



Supported by
NB-Rail Association

RECOMMENDATION FOR USE

NB-RAIL COORDINATION GROUP

Administrative Decision according to Interoperability Directive
(EU) 2016/797 art. 30.6



Co-funded by
the European Union

RFU-CCS-504

Issue 02

Date 19/06/2024

TITLE

GENERATING INFORMATION / ORDERS TO THE ON-BOARD ETCS FROM CCT SUBSYSTEMS

ORIGINATOR

TÜV SÜD NEDERLAND

SUBJECT RELATED TO

- Commission Regulation (EU) No 2016/919 (TSI CCS 2016) amended by (EU) 2019/776, (EU) 2020/387, (EU) 2020/420
- Commission Implementing Regulation (EU) 2023/1695 (TSI CCS 2023)
- Commission Regulation (EU) No 1301/2014 (TSI ENE) amended by (EU) 2018/868, (EU) 2019/776 and Commission Implementing Regulation (EU) 2023/1694

AMENDMENT RECORD:

23/11/2022: First issue. Note 2 included, based on ERA comments.

19/06/2024: Issue 02: Amended to 2023 TSIs

DESCRIPTION AND BACKGROUND EXPLANATION

The aim of this RFU is to clarify whether it is a mandatory requirement for a CCS trackside subsystem to generate and send to the CCS on-board subsystem information / orders like the following:

- closing / opening the air flaps,
- lowering / raising the pantograph,
- opening / closing the main power switch,
- changing from traction system A to traction system B.

CCS TSI chapter 4.2.3. "Trackside ETCS functionality" states: "... *Implementation of this functionality is optional for trackside; it can however be required by other applicable TSIs or national rules or the application of risk evaluation and assessment to ensure safe integration of subsystems;*"

CCS TSI has interfaces to TSI OPE, TSI LOC&PAS, TSI WAG, TSI INF, TSI ENE. Among these TSIs, only ENE TSI contains a chapter which handles the transmission of the above-mentioned information from trackside to on-board. This is ENE TSI chapter 4.3.4. "Interface with Control-Command and Signalling subsystems":

"(3) The relevant information to perform the switching off of the circuit breaker, the change of maximum train current, the change of the traction power supply system and



Supported by
NB-Rail Association

RECOMMENDATION FOR USE

NB-RAIL COORDINATION GROUP

Administrative Decision according to Interoperability Directive
(EU) 2016/797 art. 30.6



Co-funded by
the European Union

RFU-CCS-504

Issue 02

Date 19/06/2024

pantograph management shall be transmitted via ETCS when the line is equipped with ETCS and those trackside functionalities are implemented.”

This text from ENE TSI has been interpreted as a requirement for CCS trackside subsystems by some applicants.

ENE TSI chapter 4.3.4 is part of ENE TSI chapter 4.3 “Functional and technical specifications of the interfaces”. According to RFU-STR-710, Chapter 4.3 of a TSI is outside the NoBo’s assessment scope.

[Note 1: RFU-STR-710 applies to all TSIs before TSI package 09/2023, only. RFU-STR-711 applies to the TSI Package 2023.](#)

RFU PROPOSAL

The text from ENE TSI Chapter 4.3.4 does NOT impose any requirement for CCS trackside subsystems.

A CCS trackside subsystem may select the functions it needs to implement. From TSI CCS specification point of view, every possible function is optional for the CCS trackside subsystem. The applicant of the CCS trackside subsystem decides on the needed functions for his subsystem. The generation of information / orders to the on-board CCS subsystem, such as information / orders related to

- closing / opening the air flaps,
- lowering / raising the pantograph,
- opening / closing the main power switch,
- changing from traction system A to traction system B

may be transmitted from trackside to on-board via ETCS, but this is NOT mandatory for CCS trackside subsystems. Neither CCS TSI nor ENE TSI contain explicit requirements on this. It is also possible that trackside doesn’t send the information / orders at all.

[Note 2: This trackside functionality, though optional from the TSI point of view, may become mandatory for other reasons such as national rules or the application of risk evaluation and assessment as described in CCS TSI 4.2.3 \(2\).](#)

[Note 3: If the CCS trackside subsystem implements these functions \(i.e. the information is sent from trackside to the on-board via ETCS\), the CCT NoBo assesses their compliance with the relevant requirements from CCS TSI, e.g. Subset-026.](#)

THIS RFU WAS AGREED ON

PLENARY MEETING 071

THIS RFU ENTERS INTO FORCE ON

03/07/2024 (DATE OF PUBLICATION)



Supported by
NB-Rail Association

RECOMMENDATION FOR USE

NB-RAIL COORDINATION GROUP

Administrative Decision according to Interoperability Directive
(EU) 2016/797 art. 30.6



Co-funded by
the European Union

RFU-CCS-504

Issue 02

Date 19/06/2024

FROM THIS DATE ON THIS RFU CAN BE APPLIED INSTEAD OF THE PREVIOUS MANDATORY VERSION.

RFU APPLICATION IS MANDATORY STARTING FROM

03/07/2024 AT THIS DATE ANY PREVIOUS VERSIONS (*OR, ALTERNATIVELY, VERSION XX*) OF THIS RFU WILL BE WITHDRAWN.

RFUs SHALL BE APPLIED BY ALL NOBOS. PLEASE REFER TO RFU-STR-702, CHAPTER 3 OF THE SECTION "DESCRIPTION AND BACKGROUND EXPLANATION", FOR THE LEGAL BASIS SUPPORTING THIS OBLIGATION.

ERA COMMENTS

PM 071 – 19/06/2024: NO COMMENTS