



EULYNX Initiative



Europe's Rail Joint Undertaking

Interface specification SCI-TDS

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| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|--|---------------|------|--|
| Eu.SCI-TDS.PDI.4 | Head | 1 Introduction | | | |
| Eu.SCI-TDS.PDI.5 | Head | 1.1 Release information | | | |
| Eu.SCI-TDS.PDI.6 | Info | [Eu.Doc.44] Interface specification SCI-TDS CENELEC Phase: 5 Version: 4.1 (0.A) Approval date: 29.05.2024 | | | Object Text: [Eu.Doc.44] Interface specification SCI-TDS CENELEC Phase: 5 Version: 4. 0 <u>1</u> (3 <u>0</u> .A) Approval date: <u>29.05.2024</u> |
| Eu.SCI-TDS.PDI.1 | Info | Version history | | | |
| Eu.SCI-TDS.PDI.714 | Info | version number: 4.0 (0.A) date: 17.05.2022 author: Marie Gehrmann review: CCB changes: EUTDS-404, EUTDS-408, EUTDS-413 | | | |
| Eu.SCI-TDS.PDI.730 | Info | version number: 4.0 (1.A) date: 06.03.2023 author: Marie Gehrmann review: - changes: EUTDS-414, EUTDS-418, EUTDS-427, EUTDS-429 | | | |
| Eu.SCI-TDS.PDI.733 | Info | version number: 4.0 (2.A) date: 28.06.2023 author: Marie Gehrmann review: TACS Mirror Group changes: EUTDS-435, EUTDS-441, EUTDS-449, EUTDS-450, EUTDS-459, EUTDS-460, EUTDS-462 | | | |
| Eu.SCI-TDS.PDI.735 | Info | version number: 4.0 (3.A) date: 15.12.2023 author: Marie Gehrmann review: M&T changes: EUTDS-466, EUTDS-498 | | | |
| Eu.SCI-TDS.PDI.736 | Info | version number: 4.0 (4.A) date: 30.04.2024 author: Marie Gehrmann review: cluster changes: EUTDS-509, EUTDS-510, EUTDS-514, EUTDS-516 | | | object created after baseline 4.0 (3.A) |
| Eu.SCI-TDS.PDI.737 | Info | version number: 4.1 (0.A) date: 18.06.2024 author: Marie Gehrmann review: TACS Mirror Group changes: EUTDS-522, EUTDS-524 | | | object created after baseline 4.0 (3.A) |
| Eu.SCI-TDS.PDI.7 | Head | 1.2 Impressum | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|---|------------|------------------------|--|
| Eu.SCI-TDS.PDI.8 | Info | <p>Publishers:</p> <p>Europe's Rail Joint Undertaking https://rail-research.europa.eu/</p> <p>EULYNX Initiative https://eulynx.eu/</p> | | EUTDS-516 | <p>Object Text: Publishers:</p> <p>Europe's Rail Joint Undertaking https://rail-research.europa.eu/</p> <p>EULYNX Initiative A full list of the EULYNX Partners can be found on- www-https://eulynx.eu/index.php/members a_JIRA_BL4R3: EUTDS-516</p> |
| Eu.SCI-TDS.PDI.9 | Info | <p>Responsible for this document: EU-Rail System Pillar Trackside Assets Control and Supervision domain</p> | | | |
| Eu.SCI-TDS.PDI.594 | Info | <p>This document is drafted by and belongs to EU Rail.</p> <p>EU Rail encourages the distribution and re-use of this document, the technical specifications and the information it contains. EU Rail holds several intellectual property rights, such as copyright and trade mark rights, which need to be considered when this document is used.</p> <p>EU Rail authorizes you to re-publish, re-use, copy and store this document without changing it, provided that you indicate its source and include the following mention [EU Rail trade mark, title of the document, year of publication, version of document].</p> <p>EU Rail makes no representation or warranty as to the accuracy or completeness of the information contained within these documents. EU Rail shall have no liability to any party as a result of the use of the information contained herein. EU Rail will have no liability whatsoever for any indirect or consequential loss or damage, and any such liability is expressly excluded.</p> <p>You may study, research, implement, adapt, improve and otherwise use the information, the content and the models in this document for your own purposes. If you decide to publish or disclose any adapted, modified or improved version of this document, any amended implementation or derivative work, then you must indicate that you have modified this document, with a reference to the document name and the terms of use of this document. You may not use EU Rail's trade marks or name in any way that may state or suggest, directly or indirectly, that EU Rail is the author of your adaptations. EU Rail cannot be held responsible for your product, even if you have used this document and its content. It is your responsibility to verify the quality, completeness and the accuracy of the information you use, for your own purposes.</p> | | EUTDS-516 EUTDS-524 | <p>Object Text: CopyrightThis EULYNXdocument Partnersis drafted by and belongs to EU Rail. All EU Rail encourages the distribution and re-use of this document, the technical specifications and the information included it or contains. disclosed EU inRail holds several intellectual property rights, such as copyright and trade mark rights, which need to be considered when this document is licensed used.</p> <p>EU underRail authorizes you to re-publish, re-use, copy and store this document without changing it, provided that you indicate its source and include the European following Union mention Public[EU LicenseRail EUPLe trade mark, Versiontitle 1 of the document, year of publication, version of document].2</p> <p>EU Rail makes no representation or later warranty as to the accuracy or completeness of the information contained within these documents. EU Rail shall have no liability to any party as a result of the use of the information contained herein. EU Rail will have no liability whatsoever for any indirect or consequential loss or damage, and any such liability is expressly excluded.</p> <p>You may study, research, implement, adapt, improve and otherwise use the information, the content and the models in this document for your own purposes. If you decide to publish or disclose any adapted, modified or improved version of this document, any amended implementation or derivative work, then you must indicate that you have modified this document, with a reference to the document name and the terms of use of this document. You may not use EU Rail's trade marks or name in any way that may state or suggest, directly or indirectly, that EU Rail is the author of your adaptations. EU Rail cannot be held responsible for your product, even if you have used this document and its content. It is your responsibility to verify the quality, completeness and the accuracy of the information you use, for your own purposes.</p> <p>a_JIRA_BL4R3: EUTDS-516 EUTDS-524</p> |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|--|------------|------|----------------------|
| Eu.SCI-TDS.PDI.10 | Head | 1.3 Purpose | | | |
| Eu.SCI-TDS.PDI.11 | Info | This document specifies the application layer of the standardised interface for safe communication between the Subsystem - Electronic Interlocking and Subsystem - Train Detection System (SCI-TDS). | | | |
| Eu.SCI-TDS.PDI.12 | Info | This application layer is designated as SCI-TDS.PDI. | | | |
| Eu.SCI-TDS.PDI.13 | Info | This document contains the general requirements for communication and the technical specification (e.g. telegrams) of the SCI-TDS.PDI. | | | |
| Eu.SCI-TDS.PDI.14 | Info | This specification does not define the detailed behaviour of the interfacing partners (Subsystem - Electronic Interlocking and Subsystem - Train Detection System), nor the situations in which the defined telegrams are sent. This behaviour is the subject of the individual system specifications. | | | |
| Eu.SCI-TDS.PDI.15 | Info | Some items, referring to "interface-related" functionality of the communication partners, have been added to this specification as information, providing an overview only. In any case these are subject to appropriate systems (national) specification. | | | |
| Eu.SCI-TDS.PDI.16 | Info | This document is intended for the following users: <ul style="list-style-type: none"> • safety authorities • infrastructure managers • safety assessors • signalling system suppliers • validators | | | |
| Eu.SCI-TDS.PDI.734 | Info | This document is applicable for both the EU-Rail System Pillar target architecture and the EULYNX architecture. The document is delivered as a single specification fitting both the System Pillar documentation sets and the EULYNX documentation sets. EU-Rail System Pillar is the technical authority for this document. | | | |
| Eu.SCI-TDS.PDI.18 | Head | 1.4 Applicable standards and regulations | | | |
| Eu.SCI-TDS.PDI.19 | Info | The applicable standards and regulations used in EULYNX are listed in the EULYNX Reference Document List [Eu.Doc.12]. | | | |
| Eu.SCI-TDS.PDI.293 | Info | The applicability of each reference of this specification is provided by the column "applicability" in the EULYNX Reference Document [Eu.Doc.12], when the value "SCI-TDS" is stated. | | | |
| Eu.SCI-TDS.PDI.20 | Head | 1.5 Applicable documents | | | |
| Eu.SCI-TDS.PDI.21 | Info | The current versions of documents used as input or related to this document are listed in the EULYNX Documentation Plan [Eu.Doc.11]. The relationships between the documents are displayed in the Appendix A1 Documentation plan and structure [Eu.Doc.11_A1]. | | | |
| Eu.SCI-TDS.PDI.24 | Head | 1.6 Appendices | | | |
| Eu.SCI-TDS.PDI.25 | Info | <i>- intentionally left blank -</i> | | | |
| Eu.SCI-TDS.PDI.150 | Head | 1.7 Terms and abbreviations | | | |
| Eu.SCI-TDS.PDI.151 | Info | The terms and abbreviations are listed in the EULYNX Glossary [Eu.Doc.9]. | | | |
| Eu.SCI-TDS.PDI.152 | Head | 1.8 Variability management | | | |
| Eu.SCI-TDS.PDI.153 | Info | This document describes harmonised requirements. Variability management is not applicable. | | | |
| Eu.SCI-TDS.PDI.26 | Head | 1.9 Definition of object types | | | |
| Eu.SCI-TDS.PDI.27 | Info | The following definition for object types is applied in this document: | | | |
| Eu.SCI-TDS.PDI.28 | Info | <ul style="list-style-type: none"> • "Req" - This denotes a mandatory requirement. | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|--|--|------------------------|--|
| Eu.SCI-TDS.PDI.31 | Info | <ul style="list-style-type: none">"Info" - This denotes additional information to help understand the specification. These objects do not specify any additional requirements. | | | |
| Eu.SCI-TDS.PDI.32 | Info | <ul style="list-style-type: none">"Head" - This denotes chapter headings. | | | |
| Eu.SCI-TDS.PDI.33 | Head | 2 General requirements | | | |
| Eu.SCI-TDS.PDI.711 | Req | All references to [Eu.Doc.43] refer to Requirements specification for subsystem TDS version 4.2 (0.A). | | EUTDS-510 EUTDS-522 | Object Text: All references to [Eu.Doc.43] refer to Requirements specification for subsystem TDS version 4. 1 <u>2</u> (1 <u>0</u> .A). a_JIRA_BL4R3: EUTDS-510 EUTDS-522 |
| Eu.SCI-TDS.PDI.672 | Req | All references to [Eu.Doc.93] refer to Interface specification SCI Generic version 3.3 (0.A). | | EUTDS-510 EUTDS-522 | Object Text: All references to [Eu.Doc.93] refer to Interface specification SCI Generic version 3. 2 <u>3</u> (0.A). a_JIRA_BL4R3: EUTDS-510 EUTDS-522 |
| Eu.SCI-TDS.PDI.42 | Head | 2.1 Version handling | | | |
| Eu.SCI-TDS.PDI.602 | Info | The Version handling is described in [Eu.Doc.93]. | | EUTDS-510 | Object Text: The Version handling is described in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 |
| Eu.SCI-TDS.PDI.671 | Req | The PDI-version of the SCI-TDS as described in this document is 0x04. | | EUTDS-514 | Object Text: The PDI-version of the SCI-TDS as described in this document is 0x03 <u>0x04</u> . a_JIRA_BL4R3: EUTDS-514 |
| Eu.SCI-TDS.PDI.49 | Head | 2.2 Communication requirements | | | |
| Eu.SCI-TDS.PDI.50 | Req | The Communication requirements are described in [Eu.Doc.93]. | | EUTDS-510 | Object Text: The Communication requirements are described in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 |
| Eu.SCI-TDS.PDI.712 | Head | 2.3 Functional requirements | | | |
| Eu.SCI-TDS.PDI.713 | Info | The functional requirements for SCI-TDS are described in [Eu.Doc.43]. | | EUTDS-510 | Object Text: The functional requirements for SCI-TDS are described in [Eu.Doc.43]. a_JIRA_BL4R3: EUTDS-510 |
| Eu.SCI-TDS.PDI.54 | Head | 3 Telegrams SCI-TDS.PDI | | | |
| Eu.SCI-TDS.PDI.55 | Info | This chapter defines the SCI-TDS.PDI telegrams. | Basic TDS AC Basic TDS TDP Basic TDS TC | | |
| Eu.SCI-TDS.PDI.56 | Head | 3.1 Telegram structure | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------|--|--|---|--|----------|---------|----------------------|--------|-------------------------------------|------|---|--|--------|-------------------------------------|------|---|------------------------|--------|-------------------------------------|------|--|--------------------------|--------|-------------------------------------|------|---|------------------------------------|--------|------|-------------------------------------|---|---|--------|------|-------------------------------------|--|------------------------------------|--------|------|-------------------------------------|---|--------------------------------------|--------|------|-------------------------------------|---|------------------------------|--------|-----|-------------------------------------|----------------------------|---|-----------|---|
| Eu.SCI-TDS.PDI.603 | Info | The telegram structure is specified in [Eu.Doc.93]. | Basic TDS AC Basic TDS TDP Basic TDS TC | EUTDS-510 | Object Text: The telegram structure is specified in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.64 | Head | 3.2 Sender and Receiver Identifier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.604 | Info | The identification of communications partners is specified in [Eu.Doc.93]. | Basic TDS AC Basic TDS TDP Basic TDS TC | EUTDS-510 | Object Text: The identification of communications partners is specified in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.70 | Head | 3.3 Message and command type overview | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.71 | Info | <div>The following table shows permitted subsystem specific message types for the SCI-TDS.PDI. The permitted generic message types are specified in [Eu.Doc.93].</div> <table><tr><th>Message Type</th><th>Value</th><th>Sender</th><th>Receiver</th><th>Purpose</th></tr><tr><td><i>command</i> FC</td><td>0x0001</td><td>Subsystem - Electronic Interlocking</td><td>TVPS</td><td>Force section status to clear command to the Subsystem - Train Detection System. The Modes are: FC-C FC-U FC-P FC-P-A</td></tr><tr><td><i>Command</i> Update Filling Level</td><td>0x0002</td><td>Subsystem - Electronic Interlocking</td><td>TVPS</td><td>Request from the Subsystem - Electronic Interlocking to send the current Filling Level.</td></tr><tr><td><i>command</i> DRFC</td><td>0x0003</td><td>Subsystem - Electronic Interlocking</td><td>TVPS</td><td>Command to execute the Disable the restriction to force section status to clear operation to the Subsystem - Train Detection System.</td></tr><tr><td><i>command</i> Cancel</td><td>0x0008</td><td>Subsystem - Electronic Interlocking</td><td>TVPS</td><td>Command to cancel the execution of FC-P and FC-P-A.</td></tr><tr><td><i>message</i> Command Rejected</td><td>0x0006</td><td>TVPS</td><td>Subsystem - Electronic Interlocking</td><td>Message from the Subsystem - Train Detection System, that the previously sent command was rejected.</td></tr><tr><td><i>message</i> TVPS Occupancy Status</td><td>0x0007</td><td>TVPS</td><td>Subsystem - Electronic Interlocking</td><td>Message of the TVPS status. Parameter: occupancy status and ability to be forced to clear.</td></tr><tr><td><i>message</i> TVPS FC-P failed</td><td>0x0010</td><td>TVPS</td><td>Subsystem - Electronic Interlocking</td><td>Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P was not successful.</td></tr><tr><td><i>message</i> TVPS FC-P-A failed</td><td>0x0011</td><td>TVPS</td><td>Subsystem - Electronic Interlocking</td><td>Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P-A was not successful.</td></tr><tr><td><i>message</i> TDP Status</td><td>0x000B</td><td>TDP</td><td>Subsystem - Electronic Interlocking</td><td>Message of the TDP status.</td></tr></table> | Message Type | Value | Sender | Receiver | Purpose | <i>command</i> FC | 0x0001 | Subsystem - Electronic Interlocking | TVPS | Force section status to clear command to the Subsystem - Train Detection System. The Modes are: FC-C FC-U FC-P FC-P-A | <i>Command</i> Update Filling Level | 0x0002 | Subsystem - Electronic Interlocking | TVPS | Request from the Subsystem - Electronic Interlocking to send the current Filling Level. | <i>command</i> DRFC | 0x0003 | Subsystem - Electronic Interlocking | TVPS | Command to execute the Disable the restriction to force section status to clear operation to the Subsystem - Train Detection System. | <i>command</i> Cancel | 0x0008 | Subsystem - Electronic Interlocking | TVPS | Command to cancel the execution of FC-P and FC-P-A. | <i>message</i> Command Rejected | 0x0006 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System, that the previously sent command was rejected. | <i>message</i> TVPS Occupancy Status | 0x0007 | TVPS | Subsystem - Electronic Interlocking | Message of the TVPS status. Parameter: occupancy status and ability to be forced to clear. | <i>message</i> TVPS FC-P failed | 0x0010 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P was not successful. | <i>message</i> TVPS FC-P-A failed | 0x0011 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P-A was not successful. | <i>message</i> TDP Status | 0x000B | TDP | Subsystem - Electronic Interlocking | Message of the TDP status. | Basic TDS AC Basic TDS TDP Basic TDS TC Option FC-P/-A Option Update FL | EUTDS-510 | Object Text: The following table shows permitted subsystem specific message types for the SCI-TDS.PDI. The permitted generic message types are specified in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 |
| Message Type | Value | Sender | Receiver | Purpose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>command</i> FC | 0x0001 | Subsystem - Electronic Interlocking | TVPS | Force section status to clear command to the Subsystem - Train Detection System. The Modes are: FC-C FC-U FC-P FC-P-A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Command</i> Update Filling Level | 0x0002 | Subsystem - Electronic Interlocking | TVPS | Request from the Subsystem - Electronic Interlocking to send the current Filling Level. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>command</i> DRFC | 0x0003 | Subsystem - Electronic Interlocking | TVPS | Command to execute the Disable the restriction to force section status to clear operation to the Subsystem - Train Detection System. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>command</i> Cancel | 0x0008 | Subsystem - Electronic Interlocking | TVPS | Command to cancel the execution of FC-P and FC-P-A. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>message</i> Command Rejected | 0x0006 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System, that the previously sent command was rejected. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>message</i> TVPS Occupancy Status | 0x0007 | TVPS | Subsystem - Electronic Interlocking | Message of the TVPS status. Parameter: occupancy status and ability to be forced to clear. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>message</i> TVPS FC-P failed | 0x0010 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P was not successful. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>message</i> TVPS FC-P-A failed | 0x0011 | TVPS | Subsystem - Electronic Interlocking | Message from the Subsystem - Train Detection System to the Subsystem - Electronic Interlocking that the execution of the FC-P-A was not successful. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>message</i> TDP Status | 0x000B | TDP | Subsystem - Electronic Interlocking | Message of the TDP status. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.72 | Head | 3.4 Telegram definitions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | |
|--------------------|--|---|--|-----------|--|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|----|----------------------------|-----------------|--|--|
| Eu.SCI-TDS.PDI.73 | Info | In this chapter, specific telegrams for SCI-TDS.PDI are defined. The generic telegrams are defined in [Eu.Doc.93]. | Basic TDS AC Basic TDS TDP Basic TDS TC | EUTDS-510 | Object Text: In this chapter, specific telegrams for SCI-TDS.PDI are defined. The generic telegrams are defined in [Eu.Doc.93]. a_JIRA_BL4R3: EUTDS-510 | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.163 | Head | 3.4.1 Command "FC" | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.164 | Info | With this command the Subsystem - Electronic Interlocking forces a TVPS status to clear. This telegram refines the InformationFlow “Cd_FC” specified in the requirements specification (ID Eu.TDS.6803). | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.165 | Info | Telegram definition for command "FC" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0001 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>Mode of FC (1 Byte binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0001 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | Mode of FC (1 Byte binary) | Basic TDS AC | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0001 (2 Bytes binary) | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 43 | Mode of FC (1 Byte binary) | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.166 | Req | Permitted values for message "FC": | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.167 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0001. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.168 | Req | Sender Identifier The message bytes 3-22 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.169 | Req | Receiver Identifier The messages bytes 23-42 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.170 | Req | Mode of FC The message byte 43 shall contain the modes of FC. Permitted values: value meaning ----- ----- | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.172 | Req | 0x01 FC-U | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.173 | Req | 0x02 FC-C | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.174 | Req | 0x03 FC-P-A | Option FC- P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.175 | Req | 0x04 FC-P | Option FC- P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.587 | Req | 0x05 Acknowledgment after FC-P-A command | Option FC- P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.614 | Head | 3.4.2 Command "Update Filling Level" | | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | |
|--------------------|--|--|------------------|---------|----------------------|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|------------------|--|--|
| Eu.SCI-TDS.PDI.615 | Info | With this command the Subsystem - Electronic Interlocking requests the TVPS to send the current Filling Level of the given TVPS. This telegram refines the InformationFlow "Cd_Update_Filling_Level" specified in the requirements specification (ID Eu.TDS.6806). | Option Update FL | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.616 | Info | Telegram definition for command "Update Filling Level" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0002 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0002 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | Option Update FL | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0002 (2 Bytes binary) | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.617 | Req | Permitted values for message "Update Filling Level" | Option Update FL | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.618 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0002. | Option Update FL | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.619 | Req | Sender Identifier The message bytes 3-22 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option Update FL | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.620 | Req | Receiver Identifier The message bytes 23-42 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option Update FL | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.696 | Head | 3.4.3 Command "Cancel" | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.697 | Info | With this command the Subsystem - Electronic Interlocking forces the TVPS to cancel the execution of FC-P and FC-P-A. This telegram refines the InformationFlow "Cd_Cancel" specified in the requirements specification (ID Eu.TDS.6801). | Option FC-P/-A | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.698 | Info | Telegram definition for command "Cancel" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0008 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0008 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | Option FC-P/-A | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0008 (2 Bytes binary) | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.699 | Req | Permitted values for message "Cancel": | Option FC-P/-A | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.700 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0008. | Option FC-P/-A | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.701 | Req | Sender Identifier The message bytes 3-22 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | |
|--------------------|--|--|------------------------------------|---------|----------------------|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|-----------------|--|--|
| Eu.SCI-TDS.PDI.702 | Req | Receiver Identifier The message bytes 23-42 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.181 | Head | 3.4.4 Command "Disable the restriction to force section status to clear" | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.182 | Info | With this command the Subsystem - Electronic Interlocking forces the TVPS to change its status to be able to be forced to clear. This telegram refines the InformationFlow "Cd_DRFC" specified in the requirements specification (ID Eu.TDS.6802). | Basic TDS AC | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.183 | Info | Telegram definition for command "DRFC" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0003 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0003 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | Basic TDS AC | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0003 (2 Bytes binary) | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.184 | Req | Permitted values for message "DRFC": | Basic TDS AC | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.185 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0003. | Basic TDS AC | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.186 | Req | Sender Identifier The message bytes 3-22 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.187 | Req | Receiver Identifier The message bytes 23-42 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.194 | Head | 3.4.5 Message "TVPS Occupancy Status" | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.195 | Info | With this telegram the Subsystem - Train Detection System reports the status of a TVPS. This telegram refines the InformationFlow "Msg_TVPS_Occupancy_Status" specified in the requirements specification (ID Eu.TDS.6824). | Basic TDS AC Basic TDS TC | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|--|------------------------------------|---------|----------------------|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|----|----------------------------------|----|---|--------|---|----|----------------------------|----|------------------------------------|----|--------------------------------|------------------------------------|--|--|
| Eu.SCI-TDS.PDI.196 | Info | <div>Telegram definition for message "TVPS Occupancy Status"</div> <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0007 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>Occupancy Status (1 Byte binary)</td></tr><tr><td>44</td><td>Ability to be forced to clear (1 Byte binary - Boolean)</td></tr><tr><td>45..46</td><td>Filling Level (2 Bytes binary - signed integer)</td></tr><tr><td>47</td><td>POM Status (1 Byte binary)</td></tr><tr><td>48</td><td>Disturbance Status (1 Byte binary)</td></tr><tr><td>49</td><td>Change Trigger (1 Byte binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0007 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | Occupancy Status (1 Byte binary) | 44 | Ability to be forced to clear (1 Byte binary - Boolean) | 45..46 | Filling Level (2 Bytes binary - signed integer) | 47 | POM Status (1 Byte binary) | 48 | Disturbance Status (1 Byte binary) | 49 | Change Trigger (1 Byte binary) | Basic TDS AC Basic TDS TC | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0007 (2 Bytes binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | Occupancy Status (1 Byte binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | Ability to be forced to clear (1 Byte binary - Boolean) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45..46 | Filling Level (2 Bytes binary - signed integer) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | POM Status (1 Byte binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 48 | Disturbance Status (1 Byte binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 49 | Change Trigger (1 Byte binary) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.197 | Req | Permitted values for message "TVPS Occupancy Status": | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.198 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0007. | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.199 | Req | Sender Identifier The message bytes 3-22 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.200 | Req | Receiver Identifier The message bytes 23-42 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.201 | Req | Occupancy Status The message byte 43 shall contain the Occupancy Status. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.203 | Req | 0x01 TVPS is in state vacant | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.210 | Req | 0x02 TVPS is in state occupied | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.211 | Req | 0x03 TVPS is in state disturbed | Basic TDS AC Basic TDS TC | | | | | | | | | | | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|---|------------------------------------|------|----------------------|
| Eu.SCI-TDS.PDI.212 | Req | 0x04 TVPS is in state waiting for a sweeping train after FC-P-A or FC-P command | Option FC-P/-A | | |
| Eu.SCI-TDS.PDI.588 | Req | 0x05 TVPS is in state waiting for an acknowledgment after FC-P-A command | Option FC-P/-A | | |
| Eu.SCI-TDS.PDI.705 | Req | 0x06 TVPS is in state sweeping train detected | Option FC-P/-A | | |
| Eu.SCI-TDS.PDI.207 | Req | Ability to be forced to clear The message byte 44 shall contain the Ability to be forced to clear. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.208 | Req | 0x01 TVPS is not able to be forced to clear | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.209 | Req | 0x02 TVPS is able to be forced to clear | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.607 | Req | Filling Level The message bytes 45-46 shall contain the Filling Level in signed integer. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.609 | Req | 0x0000 Filling Level is 0 | Option Update FL | | |
| Eu.SCI-TDS.PDI.731 | Req | (0x0001...0x3FFF) Filling Level is 1 until 16.383 | Option Update FL | | |
| Eu.SCI-TDS.PDI.732 | Req | (0x7FFF...0x4000) Filling Level is -1 until -16.384 | Option Update FL | | |
| Eu.SCI-TDS.PDI.611 | Req | 0xFFFF Filling Level is not applicable | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.669 | Info | The payload 'Filling Level' will be filled with a value only when the message "TVPS Occupancy Status" is transmitted after receiving the command "Update Filling Level" from the Subsystem – Electronic Interlocking. In all other cases, the payload 'Filling Level' will be marked as not applicable. | Option Update FL | | |
| Eu.SCI-TDS.PDI.623 | Req | POM Status The message byte 47 shall contain the POM Status. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.624 | Req | 0x01 Power supply OK | Basic TDS TC | | |
| Eu.SCI-TDS.PDI.625 | Req | 0x02 Power supply NOK | Basic TDS TC | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|--|------------------------------------|------|----------------------|
| Eu.SCI-TDS.PDI.626 | Req | 0xFF POM Status is not applicable | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.692 | Req | Disturbance Status The message byte 48 shall contain the Disturbance Status. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.693 | Req | 0x01 Disturbance is operational | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.694 | Req | 0x02 Disturbance is technical | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.695 | Req | 0xFF Disturbance status is not applicable | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.680 | Req | Change Trigger The message byte 49 shall contain the Change Trigger. Permitted values: value meaning ----- ----- | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.681 | Req | 0x01 Passing detected | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.682 | Req | 0x02 Command from EIL accepted | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.684 | Req | 0x03 Command from maintainer accepted | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.685 | Req | 0x04 Technical failure | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.686 | Req | 0x05 Initial section state | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.707 | Req | 0x06 Internal trigger | Basic TDS AC | | |
| Eu.SCI-TDS.PDI.683 | Req | 0xFF Change Trigger is not applicable | Basic TDS AC Basic TDS TC | | |
| Eu.SCI-TDS.PDI.230 | Head | 3.4.6 Message "Command Rejected" | | | |
| Eu.SCI-TDS.PDI.231 | Info | With this telegram the Subsystem - Train Detection System reports, that the previously sent command was rejected. This telegram refines the InformationFlow "Msg_Command_Rejected" specified in the requirements specification (ID Eu.TDS.6817). | Basic TDS AC | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | |
|--------------------|--|---|----------------|---------|----------------------|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|----|--------------------------------------|----------------|--|--|
| Eu.SCI-TDS.PDI.232 | Info | Telegram definition for message "Command Rejected" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0006 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>Reason for Rejection (1 Byte binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0006 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | Reason for Rejection (1 Byte binary) | Basic TDS AC | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0006 (2 Bytes binary) | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 43 | Reason for Rejection (1 Byte binary) | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.233 | Req | Permitted values for message "Command Rejected": | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.234 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0006. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.235 | Req | Sender Identifier The message bytes 3-22 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.236 | Req | Receiver Identifier The message bytes 23-42 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.237 | Req | Reason for Rejection The message byte 43 shall contain the Reason for Rejection. Permitted values: value meaning ----- ----- | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.239 | Req | 0x01 operational rejected | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.240 | Req | 0x02 technical rejected | Basic TDS AC | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.246 | Head | 3.4.7 Message "TVPS FC-P failed" | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.247 | Info | With this telegram the Subsystem - Train Detection System reports, that the execution of the FC-P has failed. This telegram refines the InformationFlow "Msg_FC_P_Failed" specified in the requirements specification (ID Eu.TDS.6823). | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.248 | Info | Telegram definition for message "TVPS FC-P failed" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0010 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>Reason for failure (1 Byte binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0010 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | Reason for failure (1 Byte binary) | Option FC-P/-A | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0010 (2 Bytes binary) | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 43 | Reason for failure (1 Byte binary) | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.249 | Req | Permitted values for message "TVPS FC-P failed": | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.250 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0010. | Option FC-P/-A | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | |
|--------------------|--|---|----------------|-----------|---|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|----|------------------------------------|----------------|--|--|
| Eu.SCI-TDS.PDI.251 | Req | Sender Identifier The message bytes 3-22 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.252 | Req | Receiver Identifier The message bytes 23-42 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.573 | Req | Reason for failure The message byte 43 shall contain the Reason for Rejection. Permitted values: value meaning ----- ----- | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.575 | Req | 0x01 incorrect count of the sweeping train | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.576 | Req | 0x02 Expiration of time value "Con_tmax_Response_Time_FC_P" | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.577 | Req | 0x03 Bounding detection point is configured as not permitted for FC-P | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.687 | Info | 0x04 Intentionally deleted | Option FC-P/-A | EUTDS-509 | a_Object_Type: ReqInfo a_JIRA_BL4R3: EUTDS-509 | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.688 | Req | 0x05 Outgoing axle detected before expiration of minimum time | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.689 | Req | 0x06 Process cancelled | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.253 | Head | 3.4.8 Message "TVPS FC-P-A failed" | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.254 | Info | With this telegram the Subsystem - Train Detection System reports, that the execution of the FC-P-A has failed. This telegram refines the InformationFlow "Msg_FC_P_A_Failed" specified in the requirements specification (ID Eu.TDS.6822). | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.255 | Info | Telegram definition for message "TVPS FC-P-A failed" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x0011 (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>Reason for failure (1 Byte binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x0011 (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | Reason for failure (1 Byte binary) | Option FC-P/-A | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x0011 (2 Bytes binary) | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | |
| 43 | Reason for failure (1 Byte binary) | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.256 | Req | Permitted values for message "TVPS FC-P-A failed": | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.257 | Req | Message Type The message bytes 1 and 2 shall be set to 0x0011. | Option FC-P/-A | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.258 | Req | Sender Identifier The message bytes 3-22 shall contain the operational identifier of the TVPS according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) | | | | | | | | | | | | | | |
|--------------------|--|--|----------------|-----------|---|-------------------------------------|--------|---------------------------------------|--------|--|--------|--|----|----------------------------------|----|---------------------------------------|---------------|--|--|
| Eu.SCI-TDS.PDI.259 | Req | Receiver Identifier The message bytes 23-42 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.578 | Req | Reason for failure The message byte 43 shall contain the Reason for Rejection. Permitted values: value meaning ----- ----- | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.580 | Req | 0x01 incorrect count of the sweeping train | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.581 | Req | 0x02 Expiration of time "Con_tmax_Response_Time_FC_P_A" | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.582 | Req | 0x03 Bounding detection point is configured as not permitted for FC-P-A | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.583 | Info | 0x04 Intentionally deleted | Option FC-P/-A | EUTDS-509 | a_Object_Type: ReqInfo a_JIRA_BL4R3: EUTDS-509 | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.690 | Req | 0x05 Outgoing axle detected before expiration of minimum time | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.691 | Req | 0x06 Process cancelled | Option FC-P/-A | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.645 | Head | 3.4.9 Message "TDP Status" | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.646 | Info | With this telegram the Subsystem - Train Detection System reports, reports the current status of the TDP. This telegram refines the InformationFlow "Msg_TDP_Status" specified in the requirements specification (ID Eu.TDS.6832). | Basic TDS TDP | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.647 | Info | Telegram definition for message "TDP Status" <table><tr><th>Byte-Nr.</th><th>Content</th></tr><tr><td>00</td><td>Protocol Type: 0x20 (1 Byte binary)</td></tr><tr><td>01..02</td><td>Message Type: 0x000B (2 Bytes binary)</td></tr><tr><td>03..22</td><td>Sender Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>23..42</td><td>Receiver Identifier (20 Bytes ISO IEC 8859-1:1998)</td></tr><tr><td>43</td><td>State of passing (1 Byte binary)</td></tr><tr><td>44</td><td>Direction of passing (1 Bytes binary)</td></tr></table> | Byte-Nr. | Content | 00 | Protocol Type: 0x20 (1 Byte binary) | 01..02 | Message Type: 0x000B (2 Bytes binary) | 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | 43 | State of passing (1 Byte binary) | 44 | Direction of passing (1 Bytes binary) | Basic TDS TDP | | |
| Byte-Nr. | Content | | | | | | | | | | | | | | | | | | |
| 00 | Protocol Type: 0x20 (1 Byte binary) | | | | | | | | | | | | | | | | | | |
| 01..02 | Message Type: 0x000B (2 Bytes binary) | | | | | | | | | | | | | | | | | | |
| 03..22 | Sender Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | | | |
| 23..42 | Receiver Identifier (20 Bytes ISO IEC 8859-1:1998) | | | | | | | | | | | | | | | | | | |
| 43 | State of passing (1 Byte binary) | | | | | | | | | | | | | | | | | | |
| 44 | Direction of passing (1 Bytes binary) | | | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.648 | Req | Message Type The message bytes 1 and 2 shall be set to 0x000B. | Basic TDS TDP | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.649 | Req | Sender Identifier The message bytes 3-22 shall contain the operational identifier of the TDP according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS TDP | | | | | | | | | | | | | | | | |
| Eu.SCI-TDS.PDI.650 | Req | Receiver Identifier The message bytes 23-42 shall contain the technical identifier of the Subsystem - Electronic Interlocking according to ID Eu.SCI-XX.PDI.59 in ISO IEC 8859-1:1998 format. | Basic TDS TDP | | | | | | | | | | | | | | | | |

| ID | Type | Requirement | Func. Pkg. | JIRA | 4.1(0.A) > 4.0 (3.A) |
|--------------------|------|--|------------------|------|----------------------|
| Eu.SCI-TDS.PDI.651 | Req | State of passing The message byte 43 shall contain the State of passing. Permitted values: value meaning ----- ----- | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.652 | Req | 0x01 not passed | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.654 | Req | 0x02 passed | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.655 | Req | 0x03 disturbed | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.656 | Req | Direction of passing The message byte 44 shall contain the Direction of passing. Permitted values: value meaning ----- ----- | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.657 | Req | 0x01 reference direction | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.658 | Req | 0x02 against reference direction | Basic TDS TDP | | |
| Eu.SCI-TDS.PDI.659 | Req | 0x03 without indicated direction | Basic TDS TDP | | |