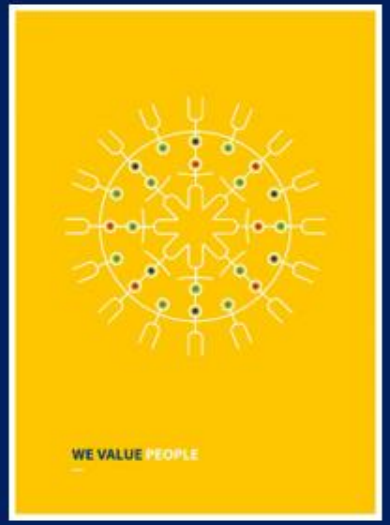
- **Single design concept** across 3 Baltic states = scale and maintenance economies, limited number of interfaces
- Sustainability and Life-Cycle Cost requirements
- "**State-of-the-art and further**" by early adopting the latest evolutions of CCS standardization and initiatives (game changers from Shift2Rail and industry innovations (ATO functionalities, etc.)
- Advanced coordination functions for intermodal operation with 1520 mm railways
- Concentration of equipment in Block Systems locations
- Zero copper cables on open line
- Renewable electricity supply

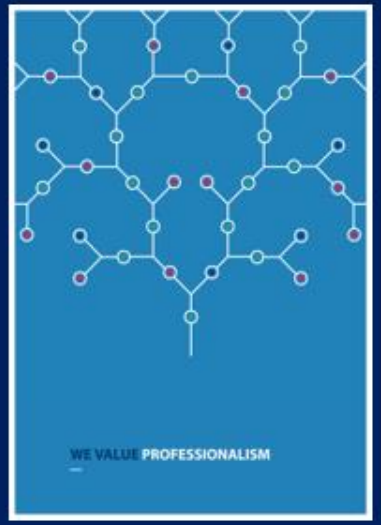
*According provisional recommendations of CCS deployment strategy study – pending to review and approval

• Scope of CCS-Engineering services

- Phase 1
  - performing necessary preliminary designs and checking/elaboration of concept solutions for subsystems, technical buildings, CTC, architectures, etc..
  - finalisation of requirements specifications for subsystems incl. ERTMS, Interlocking, trackside devices, TMS, PIS, trackside ancillary systems, telecommunications, ticketing, platform gates, powers supply and cable duct system(s)
  - requirements management incl. all railway systems requirements
  - support during tendering process

- Phase 2
  - management of suppliers and design/construction companies
  - supervision of the design, construction and commissioning works
  - supervision of system integration and dynamic testing





Thank you!