



**EULYNX Initiative**

## **Requirements specification for SCI-RBC**

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ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.1	Head	<b>1 Introduction</b>		Default
Eu.RBC.2	Head	<b>1.1 Release information</b>		Default
Eu.RBC.3	Info	[Eu.Doc.47] Requirements specification for SCI-RBC Cenelec Phase: 4 Version: 4.0 (4.A) Approval date: 02.06.2025		Default
Eu.RBC.2099	Info	<b>Version history</b>		Default
Eu.RBC.6044	Info	Version number: 4.0 (0.A) Date: 16.05.2022 Model version: 18 Generic interface and subsystem requirements for SCI version: 1.0 (0.A) Author: Filip Giering Review: CCB Changes: EURBC-188, EURBC-189, EURBC-190, EURBC-191, EURBC-193, EURBC-194, EURBC-195, EURBC-196, EURBC-199, EURBC-200, EURBC-201		Default
Eu.RBC.6103	Info	Version number: 4.0 (1.A) Date: 11.05.2023 Model version: 22 Generic interface and subsystem requirements for SCI version: 1.0 (1.A) Author: Filip Giering Review: cluster Changes: EURBC-203, EURBC-204, EURBC-206, EURBC-208, EURBC-211		Default
Eu.RBC.6114	Info	Version number: 4.0 (2.A) Date: 26.06.2023 Model version: 22 Generic interface and subsystem requirements for SCI version: 1.0 (3.A) Author: Filip Giering Review: CCB Changes: EURBC-209, EURBC-213, EURBC-215, EURBC-216, EURBC-217, EURBC-218		Default
Eu.RBC.6123	Info	Version number: 4.0 (3.A) Date: 15.12.2023 Model version: 25 Generic interface and subsystem requirements for SCI version: 1.0 (4.A) Author: Filip Giering Review: M&T Changes: EURBC-202, EURBC-220, EURBC-221, EURBC-222, EURBC-223, EURBC-224		Default
Eu.RBC.6166	Info	Version number: 4.0 (4.A) Date: 19.06.2025 Model version: 29 Generic interface and subsystem requirements for SCI version: 1.1 (2.A) Author: Filip Giering Review: CCB Changes: EURBC-226, EURBC-227, EURBC-229, EURBC-231, EURBC-232		Default
Eu.RBC.4	Head	<b>1.2 Impressum</b>		Default
Eu.RBC.5	Info	Publisher: <b>EULYNX Initiative</b>  A full list of the EULYNX Partners can be found on <a href="https://eulynx.eu/">https://eulynx.eu/</a> .		Default
Eu.RBC.6	Info	Responsible for this document: EULYNX Project Management Office <a href="http://www.eulynx.eu">www.eulynx.eu</a>		Default
Eu.RBC.3372	Info	Copyright EULYNX Partners All information included or disclosed in this document is licensed under the European Union Public Licence EUPL, Version 1.2 or later.		Default
Eu.RBC.7	Head	<b>1.3 Purpose</b>		Default
Eu.RBC.8	Info	The purpose of this document is the specification of the functional requirements for the interface SCI-RBC for the development of the EULYNX System.		Default
Eu.RBC.3963	Info	This document describes functional requirements for the interface SCI-RBC.		Default
Eu.RBC.3964	Info	This document is intended for the following users: <ul style="list-style-type: none"><li>• safety authorities</li><li>• infrastructure managers</li><li>• safety assessors</li><li>• signalling system suppliers</li><li>• validators</li></ul>		Default
Eu.RBC.3965	Info	This document is the basis for the implementation by the supplier and for approval by the infrastructure manager.		Default
Eu.RBC.9	Head	<b>1.4 Applicable standards and regulations</b>		Default
Eu.RBC.10	Info	The applicable standards and regulations used in EULYNX are listed in the EULYNX Reference Document List [Eu.Doc.12].		Default
Eu.RBC.11	Head	<b>1.5 Applicable documents</b>		Default
Eu.RBC.12	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].		Default

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.13	Head	<b>1.6 Terms and abbreviations</b>		Default
Eu.RBC.14	Info	The terms and abbreviations are listed in the EULYNX Glossary [Eu.Doc.9].		Default
Eu.RBC.17	Head	<b>1.7 Variability management</b>		Default
Eu.RBC.18	Info	Applicability column indicates the applicability of the requirement or information object per EULYNX partner. Value "Default" means the object applies to all EULYNX partners. Value "IM code" means the object applies specifically to the stated EULYNX partner. Value "-" indicates that this requirement is part of the chapters of the state machine modelling. The state machine itself defines the applicability of each transition. If there are no FlowPorts which describe the different applicabilities, the whole state machine is default. IM codes follow the pattern "abcdyz", where abcd is the UIC numeric code for railway companies and yz is by default "00".		Default
Eu.RBC.3373	Head	<b>1.8 Definition of object types</b>		Default
Eu.RBC.3374	Info	The following definition for object types is applied in this document:		Default
Eu.RBC.3375	Info	• "Req" - This denotes a mandatory requirement.		Default
Eu.RBC.6125	Info	• "Def" - This denotes referenceable model elements that are used in the model-based creation of requirements		Default
Eu.RBC.3376	Info	• "Info" - This denotes additional information to help understand the specification. These objects do not specify any additional requirements.		Default
Eu.RBC.3377	Info	• "Head" - This denotes chapter headings.		Default
Eu.RBC.15	Head	<b>1.9 Modelling</b>		Default
Eu.RBC.16	Info	The section "Functional requirements specification" follows a model based systems engineering process using Systems Modelling Language (SysML) and defines the information objects (stimuli and responses) exchanged over the SCI-RBC interface.		Default
Eu.RBC.3933	Info	The diagrams presented in this document are modelled in SysML [SysML].		Default
Eu.RBC.3934	Info	The rules for the interpretation of the model based parts of specification are defined in [Eu.Doc.29].		Default
Eu.RBC.3935	Info	In chapter 3 "Functional requirements specification" the functional system requirements, defined in the form of a SysML model in the PTC Integrity Modeler are depicted as a surrogate of this model in the form of DOORS-objects.		Default
Eu.RBC.3960	Info	A requirement thereby consists of the respective SysML model element, for instance a SysML diagram, and if necessary an additional extension of the requirement.		Default
Eu.RBC.3961	Info	In the column “Requirement Part 1” the particular SysML model element is depicted and in the column “Requirement Part 2” the corresponding extension of the definition is given. The stated object type normally applies both to “Requirement Part 1” and to “Requirement Part 2”.		Default
Eu.RBC.3962	Info	There are requirements with type "Req" given, where the column "Requirement Part 2" or a part of it is provided with the heading "Information". In this case, the defined type only applies to the column "Requirement Part 1" and the part of "Requirement Part 2", which is not labelled as "Information".		Default
Eu.RBC.6124	Info	State machines or several state machines linked together in a Functional Architecture define the totality of all functional requirements of an SUS or an SIUS in a coherent and consistent manner. State diagrams of a corresponding state machine are marked with the object type “Req”. For the later design and implementation, it is not the description language SysML that is binding, but the domain-specific meaning expressed by it. The specified behaviour can be converted into a vendor specific language but must retain the domain specific meaning describing the functional requirements. The specific model elements are additionally specified and defined by object type "Def" to allow for traceability to supplier designs or test cases. The compliance of products to the specifications must be demonstrated by testing against EULYNX test cases, which are derived from the functionality specified by the models.		Default
Eu.RBC.19	Head	<b>2 Conditions of use</b>		Default
Eu.RBC.2828	Info	The specifications defined in this document shall follow the requirements of the EULYNX System Architecture Specification [Eu.Doc.16].		Default
Eu.RBC.3936	Req	The specifications defined in this document shall be complemented by the generic requirements specified in Generic interface and subsystem requirements [Eu.Doc.119].		Default
Eu.RBC.5460	Req	All references to [Eu.Doc.119] refer to version 1.1 of that document.		Default
Eu.RBC.5461	Info	SCI-RBC is applied to connect the Radio Block Centre or the Centralised ETCS L1 Controller to the Subsystem - Electronic interlocking. The functional scope of SCI-RBC depends on the type of adjacent system (Radio Block Centre or Centralised ETCS L1 Controller) connected to the EULYNX System via SCI-RBC and on the applied ETCS levels. The functional scope and related use cases and information flows are defined by national specifications and are reflected in the marking of IM applicability.  Note: Wherever this specification mentions the actor 'Radio Block Centre', this may be interpreted as referring to the actor 'Centralised ETCS L1 Controller' if relevant in a L1 operational context.		Default
Eu.RBC.2829	Head	<b>3 Functional requirements specification</b>		Default
Eu.RBC.6023	Head	<b>3.1 SCI-RBC - Logical Viewpoint</b>		Default
Eu.RBC.6079	Head	<b>3.1.1 SCI-RBC - Logical Context</b>		Default
Eu.RBC.4242	Def	[Package] SCI-RBC - Logical Context [Logical Viewpoint - Interface Definition - Logical Context] <div><div><div><div><div>Subsystem - Electronic Interlocking</div><div>«logical structural entity» Subsystem - Electronic Interlocking</div></div><div>1 SCI-RBC</div></div><div><div>«logical structural entity» SCI-RBC</div><div>SCI-RBC</div></div><div><div>Adjacent Systems and System Actors</div><div>«environmental structural entity» Radio Block Centre</div></div><div>1 SCI-RBC</div></div></div>		Default
Eu.RBC.6175	Req	The logical interface SCI-RBC shall provide a connection of exactly one Subsystem - Electronic Interlocking and one Radio Block Centre.		Default
Eu.RBC.5946	Head	<b>3.2 SCI-RBC - Information Flows</b>		Default
Eu.RBC.6058	Info	The generic commands and messages through the SCI-RBC are specified in [Eu.Doc.119].		Default

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5947	Def	<div><div>[Package] SCI-RBC - Information Flows [Interface Requirements - Directions Of Exchanged Information Objects]</div><div><div><b>bdd</b> [Package] SCI-RBC - Information Flows [Interface Requirements - Directions Of Exchanged Information Objects]</div><div><div><div><div>«information flow» SCI_RBC_Messages</div><div>reqd «signal» Msg_BG_Status prov «signal» Msg_ESA_Status reqd «signal» Msg_Flank_Protection_Status prov «signal» Msg_LSA_Status prov «signal» Msg_WA_Status prov «signal» Msg_IO_Element_Status prov «signal» Msg_LX_Status prov «signal» Msg_Point_Status prov «signal» Msg_Route_Status prov «signal» Msg_Signal_Status prov «signal» Msg_TVP_Section_Status reqd «signal» Msg_Route_Occupation reqd «signal» Msg_Route_Cancelling_Reply reqd «signal» Msg_Signal_Occupation reqd «signal» Msg_Signal_Cancelling_Reply reqd «signal» Msg_Preset_Signal_BG_Reply reqd «signal» Msg_Group_Failure reqd «signal» Msg_Train_Data</div></div><div><div>«information flow» SCI_RBC_Commands</div><div>reqd «signal» Cd_Signal_Control prov «signal» Cd_Signal_Cancelling reqd «signal» Cd_Signal_Overlap_Control reqd «signal» Cd_Route_Control prov «signal» Cd_Route_Cancelling prov «signal» Cd_Preset_Signal_BG reqd «signal» Cd_IO_Element_Control reqd «signal» Cd_LX_Control</div></div><div><div>«information flow» SCI_RBC_EIL</div><div><div>proxyPorts</div>«ProxyPort» P105inout : SCI_RBC_Messages «ProxyPort» P106inout : SCI_RBC_Commands «ProxyPort» P1inout : PDI_GEN_ADJ</div></div><div><div>«information flow» SCI_RBC_RBC</div><div><div>proxyPorts</div>«ProxyPort» P105inout : SCI_RBC_Messages «ProxyPort» P106inout : SCI_RBC_Commands «ProxyPort» P1inout : PDI_GEN_ADJ</div></div></div></div></div></div>		Default
Eu.RBC.6050	Def	Cd_IO_Element_Control	Command (Cd) to request the activation or deactivation of an IO element.	007600 008000 310901
Eu.RBC.6051	Def	Cd_LX_Control	Command (Cd) to request the activation or deactivation of a level crossing.	007600 008000 310901
Eu.RBC.6052	Def	Cd_Preset_Signal_BG	Command (Cd) requesting the alignment of the telegrams of the pre-signal balise groups with the given signal aspect. Note: On the level of the interface SCI-RBC, all pre-signal or post-signal balise groups associated with a signal are considered as one entity.	008201
Eu.RBC.6053	Def	Cd_Route_Cancelling	Command (Cd) to request the cancellation of a route.	999900
Eu.RBC.6054	Def	Cd_Route_Control	Command (Cd) form to request the reservation or allow the release of a route or sub route.	999900
Eu.RBC.6055	Def	Cd_Signal_Cancelling	Command (Cd) to request the cancellation of a route entry signal.	007600 310901
Eu.RBC.6056	Def	Cd_Signal_Control	Command (Cd) transmitting or withdrawing a route setting trigger.	008000
Eu.RBC.6057	Def	Cd_Signal_Overlap_Control	Command (Cd) to control the overlap release of a signal showing stop aspect.	008000 310901
Eu.RBC.6059	Def	Msg_BG_Status	Message (Msg) containing the status of the balise groups of a signal. Note: On the level of the interface SCI-RBC, all pre-signal or post-signal balise groups associated with a signal are considered as one entity.	008200 008201 310901
Eu.RBC.6060	Def	Msg_ESA_Status	Message (Msg) containing the new activation status of an ESA.	007600
Eu.RBC.6061	Def	Msg_Flank_Protection_Status	Message (Msg) to inform if flank protection is provided by ETCS.	008000 310901
Eu.RBC.6062	Def	Msg_Group_Failure	Message (Msg) to inform about the failure of a group or subgroup of elements.	007600 008000
Eu.RBC.6063	Def	Msg_IO_Element_Status	Message (Msg) containing the new status of an IO element.	Default
Eu.RBC.6064	Def	Msg_LSA_Status	Message (Msg) containing a new LSA status.	007600 310901
Eu.RBC.6065	Def	Msg_LX_Status	Message (Msg) containing a new LX status.	Default
Eu.RBC.6066	Def	Msg_Point_Status	Message (Msg) containing a new point status.	Default

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.6067	Def	Msg_Preset_Signal_BG_Reply	Message (Msg) reporting whether the telegrams of the pre-signal balise groups were brought into alignment with the signal aspect requested in Cmd_Preset_Signal_BG. Note: On the level of the interface SCI-RBC, all pre-signal or post-signal balise groups associated with a signal are considered as one entity.	008201
Eu.RBC.6068	Def	Msg_Route_Cancelling_Reply	Message (Msg) containing either confirmation or rejection of a route cancellation depending on the information the RBC received from the ETCS vehicle.	999900
Eu.RBC.6069	Def	Msg_Route_Occupation	Message containing information about trains assigned to the given route.	999900
Eu.RBC.6070	Def	Msg_Route_Status	Message (Msg) containing a new route status.	999900
Eu.RBC.6071	Def	Msg_Signal_Cancelling_Reply	Message (Msg) containing either confirmation or rejection of a signal cancellation depending on the information the RBC received from the ETCS vehicle.	007600 310901
Eu.RBC.6072	Def	Msg_Signal_Occupation	Message containing information about trains assigned to the given route destination signal.	007600 310901
Eu.RBC.6073	Def	Msg_Signal_Status	Message (Msg) containing a new signal status.	Default
Eu.RBC.6074	Def	Msg_Train_Data	Message (Msg) containing the ETCS train data previously received from the ETCS vehicle.	008000
Eu.RBC.6075	Def	Msg_TVP_Section_Status	Message (Msg) containing a new status of a TVP section.	Default
Eu.RBC.6076	Def	Msg_WA_Status	Message (Msg) containing a new Working area status.	007600 310901
Eu.RBC.6007	Head	3.3 SCI-RBC - Functional Viewpoint		Default
Eu.RBC.5055	Info	The generic functions are specified in [Eu.Doc.119].		Default
Eu.RBC.2910	Head	3.3.1 SCI-RBC - Functional Context		Default
Eu.RBC.2925	Info	<div><div>[Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Initialisation]</div><div><div>uc [Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Initialisation]</div><div><div>SCI-RBC Connection Domain</div><div><div><div>Subsystem - Electronic Interlocking</div><div>SCI-XX AdjS IFUC1.1: Establish PDI connection</div><div>Radio Block Centre</div></div><div><div>«include»</div><div>SCI-RBC IFUC 1.3. Report status</div></div><div><div>SCI-XX AdjS IFUC1.2: Close PDI connection</div></div></div></div></div></div>	This use case diagram shows the Connection Domain-UseCases that deal with the start-up procedure, which follows after a communication channel between Subsystem - Electronic Interlocking and Radio Block Centre has been established.	Default
Eu.RBC.5056	Info	The generic UseCases SCI-XX AdjS IFUC1.1: Establish PDI connection and SCI-XX AdjS IFUC1.2: Close PDI connection are specified in [Eu.Doc.119].		Default

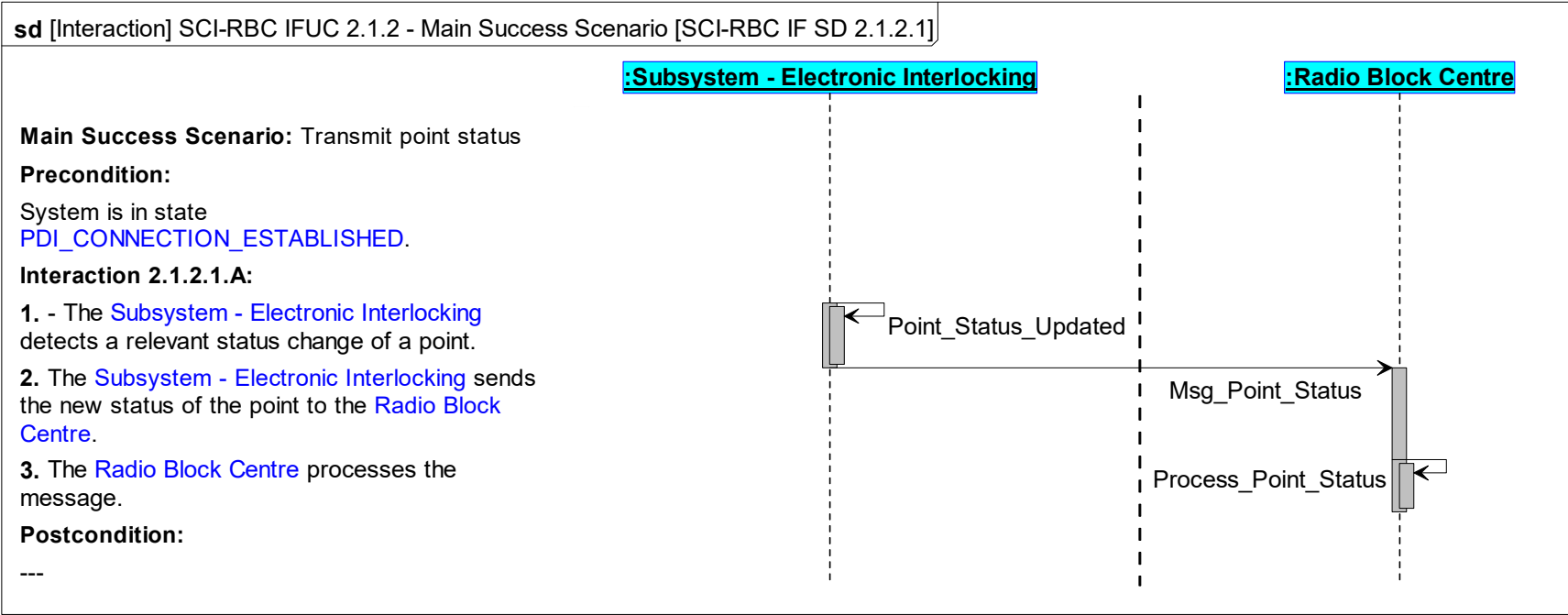
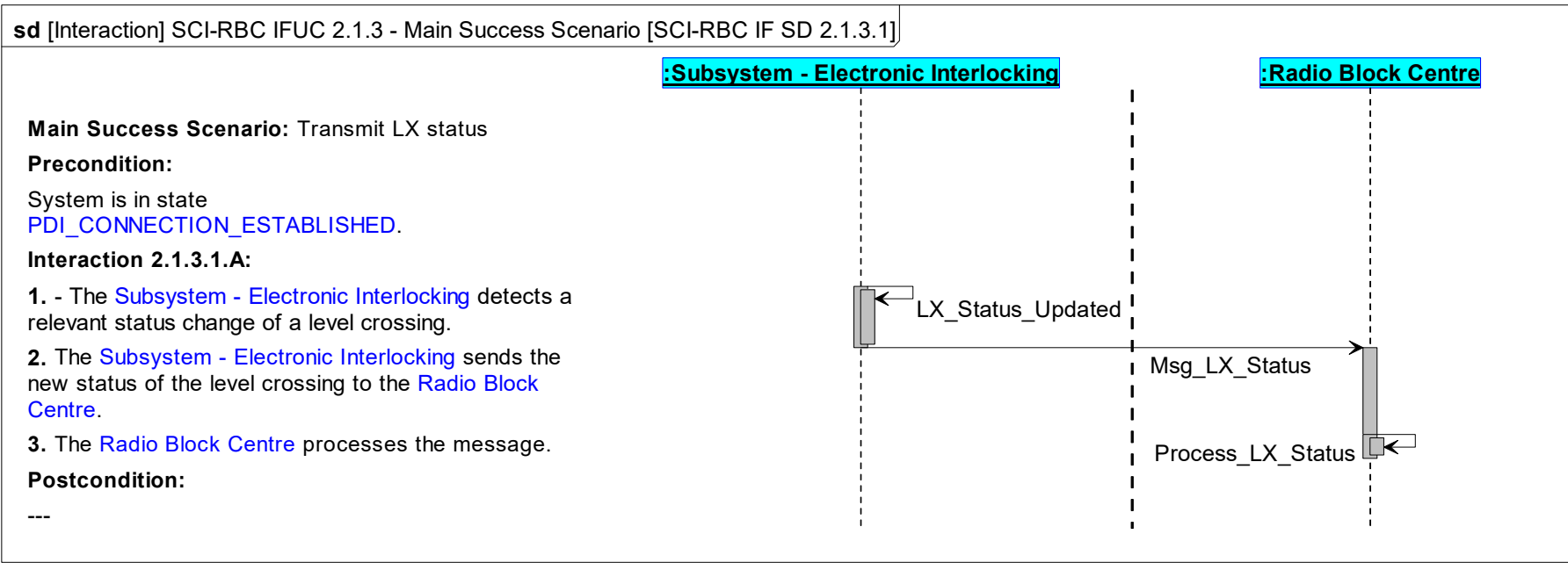
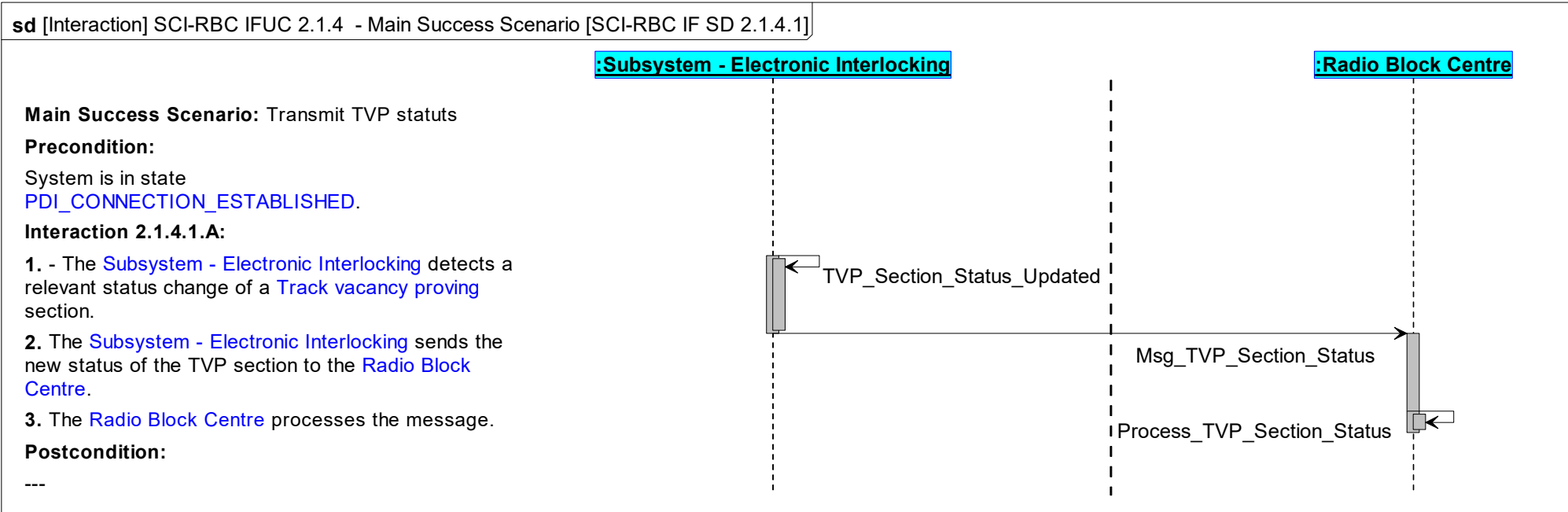








ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4432	Info	<div><div>[Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Transmit element status]</div><div>uc [Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Transmit element status]</div><div></div></div>	<p>This use case diagram shows the generalized Connection Domain-UseCase "SCI-RBC CDUC 2.1 Transmit element status" and its specialized variants, which ensure that the Radio Block Centre has identical status information of (field) elements as the Subsystem - Electronic Interlocking.</p>	Default
Eu.RBC.3061	Info	SCI-RBC IFUC 2.1.1 Transmit signal status	<p>The Connection Domain-UseCase "SCI-RBC IFUC 2.1.1 Transmit signal status" defines that the Subsystem - Electronic Interlocking provides the Radio Block Centre with event-controlled information about signal indications. It communicates the current status of one signal at a time to the Radio Block Centre.</p>	Default
Eu.RBC.3062	Info	<div><div>[Interaction] SCI-RBC IFUC 2.1.1 - Main Success Scenario [SCI-RBC IF SD 2.1.1.1]</div><div>sd [Interaction] SCI-RBC IFUC 2.1.1 - Main Success Scenario [SCI-RBC IF SD 2.1.1.1]</div><div></div><div><p><b>Main Success Scenario:</b> Transmit signal status</p><p><b>Precondition:</b> System is in state <b>PDI_CONNECTION_ESTABLISHED</b>.</p><p><b>Interaction 2.1.1.1.A:</b></p><ol style="list-style-type: none"><li>- The <b>Subsystem - Electronic Interlocking</b> detects a relevant status change of a signal.</li><li>The <b>Subsystem - Electronic Interlocking</b> sends the new status of the signal to the <b>Radio Block Centre</b>.</li><li>The <b>Radio Block Centre</b> processes the message.</li></ol><p><b>Postcondition:</b> ---</p></div></div>		Default
Eu.RBC.3072	Info	SCI-RBC IFUC 2.1.2 Transmit point status	<p>The Connection Domain-UseCase "SCI-RBC IFUC 2.1.2 Transmit point status" defines that the Subsystem - Electronic Interlocking provides the Radio Block Centre with event-controlled information about current point positions. It communicates the current status of one point at a time to the Radio Block Centre.</p>	Default

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.3073	Info	[Interaction] SCI-RBC IFUC 2.1.2 - Main Success Scenario [SCI-RBC IF SD 2.1.2.1]  sd [Interaction] SCI-RBC IFUC 2.1.2 - Main Success Scenario [SCI-RBC IF SD 2.1.2.1]  <b>:Subsystem - Electronic Interlocking</b>  <b>Main Success Scenario:</b> Transmit point status <b>Precondition:</b> System is in state PDI_CONNECTION_ESTABLISHED. <b>Interaction 2.1.2.1.A:</b> <b>1.</b> - The Subsystem - Electronic Interlocking detects a relevant status change of a point. <b>2.</b> The Subsystem - Electronic Interlocking sends the new status of the point to the Radio Block Centre. <b>3.</b> The Radio Block Centre processes the message. <b>Postcondition:</b> --- 		Default
Eu.RBC.3081	Info	SCI-RBC IFUC 2.1.3 Transmit LX status	The Connection Domain-UseCase "SCI-RBC IFUC 2.1.3 Transmit LX status" defines that the Subsystem - Electronic Interlocking provides the Radio Block Centre with event-controlled information about the status of a level crossing (LX). The Subsystem - Electronic Interlocking communicates the current status of one level crossing at a time to the Radio Block Centre.	Default
Eu.RBC.3082	Info	[Interaction] SCI-RBC IFUC 2.1.3 - Main Success Scenario [SCI-RBC IF SD 2.1.3.1]  sd [Interaction] SCI-RBC IFUC 2.1.3 - Main Success Scenario [SCI-RBC IF SD 2.1.3.1]  <b>:Subsystem - Electronic Interlocking</b>  <b>Main Success Scenario:</b> Transmit LX status <b>Precondition:</b> System is in state PDI_CONNECTION_ESTABLISHED. <b>Interaction 2.1.3.1.A:</b> <b>1.</b> - The Subsystem - Electronic Interlocking detects a relevant status change of a level crossing. <b>2.</b> The Subsystem - Electronic Interlocking sends the new status of the level crossing to the Radio Block Centre. <b>3.</b> The Radio Block Centre processes the message. <b>Postcondition:</b> --- 		Default
Eu.RBC.3090	Info	SCI-RBC IFUC 2.1.4 Transmit TVP status	The Connection Domain-UseCase "SCI-RBC IFUC 2.1.4 Transmit TVP status" defines that the Subsystem - Electronic Interlocking provides the Radio Block Centre with event-controlled information about the status of a track vacancy proving (TVP) section. The Subsystem - Electronic Interlocking communicates the current status of one track vacancy proving section at a time to the Radio Block Centre.	Default
Eu.RBC.3091	Info	[Interaction] SCI-RBC IFUC 2.1.4 - Main Success Scenario [SCI-RBC IF SD 2.1.4.1]  sd [Interaction] SCI-RBC IFUC 2.1.4 - Main Success Scenario [SCI-RBC IF SD 2.1.4.1]  <b>:Subsystem - Electronic Interlocking</b>  <b>Main Success Scenario:</b> Transmit TVP statuts <b>Precondition:</b> System is in state PDI_CONNECTION_ESTABLISHED. <b>Interaction 2.1.4.1.A:</b> <b>1.</b> - The Subsystem - Electronic Interlocking detects a relevant status change of a Track vacancy proving section. <b>2.</b> The Subsystem - Electronic Interlocking sends the new status of the TVP section to the Radio Block Centre. <b>3.</b> The Radio Block Centre processes the message. <b>Postcondition:</b> --- 		Default
Eu.RBC.3099	Info	SCI-RBC IFUC 2.1.5 Transmit IO element status	The Connection Domain-UseCase "SCI-RBC IFUC 2.1.5 Transmit IO element status" defines that the Subsystem - Electronic Interlocking provides the Radio Block Centre	Default



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4433	Info	<div><div>[Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Transmit area status]</div><div>uc [Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Transmit area status]</div><div><p>The diagram shows a central use case 'SCI-RBC CDUC 2.2 Transmit area status' (green oval). It is connected by lines to two external components: 'Subsystem - Electronic Interlocking' (red box) on the left and 'Radio Block Centre' (red box) on the right. Inside a dashed box labeled 'SCI-RBC Connection Domain', there are three other use cases: 'SCI-RBC IFUC 2.2.1 Transmit working area status' (green oval), 'SCI-RBC IFUC 2.2.2 Transmit local shunting area status' (green oval), and 'SCI-RBC IFUC 2.2.3 Transmit emergency stop area status' (green oval). Arrows point from each of these three IFUC use cases to the central CDUC use case.</p></div></div>	This use case diagram shows the generalized Connection Domain-UseCase "SCI-RBC CDUC 2.2 Transmit area status" and its specialized variants, which ensure that the Radio Block Centre has identical status information of defined areas as the Subsystem - Electronic Interlocking.	007600 310901
Eu.RBC.4434	Info	SCI-RBC IFUC 2.2.1 Transmit working area status	The Connection Domain-UseCase "SCI-RBC IFUC 2.2.1 Transmit working area status" defines that the Subsystem - Electronic Interlocking informs the Radio Block Centre about the status change of a working area (WA) (if it has been activated or deactivated or if the shunting mode permission inside the WA has been changed).	007600 310901
Eu.RBC.4435	Info	<div><div>[Interaction] SCI-RBC IFUC 2.2.1 - Main Success Scenario [SCI-RBC IF SD 2.2.1.1]</div><div>sd [Interaction] SCI-RBC IFUC 2.2.1 - Main Success Scenario [SCI-RBC IF SD 2.2.1.1]</div><div><p>The sequence diagram shows two lifelines: ':Subsystem - Electronic Interlocking' and ':Radio Block Centre'. The process starts with a self-call on the Subsystem lifeline labeled 'WA_Status_Updated'. Then, a message 'Msg_WA_Status' is sent from the Subsystem to the Radio Block Centre. Finally, there is a self-call on the Radio Block Centre lifeline labeled 'Process_WA_Status'.</p></div></div> <div><p><b>Main Success Scenario:</b> Transmit working area status</p><p><b>Precondition:</b> System is in state <b>PDI_CONNECTION_ESTABLISHED</b>.</p><p><b>Interaction 2.2.1.1.A:</b></p><ol style="list-style-type: none"><li>- The <b>Subsystem - Electronic Interlocking</b> detects a relevant status change of a <b>Working area</b>.</li><li>The <b>Subsystem - Electronic Interlocking</b> sends the new status of the WA to the <b>Radio Block Centre</b>.</li><li>The <b>Radio Block Centre</b> processes the message.</li></ol><p><b>Postcondition:</b> ---</p></div>		007600 310901
Eu.RBC.4293	Info	SCI-RBC IFUC 2.2.2 Transmit local shunting area status	The Connection Domain-UseCase "SCI-RBC IFUC 2.2.2 Transmit local shunting area status" defines that the Subsystem - Electronic Interlocking informs the Radio Block Centre about the status change of a local shunting area (LSA). This scenario is used to allow railway vehicles to go to shunting mode if a LSA is activated and the railway vehicle is located inside the LSA. LSAs must be defined by data preparation both for Subsystem - Electronic Interlocking and Radio Block Centre.	007600 310901

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4294	Info	<div><div>[Interaction] SCI-RBC IFUC 2.2.2 - Main Success Scenario [SCI-RBC IF SD 2.2.2.1]</div><div><div>sd [Interaction] SCI-RBC IFUC 2.2.2 - Main Success Scenario [SCI-RBC IF SD 2.2.2.1]</div><div><div><div>:Subsystem - Electronic Interlocking</div><div>:Radio Block Centre</div></div><div><div><div><div></div></div></div><div><div></div><div>LSA_Status_Updated</div><div></div></div><div><div></div><div>Msg_LSA_Status</div><div></div></div><div><div></div><div>Process_LSA_Status</div><div></div></div></div></div></div><div><p><b>Main Success Scenario:</b> Transmit local shunting area status</p><p><b>Precondition:</b> System is in state <a href="#">PDI_CONNECTION_ESTABLISHED</a>.</p><p><b>Interaction 2.2.2.1.A:</b></p><ol style="list-style-type: none"><li>- The <a href="#">Subsystem - Electronic Interlocking</a> detects a relevant status change of a <a href="#">Local shunting area</a>.</li><li>The <a href="#">Subsystem - Electronic Interlocking</a> sends the new status of the LSA to the <a href="#">Radio Block Centre</a>.</li><li>The <a href="#">Radio Block Centre</a> processes the message.</li></ol><p><b>Postcondition:</b> ---</p></div></div>		007600 310901
Eu.RBC.4303	Info	SCI-RBC IFUC 2.2.3 Transmit emergency stop area status	The Connection Domain-UseCase "SCI-RBC IFUC 2.2.3 Transmit emergency stop area status" defines that the Subsystem - Electronic Interlocking shall inform the Radio Block Centre about the status change of an emergency stop area (ESA). ESAs are used to trigger an emergency stop by all trains inside or approaching the ESA. Depending on the type of ESA (conditional or unconditional), the area is used to trigger a specific reaction from all trains inside or approaching the ESA. ESAs must be defined by data preparation both for Subsystem - Electronic Interlocking and Radio Block Centre.	007600
Eu.RBC.4304	Info	<div><div>[Interaction] SCI-RBC IFUC 2.2.3 - Main Success Scenario [SCI-RBC IF SD 2.2.3.1]</div><div><div>sd [Interaction] SCI-RBC IFUC 2.2.3 - Main Success Scenario [SCI-RBC IF SD 2.2.3.1]</div><div><div><div>:Subsystem - Electronic Interlocking</div><div>:Radio Block Centre</div></div><div><div><div><div></div></div></div><div><div></div><div>ESA_Status_Updated</div><div></div></div><div><div></div><div>Msg_ESA_Status</div><div></div></div><div><div></div><div>Process_ESA_Status</div><div></div></div></div></div></div><div><p><b>Main Success Scenario:</b> Transmit emergency stop area status</p><p><b>Precondition:</b> System is in state <a href="#">PDI_CONNECTION_ESTABLISHED</a>.</p><p><b>Interaction 2.2.3.1.A:</b></p><ol style="list-style-type: none"><li>- The <a href="#">Subsystem - Electronic Interlocking</a> detects a relevant status change of an <a href="#">Emergency Stop Area</a>.</li><li>The <a href="#">Subsystem - Electronic Interlocking</a> sends the new status of the ESA to the <a href="#">Radio Block Centre</a>.</li><li>The <a href="#">Radio Block Centre</a> processes the message.</li></ol><p><b>Postcondition:</b> ---</p></div></div>		007600

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.2922	Info	<div><div>[Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Command control operations]</div><div>uc [Package] SCI-RBC - Functional Context [Interface Definition - UseCases - Operation - Command control operations]</div><div><p>The diagram shows a central use case 'SCI-RBC CDUC 2.3 Command control operations' within a dashed box labeled 'SCI-RBC Connection Domain'. It is connected to four other use cases: 'SCI-RBC IFUC 2.3.1 LX activation request', 'SCI-RBC IFUC 2.3.2 LX deactivation request', 'SCI-RBC IFUC 2.3.3 IO activation request', and 'SCI-RBC IFUC 2.3.4 IO deactivation request'. Outside the domain, there are two system components: 'Subsystem - Electronic Interlocking' and 'Radio Block Centre', both connected to the central use case.</p></div></div>	<p>This use case diagram shows how the generalized Connection Domain-UseCase "SCI-RBC CDUC 2.3 Command control operations" is broken down into specialized use cases, which define how the Radio Block Centre requests an action from an element via the Subsystem - Electronic Interlocking.</p>	007600 008000 310901
Eu.RBC.2976	Info	SCI-RBC IFUC 2.3.1 LX activation request	<p>The Connection Domain-UseCase "SCI-RBC IFUC 2.3.1 LX activation request" defines that the Radio Block Centre requests the activation of a level crossing (LX) from the Subsystem - Electronic Interlocking.</p>	007600 008000 310901
Eu.RBC.2977	Info	<div><div>[Interaction] SCI-RBC IFUC 2.3.1 - Main Success Scenario [SCI-RBC IF SD 2.3.1.1]</div><div>sd [Interaction] SCI-RBC IFUC 2.3.1 - Main Success Scenario [SCI-RBC IF SD 2.3.1.1]</div><div><p>The sequence diagram shows the interaction between the Subsystem - Electronic Interlocking and the Radio Block Centre. The Subsystem - Electronic Interlocking has a self-call 'Process_LX_Control' and sends 'Cd_LX_Control' to the Radio Block Centre. The Radio Block Centre sends 'LX_Control_Required' to the Subsystem - Electronic Interlocking, which then sends 'LX_Status_Updated' back to the Radio Block Centre. The Radio Block Centre also has a self-call 'Process_LX_Status' and sends 'Msg_LX_Status' to the Subsystem - Electronic Interlocking.</p></div></div> <div><p><b>Main Success Scenario:</b> LX activation request</p><p><b>Precondition:</b></p><p>System is in state <b>PDI_CONNECTION_ESTABLISHED</b>.</p><p><b>Interaction 2.3.1.1.A:</b></p><ol style="list-style-type: none"><li>- The <b>Radio Block Centre</b> detects that a level crossing needs to be activated.</li><li>The <b>Radio Block Centre</b> sends an activation request for a level crossing to the <b>Subsystem - Electronic Interlocking</b>.</li><li>The <b>Subsystem - Electronic Interlocking</b> processes the message.</li></ol><p><b>Interaction 2.3.1.1.B:</b></p><ol style="list-style-type: none"><li>- The <b>Subsystem - Electronic Interlocking</b> detects a status change of the LX.</li><li>The <b>Subsystem - Electronic Interlocking</b> sends the new status of the LX to the <b>Radio Block Centre</b>.</li><li>The <b>Radio Block Centre</b> processes the message.</li></ol><p><b>Postcondition:</b></p><p>---</p></div>		007600 008000 310901
Eu.RBC.3574	Info	SCI-RBC IFUC 2.3.2 LX deactivation request	<p>The Connection Domain-UseCase "SCI-RBC IFUC 2.3.2 LX deactivation request" defines that the Radio Block Centre requests the deactivation of a level crossing (LX) from the Subsystem - Electronic Interlocking.</p>	007600 008000 310901



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.3575	Info	<div><div>[Interaction] SCI-RBC IFUC 2.3.2 - Main Success Scenario [SCI-RBC IF SD 2.3.2.1]</div><div><div>sd [Interaction] SCI-RBC IFUC 2.3.2 - Main Success Scenario [SCI-RBC IF SD 2.3.2.1]</div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div><b>:Subsystem - Electronic Interlocking</b></div><div><b>:Radio Block Centre</b></div></div></div><div><div><div><b>Main Success Scenario:</b> LX deactivation request</div><div><b>Precondition:</b> System is in state <b>.PDI_CONNECTION_ESTABLISHED</b></div><div><b>Interaction 2.3.2.1.A:</b> 1. - The <b>Radio Block Centre</b> detects that a level crossing can be deactivated. 2. The <b>Radio Block Centre</b> sends a deactivation request for a level crossing to the <b>Subsystem - Electronic Interlocking</b>. 3. The <b>Subsystem - Electronic Interlocking</b> processes the message. <b>Interaction 2.3.2.1.B:</b> 4. - The <b>Subsystem - Electronic Interlocking</b> detects a status change of the LX. 5. The <b>Subsystem - Electronic Interlocking</b> sends the new status of the LX to the <b>Radio Block Centre</b>. 6. The <b>Radio Block Centre</b> processes the message. <b>Postcondition:</b> ---</div></div></div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div>LX_Control_Required</div><div></div></div><div><div>Cd_LX_Control</div><div></div></div><div><div>Process_LX_Control</div><div></div></div><div><div>LX_Status_Updated</div><div></div></div><div><div>Msg_LX_Status</div><div></div></div><div><div>Process_LX_Status</div><div></div></div></div></div></div></div></div></div></div>		007600 008000 310901
Eu.RBC.2996	Info	SCI-RBC IFUC 2.3.3 IO activation request	The Connection Domain-UseCase "SCI-RBC IFUC 2.3.3 IO activation request" defines that the Radio Block Centre requests the activation of an IO element from the Subsystem - Electronic Interlocking.	007600 008000 310901
Eu.RBC.2997	Info	<div><div>[Interaction] SCI-RBC IFUC 2.3.3 - Main Success Scenario [SCI-RBC IF SD 2.3.3.1]</div><div><div>sd [Interaction] SCI-RBC IFUC 2.3.3 - Main Success Scenario [SCI-RBC IF SD 2.3.3.1]</div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div><b>:Subsystem - Electronic Interlocking</b></div><div><b>:Radio Block Centre</b></div></div></div><div><div><div><b>Main Success Scenario:</b> IO activation request</div><div><b>Precondition:</b> System is in state <b>PDI_CONNECTION_ESTABLISHED</b>.</div><div><b>Interaction 2.3.3.1.A:</b> 1. - The <b>Radio Block Centre</b> detects that the conditions to activate an IO system are fulfilled. 2. The <b>Radio Block Centre</b> sends an activation request for an IO element to the <b>Subsystem - Electronic Interlocking</b>. 3. The <b>Subsystem - Electronic Interlocking</b> processes the message. <b>Interaction 2.3.3.1.B:</b> 4. - The <b>Subsystem - Electronic Interlocking</b> detects a status change of the IO element. 5. The <b>Subsystem - Electronic Interlocking</b> sends the new status of the IO element to the <b>Radio Block Centre</b>. 6. The <b>Radio Block Centre</b> processes the message. <b>Postcondition:</b> ---</div></div></div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div>IO_Element_Control_Required</div><div></div></div><div><div>Cd_IO_Element_Control</div><div></div></div><div><div>Process_IO_Element_Control</div><div></div></div><div><div>IO_Element_Status_Updated</div><div></div></div><div><div>Msg_IO_Element_Status</div><div></div></div><div><div>Process_IO_Element_Status</div><div></div></div></div></div></div></div></div></div></div>		007600 008000 310901
Eu.RBC.3585	Info	SCI-RBC IFUC 2.3.4 IO deactivation request	The Connection Domain-UseCase "SCI-RBC IFUC 2.3.4 IO deactivation request" defines that the Radio Block Centre requests the deactivation of an IO element from the Subsystem - Electronic Interlocking.	007600 008000 310901







ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4709	Info	<div><div>[Interaction] SCI-RBC IFUC 2.4.3 - Main Success Scenario [SCI-RBC IF SD 2.4.3.1]</div><div><div>sd [Interaction] SCI-RBC IFUC 2.4.3 - Main Success Scenario [SCI-RBC IF SD 2.4.3.1]</div><div><div><div><div><div><div></div><div></div></div><div><div><div></div><div></div></div></div><div><div><div><b>:Subsystem - Electronic Interlocking</b></div><div><b>:Radio Block Centre</b></div></div></div></div><div><p><b>Main Success Scenario:</b> Cooperate on route cancelling</p><p><b>Precondition:</b> System is in state <a href="#">PDI_CONNECTION_ESTABLISHED</a>.</p><p><b>Interaction 2.4.3.1.A:</b> <b>alt</b> [element based]</p><div><div>1a1. The <a href="#">Subsystem - Electronic Interlocking</a> detects that route cancelling is desired.</div><div>1a2. The <a href="#">Subsystem - Electronic Interlocking</a> sends a cancellation request for a route entry signal to the <a href="#">Radio Block Centre</a>.</div><div>1a3. The <a href="#">Radio Block Centre</a> processes the message.</div></div><p><b>else alt</b> [route based]</p><div><div>1b1. The <a href="#">Subsystem - Electronic Interlocking</a> detects that route cancelling is desired.</div><div>1b2. The <a href="#">Subsystem - Electronic Interlocking</a> sends a cancellation request for a route to the <a href="#">Radio Block Centre</a>.</div><div>1b3. The <a href="#">Radio Block Centre</a> processes the message.</div></div><p><b>end alt</b></p><p><b>Interaction 2.4.3.1.B:</b> <b>alt</b> [element based]</p><div><div>2a1. The <a href="#">Radio Block Centre</a> has generated either an acknowledgement or a rejection of signal cancellation.</div><div>2a2. The <a href="#">Radio Block Centre</a> sends the reply to the <a href="#">Subsystem - Electronic Interlocking</a>.</div><div>2a3. The <a href="#">Radio Block Centre</a> processes the message.</div></div><p><b>else alt</b> [route based]</p><div><div>2b1. The <a href="#">Radio Block Centre</a> has generated either an acknowledgement or a rejection of route cancellation.</div><div>2b2. The <a href="#">Radio Block Centre</a> sends the reply to the <a href="#">Subsystem - Electronic Interlocking</a>.</div><div>2b3. The <a href="#">Radio Block Centre</a> processes the message.</div></div><p><b>end alt</b></p><p><b>Postcondition:</b> ---</p></div><div></div></div></div></div></div></div>		007600 310901
Eu.RBC.4727	Info	SCI-RBC IFUC 2.4.4 Enable overlap release	The Connection Domain-UseCase "SCI-RBC IFUC 2.4.4 Enable overlap release" defines that the Radio Block Centre takes control of the overlap of a signal by requesting the reservation of a signal from the Subsystem - Electronic Interlocking. This prevents the release of the overlap after the overlap timer has elapsed. The Radio Block Centre should send a release request for the overlap as soon as the associated railway vehicle comes to standstill. This enables to release the overlap as early as possible.	008000 310901

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4728	Info	[Interaction] SCI-RBC IFUC 2.4.4 - Main Success Scenario [SCI-RBC IF SD 2.4.4.1] <div><div>sd [Interaction] SCI-RBC IFUC 2.4.4 - Main Success Scenario [SCI-RBC IF SD 2.4.4.1]</div><div><div>:Subsystem - Electronic Interlocking</div><div><div>:Radio Block Centre</div></div></div><div><p><b>Main Success Scenario:</b> Enable overlap release</p><p><b>Precondition:</b></p><p>System is in state <b>PDI_CONNECTION_ESTABLISHED</b>.</p><p><b>Interaction 2.4.4.1.A:</b></p><p>1. - The <b>Radio Block Centre</b> detects that overlap reservation for a signal is required.</p><p>2. The <b>Radio Block Centre</b> sends a reservation request for a signal.</p><p>3. The <b>Subsystem - Electronic Interlocking</b> processes the message.</p><p><b>Interaction 2.4.4.1.B:</b></p><p>4. - The <b>Radio Block Centre</b> detects that the train has stopped.</p><p>5. The <b>Radio Block Centre</b> sends an overlap release message for the signal showing signal aspect Stop.</p><p>6. The <b>Subsystem - Electronic Interlocking</b> processes the message.</p><p><b>Interaction 2.4.4.1.C:</b></p><p>7. - The <b>Subsystem - Electronic Interlocking</b> has released the overlap of the signal.</p><p>8. The <b>Subsystem - Electronic Interlocking</b> informs the <b>Radio Block Centre</b> about the release of overlap by sending signal aspect Stop, overlap not defined.</p><p>9. The <b>Radio Block Centre</b> processes the message.</p><p><b>Interaction 2.4.4.1.D:</b></p><p>10. - The <b>Radio Block Centre</b> detects that overlap reservation for a signal is no longer required.</p><p>11. The <b>Radio Block Centre</b> sends the withdrawal of the signal reservation.</p><p>12. The <b>Subsystem - Electronic Interlocking</b> processes the message.</p><p><b>Postcondition:</b></p><p>---</p></div></div>		008000 310901
Eu.RBC.4756	Info	SCI-RBC IFUC 2.4.5 Provide route occupation status	The Connection Domain-UseCase "SCI-RBC IFUC 2.4.5 Provide route occupation status" defines that the Radio Block Centre informs the Subsystem - Electronic Interlocking when it issues an MA for a route and when a train that has received the MA reaches standstill or performs End-of-Mission.	007600 310901

















ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.6024	Def	<div><div>[Block] SCI-RBC [Functional Viewpoint - Interface Requirements - Functional Architecture]</div><div><div>ibb [Block] SCI-RBC [Functional Viewpoint - Interface Requirements - Functional Architecture]</div><div><div>«logical structural entity» SCI-RBC</div><div><div><div><div>«participant» {end = SCI-RBC} «logical structural entity» InLink : Subsystem - Electronic Interlocking</div><div><div>«functional entity» SCI-RBC EIL generic : S_SCI_Adj_Sec</div><div><div>t27out_Check_Prim_Status t25in_Prim_Status_Report_Complete p2inout : ~SCI_AdjS_Sec_Specific</div><div><div>p2inout : SCI_AdjS_Sec_Specific t25out_Prim_Status_Report_Complete t27in_Check_Prim_Status : PulsedIn</div><div><div>D40in_Con_007600 : Boolean D41in_Con_008000 : Boolean</div><div><div>SCI-RBC EIL : S_SCI_RBC_Sec</div><div><div>D42in_Con_008200 : Boolean D43in_Con_008201 : Boolean D44in_Con_310900 : Boolean D45in_Con_999900 : Boolean D46in_Con_310901 : Boolean</div><div><div>t206out_Start_Sec_Status_Report : PulsedOut t207out_Check_Prim_Status_Report : PulsedOut t224in_Sec_Status_Report_Complete : PulsedIn t225in_Prim_Status_Report_Complete : PulsedIn</div><div><div>p101inout : ~SCI_RBC_Messages p102inout : ~SCI_RBC_Commands</div><div><div>p101inout : SCI_RBC_Messages p102inout : SCI_RBC_Commands</div><div><div>t207in_Check_Prim_Status_Report : PulsedIn t206in_Start_Sec_Status_Report : PulsedIn</div><div><div>SCI-RBC EIL National : S_SCI_RBC_Sec_National</div><div><div>t225in_Prim_Status_Report_Complete : PulsedIn t224in_Sec_Status_Report_Complete : PulsedIn</div></div></div></div></div></div><div><div>«participant» {end = SCI-RBC} «environmental structural entity» InLink : Radio Block Centre</div><div><div>«functional entity» SCI-RBC RBC generic : S_SCI_Adj_Prim</div><div><div>p2inout : ~SCI_AdjS_Prim_Specific P1inout : ~PDI_GEN_ADJ t25in_Sec_Status_Report_Complete t27out_Check_Sec_Status</div><div><div>p2inout : SCI_AdjS_Prim_Specific P105inout : ~SCI_RBC_Messages t27in_Check_Sec_Status : PulsedIn t25out_Sec_Status_Report_Complete : PulsedOut</div><div><div>D40in_Con_007600 : Boolean D41in_Con_008000 : Boolean</div><div><div>SCI-RBC RBC : S_SCI_RBC_Prim</div><div><div>D42in_Con_008200 : Boolean D43in_Con_008201 : Boolean D44in_Con_310900 : Boolean D45in_Con_999900 : Boolean D46in_Con_310901 : Boolean</div><div><div>t126out_Start_Prim_Status_Report : PulsedOut t125in_Sec_Status_Report_Complete : PulsedIn t124in_Prim_Status_Report_Complete : PulsedIn t127out_Check_Received_Status : PulsedOut</div><div><div>p103inout : SCI_RBC_Messages p104inout : SCI_RBC_Commands</div><div><div>p103inout : ~SCI_RBC_Messages p104inout : ~SCI_RBC_Commands</div><div><div>d127in_Check_Received_Status : PulsedIn</div><div><div>t125out_Sec_Status_Report_Complete : PulsedOut SCI-RBC RBC National : S_SCI_RBC_Prim_National t124out_Prim_Status_Report_Complete : PulsedOut</div><div><div>t126in_Start_Prim_Status_Report : PulsedIn</div></div></div></div></div></div></div><div><div>EIL2 : SCI_RBC_EIL</div><div>RBC1 : SCI_RBC_RBC</div><div><div>P1inout : ~PDI_GEN_ADJ P1inout : PDI_GEN_ADJ</div><div><div>P105inout : ~SCI_RBC_Messages P105inout : SCI_RBC_Messages</div><div><div>P106inout : ~SCI_RBC_Commands P106inout : SCI_RBC_Commands</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>		Default
Eu.RBC.6046	Head	3.3.4 SCI-RBC - Functional Entities		Default
Eu.RBC.4918	Info	S_SCI_RBC_Prim	The logical component S_SCI_RBC_Prim represents the EULYNX specific part of the interface.	-

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5402	Req	<div>[Block] S_SCI_RBC_Prim [Functional Viewpoint - Interface Requirements - Functional Entity]</div> <div><div>ibdd [Block] S_SCI_RBC_Prim [Functional Viewpoint - Interface Requirements - Functional Entity]</div><div><div><div>«functional entity» S_SCI_RBC_Prim</div><div><div><div>p2inout : SCI_AdjS_Prim_Specific</div><div><div><div>D40in_Con_007600 : Boolean</div><div>D41in_Con_008000 : Boolean</div><div>D42in_Con_008200 : Boolean</div><div>D43in_Con_008201 : Boolean</div><div>D44in_Con_310900 : Boolean</div><div>D46in_Con_310901 : Boolean</div><div>D45in_Con_999900 : Boolean</div><div>t27in_Check_Sec_Status : PulsedIn</div><div>t124in_Prim_Status_Report_Complete : PulsedIn</div><div>t125in_Sec_Status_Report_Complete : PulsedIn</div></div><div><div>p103inout : SCI_RBC_Messages</div><div>p104inout : SCI_RBC_Commands</div><div>P105inout : ~SCI_RBC_Messages</div><div>P106inout : ~SCI_RBC_Commands</div><div>t127out_Check_Received_Status : PulsedOut</div><div>t25out_Sec_Status_Report_Complete : PulsedOut</div><div>t126out_Start_Prim_Status_Report : PulsedOut</div></div></div></div></div></div></div></div>	Diagram "[Block] S_SCI_RBC_Prim [Functional Viewpoint - Interface Requirements - Functional Entity]" shows the FLOWPorts of S_SCI_RBC_Prim connecting to S_SCI_AdjS_Prim and used for IM configuration.	-
Eu.RBC.6009	Def	p103inout		-
Eu.RBC.6010	Def	p104inout		-
Eu.RBC.6011	Def	P105inout	The port P105inout exchanges information objects according to SCI_RBC_Messages.	-
Eu.RBC.6012	Def	P106inout	The port P106inout exchanges information objects according to SCI_RBC_Commands.	-
Eu.RBC.6047	Def	p2inout		-
Eu.RBC.5431	Def	t27in_Check_Sec_Status	The port t27in_Check_Sec_Status signals that S_SCI_AdjS_Prim has received status messages during RECEIVING_SEC_STATUS that need to be processed during CHECKING_SEC_STATUS.	-
Eu.RBC.5492	Def	t124in_Prim_Status_Report_Complete	The port t124in_Prim_Status_Report_Complete represents the internal event that all relevant status messages have been sent during SENDING_PRIM_STATUS_REPORT.	-
Eu.RBC.5427	Def	t125in_Sec_Status_Report_Complete	The port t125in_Sec_Status_Report_Complete represents the internal event that all received status messages have been processed during CHECKING_SEC_STATUS.	-
Eu.RBC.6097	Def	t126out_Start_Prim_Status_Report	The port t127out_Check_Received_Status represents the internal command to start processing the recieved status report.	-
Eu.RBC.6098	Def	t25out_Sec_Status_Report_Complete	The port t127out_Check_Received_Status represents the internal command to start processing the recieved status report.	-
Eu.RBC.5428	Def	t127out_Check_Received_Status	The port t127out_Check_Received_Status represents the internal command to start processing the recieved status report.	-
Eu.RBC.4919	Def	D40in_Con_007600	The port D40in_Con_007600 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 007600.	-
Eu.RBC.4920	Def	D41in_Con_008000	The port D41in_Con_008000 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008000.	-
Eu.RBC.5482	Def	D42in_Con_008200	The port D42in_Con_008200 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008200.	-
Eu.RBC.5481	Def	D43in_Con_008201	The port D43in_Con_008201 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008201.	-
Eu.RBC.5483	Def	D44in_Con_310900	The port D44in_Con_310900 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 310900.	-

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5058	Def	D45in_Con_999900	The port D45in_Con_999900 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 999900.	-
Eu.RBC.5566	Def	D46in_Con_310901	The port D46in_Con_310901 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 310901.	-
Eu.RBC.4922	Info	S_SCI_RBC_Prim - Behaviour		-
Eu.RBC.4923	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 1<div>stm [State Machine] S_SCI_RBC_Prim - Behaviour [Functional Viewpoint - Interface Requirements - Functional Entity STD 1]</div><pre>stateDiagram-v2     [*] --&gt; INTERFACE_CLOSED : Initial0     INTERFACE_CLOSED --&gt; INTERFACE_OPEN : Establishing_PDI_Connection/     INTERFACE_OPEN --&gt; INTERFACE_CLOSED : PDI_Connection_Closed/     state INTERFACE_OPEN {         [*] --&gt; REPORTING_STATUS : Initial1         REPORTING_STATUS --&gt; PDI_CONNECTION_ESTABLISHED : PDI_Connection_Established/         state PDI_CONNECTION_ESTABLISHED {             state RECEIVING_MESSAGES {                 [*] --&gt; RECEIVING : Initial2             }             state SENDING_MESSAGES {                 [*] --&gt; SENDING : Initial3             }         }     }     PDI_CONNECTION_ESTABLISHED --&gt; REPORTING_STATUS</pre></div>	<div>This state machine diagram describes the requirements for the following functionalities:</div> <div>- frame for setting up the interface from RBC perspective</div> <div>- frame for receiving and sending messages for the status report from RBC perspective</div> <div>- frame for receiving and sending messages while PDI connction is established from RBC perspective</div>	-
Eu.RBC.5012	Def	Initial0		-
Eu.RBC.5013	Def	/{Initial0 - INTERFACE_CLOSED}		-
Eu.RBC.5014	Def	INTERFACE_CLOSED		-
Eu.RBC.5015	Def	Establishing_PDI_Connection/{INTERFACE_CLOSED - INTERFACE_OPEN}		-
Eu.RBC.5016	Def	INTERFACE_OPEN		-
Eu.RBC.5017	Def	Initial1		-
Eu.RBC.5018	Def	/{Initial1 - REPORTING_STATUS}		-
Eu.RBC.5363	Def	REPORTING_STATUS		-



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5367	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 1.1</div> <div>stm [Atomic State] REPORTING_STATUS [Functional Viewpoint - Interface Requirements - Functional Entity STD 1.1]</div> <div><pre>stateDiagram-v2     [*] --&gt; Initial4     Initial4 --&gt; RECEIVING_SEC_STATUS_REPORT     state RECEIVING_SEC_STATUS_REPORT {         Msg_Signal_Status/ send Msg_Signal_Status to p103inout;         Msg_Point_Status/ send Msg_Point_Status to p103inout;         Msg_TVP_Status/ send Msg_TVP_Section_Status to p103inout;         Msg_LX_Status/ send Msg_LX_Status to p103inout;         Msg_IO_Element_Status/ send Msg_IO_Element_Status to p103inout;         Msg_Route_Status[D45in_Con_999900]/ send Msg_Route_Status to p103inout;         Msg_ESA_Status[D40in_Con_007600]/ send Msg_ESA_Status to p103inout;         Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/ send Msg_LSA_Status to p103inout;         Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/ send Msg_WA_Status to p103inout;     }     RECEIVING_SEC_STATUS_REPORT --&gt; CHECKING_SEC_STATUS_REPORT : when( t27in_Check_Sec_Status ) /     state CHECKING_SEC_STATUS_REPORT {         Entry/ t127out_Check_Received_Status := TRUE;     }     CHECKING_SEC_STATUS_REPORT --&gt; WAITING_FOR_PRIM_STATUS_REPORT : when( t125in_Sec_Status_Report_Complete ) / t25out_Sec_Status_Report_Complete := TRUE;     state WAITING_FOR_PRIM_STATUS_REPORT {}     WAITING_FOR_PRIM_STATUS_REPORT --&gt; SENDING_PRIM_STATUS_REPORT : Start_Primary_Status_Report/ t126out_Start_Primary_Status_Report := TRUE;     state SENDING_PRIM_STATUS_REPORT {         Msg_BG_Status[D42in_Con_008200 OR D43in_Con_008201 OR D44in_Con_310900]/ send Msg_BG_Status to P105inout;     }     SENDING_PRIM_STATUS_REPORT --&gt; [*] : when( t124in_Primary_Status_Report_Complete ) / send Primary_Status_Report_Completed to p2inout;</pre></div>	<p>This state machine diagram describes the requirements for the following functionalities:</p> <ul style="list-style-type: none"><li>- receive the status messages from the Subsystem - Electronic Interlocking for the status report</li><li>- check the received the status report</li><li>- send the status messages to the Subsystem - Electronic Interlocking for the status report</li></ul>	-
Eu.RBC.5364	Def	Initial4		-
Eu.RBC.5365	Def	/{Initial4 - RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5029	Def	RECEIVING_SEC_STATUS_REPORT		-
Eu.RBC.5254	Def	Msg_Signal_Status/send Msg_Signal_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5255	Def	Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5256	Def	Msg_Point_Status/send Msg_Point_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5257	Def	Msg_TVP_Status/send Msg_TVP_Section_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5258	Def	Msg_LX_Status/send Msg_LX_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5259	Def	Msg_IO_Element_Status/send Msg_IO_Element_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5261	Def	Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5262	Def	Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5263	Def	Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to p103inout;{State-internal in RECEIVING_SEC_STATUS_REPORT}		-
Eu.RBC.5441	Def	when(t27in_Check_Sec_Status)/{RECEIVING_SEC_STATUS_REPORT - CHECKING_SEC_STATUS_REPORT}		-
Eu.RBC.5030	Def	PDI_Connection_Established/{REPORTING_STATUS - PDI_CONNECTION_ESTABLISHED}		-
Eu.RBC.5438	Def	CHECKING_SEC_STATUS_REPORT		-
Eu.RBC.5439	Def	when(t125in_Sec_Status_Report_Complete)/ t25out_Sec_Status_Report_Complete := TRUE;{CHECKING_SEC_STATUS_REPORT - WAITING_FOR_PRIM_STATUS_REPORT}		-
Eu.RBC.5457	Def	entry/t127out_Check_Received_Status := TRUE;{State-internal in CHECKING_SEC_STATUS_REPORT}		-
Eu.RBC.5440	Def	Final		-
Eu.RBC.5442	Def	WAITING_FOR_PRIM_STATUS_REPORT		-



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5443	Def	Start_Prim_Status_Report/ t126out_Start_Prim_Status_Report := TRUE;{WAITING_FOR_PRIM_STATUS_REPORT - SENDING_PRIM_STATUS_REPORT}		-
Eu.RBC.5490	Def	SENDING_PRIM_STATUS_REPORT		-
Eu.RBC.5491	Def	when(t124in_Prim_Status_Report_Complete)/ send Prim_Status_Report_Completed to p2inout;{SENDING_PRIM_STATUS_REPORT - Final}		-
Eu.RBC.5527	Def	Msg_BG_Status[D42in_Con_008200 OR D43in_Con_008201 OR D44in_Con_310900]/send Msg_BG_Status to P105inout;{State-internal in SENDING_PRIM_STATUS_REPORT}		-
Eu.RBC.5019	Def	PDI_CONNECTION_ESTABLISHED		-
Eu.RBC.5020	Def	RECEIVING_MESSAGES		-
Eu.RBC.5021	Def	Initial2		-
Eu.RBC.5022	Def	/{Initial2 - RECEIVING}		-
Eu.RBC.5355	Def	RECEIVING		-
Eu.RBC.5358	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 1.2</div> <div>strn [Atomic State] RECEIVING [Functional Viewpoint - Interface Requirements - Functional Entity STD 1.2]</div> <div><p>The diagram shows a state machine for the 'RECEIVING_MESSAGES' state. It starts with an initial state 'Initial5' leading to the 'RECEIVING_MESSAGES' state. The state contains a list of messages to be sent to p103inout and p104inout, including Msg_Signal_Status, Msg_Point_Status, Msg_TVP_Status, Msg_LX_Status, Msg_IO_Element_Status, Msg_Group_Failure, Msg_Route_Status, Cd_Signal_Cancelling, Cd_Route_Cancelling, Msg_ESA_Status, Msg_LSA_status, Msg_WA_Status, and Cd_Preset_Signal_BG.</p></div>	<div>This state machine diagram describes the requirements for the following functionalities:</div> <div>- receive the status messages from the Subsystem - Electronic Interlocking while PDI connction is established</div>	-
Eu.RBC.5356	Def	Initial5		-
Eu.RBC.5357	Def	/{Initial5 - RECEIVING_MESSAGES}		-
Eu.RBC.5023	Def	RECEIVING_MESSAGES		-
Eu.RBC.5230	Def	Msg_Signal_Status/send Msg_Signal_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5231	Def	Cd_Route_Cancelling[D45in_Con_999900]/send Cd_Route_Cancelling to p104inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5232	Def	Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5233	Def	Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5234	Def	Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5235	Def	Msg_Point_Status/send Msg_Point_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5236	Def	Msg_TVP_Status/send Msg_TVP_Section_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5237	Def	Msg_LX_Status/send Msg_LX_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5238	Def	Msg_IO_Element_Status/send Msg_IO_Element_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5239	Def	Msg_Group_Failure[D40in_Con_007600 OR D41in_Con_008000 OR D45in_Con_999900]/send Msg_Group_Failure to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5241	Def	Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to p103inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5242	Def	Cd_Signal_Cancelling[D40in_Con_007600 OR D46in_Con_310901]/send Cd_Signal_Cancelling to p104inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5524	Def	Cd_Preset_Signal_BG[D43in_Con_008201]/send Cd_Preset_Signal_BG to p104inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5025	Def	SENDING_MESSAGES		-
Eu.RBC.5026	Def	Initial3		-
Eu.RBC.5027	Def	/{Initial3 - SENDING}		-
Eu.RBC.5359	Def	SENDING		-



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5425	Def	t125out_Sec_Status_Report_Complete	The port t125out_Sec_Status_Report_Complete represents the internal event that all received status messages have been processed during CHECKING_SEC_STATUS_REPORT.	-
Eu.RBC.5426	Def	d127in_Check_Received_Status	The port d127in_Check_Received_Status represents the internal command to start processing the recieved status report.	-
Eu.RBC.6014	Def	p103inout		-
Eu.RBC.6015	Def	p104inout		-
Eu.RBC.6099	Def	t126in_Start_Prim_Status_Report	The port d127in_Check_Received_Status represents the internal command to start processing the recieved status report.	-
Eu.RBC.4963	Info	S_SCI_RBC_Sec	The logical component S_SCI_RBC_Sec represents the EULYNX specific part of the interface.	-
Eu.RBC.5409	Req	<div><div>[Block] S_SCI_RBC_Sec [Functional Viewpoint - Interface Requirements - Functional Entity]</div><div><div><div>ibdd [Block] S_SCI_RBC_Sec [Functional Viewpoint - Interface Requirements - Functional Entity]</div><div><div><div>«functional entity» S_SCI_RBC_Sec</div><div><div><div><div>p2inout : SCI_AdjS_Sec_Specific</div><div>p101inout : ~SCI_RBC_Messages</div><div>p102inout : ~SCI_RBC_Commands</div><div>t25out_Prim_Status_Report_Complete</div><div>P105inout : SCI_RBC_Messages</div><div>P106inout : SCI_RBC_Commands</div><div>t206out_Start_Sec_Status_Report : PulsedOut</div><div>t207out_Check_Prim_Status_Report : PulsedOut</div><div>t27in_Check_Prim_Status : PulsedIn</div><div>t224in_Sec_Status_Report_Complete : PulsedIn</div><div>t225in_Prim_Status_Report_Complete : PulsedIn</div></div></div></div></div></div></div></div></div>	Diagram "[Block] S_SCI_RBC_Sec [Functional Viewpoint - Interface Requirements - Functional Entity]" shows the FLOWPorts of S_SCI_RBC_Sec connecting to S_SCI_AdjS_Sec and used for IM configuration.	-
Eu.RBC.6016	Def	p101inout		-
Eu.RBC.6017	Def	p102inout		-
Eu.RBC.6018	Def	P105inout	The port P105inout exchanges information objects according to SCI_RBC_Messages.	-
Eu.RBC.6019	Def	P106inout	The port P106inout exchanges information objects according to SCI_RBC_Commands.	-
Eu.RBC.6048	Def	p2inout		-
Eu.RBC.5435	Def	t25out_Prim_Status_Report_Complete	The port t25out_Prim_Status_Report_Complete signals to S_SCI_AdjS_Sec that the transmission of status messages during SENDING_SEC_STATUS is complete.	-
Eu.RBC.5436	Def	t27in_Check_Prim_Status	The port t27in_Check_Prim_Status signals that S_SCI_AdjS_Sec has received status messages during RECEIVING_PRIM_STATUS that need to be processed during CHECKING_PRIM_STATUS.	-
Eu.RBC.4971	Def	t224in_Sec_Status_Report_Complete	The port t224in_Sec_Status_Report_Complete represents the internal event that all relevant status messages have been sent during SENDING_SEC_STATUS.	-
Eu.RBC.5517	Def	t225in_Prim_Status_Report_Complete	The port t225in_Prim_Status_Report_Complete represents the internal event that all received status messages have been processed during CHECKING_PRIM_STATUS_REPORT.	-
Eu.RBC.6100	Def	t206out_Start_Sec_Status_Report	The port t25out_Prim_Status_Report_Complete signals to S_SCI_AdjS_Sec that the transmission of status messages during SENDING_SEC_STATUS is complete.	-
Eu.RBC.6101	Def	t207out_Check_Prim_Status_Report	The port t25out_Prim_Status_Report_Complete signals to S_SCI_AdjS_Sec that the transmission of status messages during SENDING_SEC_STATUS is complete.	-

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.4964	Def	D40in_Con_007600	The port D40in_Con_007600 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 007600.	-
Eu.RBC.4965	Def	D41in_Con_008000	The port D41in_Con_008000 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008000.	-
Eu.RBC.5506	Def	D42in_Con_008200	The port D42in_Con_008200 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008200.	-
Eu.RBC.5507	Def	D43in_Con_008201	The port D43in_Con_008201 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 008201.	-
Eu.RBC.5508	Def	D44in_Con_310900	The port D44in_Con_310900 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 310900.	-
Eu.RBC.5567	Def	D46in_Con_310901	The port D46in_Con_310901 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 310901.	-
Eu.RBC.5117	Def	D45in_Con_999900	The port D45in_Con_999900 provides the configuration value whether the Radio Block Centre is configured for the infrastructure manager 999900.	-
Eu.RBC.4967	Info	S_SCI_RBC_Sec - Behaviour		-
Eu.RBC.4968	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 2</div> <div>stm [State Machine] S_SCI_RBC_Sec - Behaviour [Functional Viewpoint - Interface Requirements - Functional Entity STD 2]</div> <div><p>The diagram is a state machine for S_SCI_RBC_Sec - Behaviour. It starts with an initial state 'Initial0' leading to a state 'INTERFACE_CLOSED'. From 'INTERFACE_CLOSED', a transition 'Establishing_PDI_Connection/' leads to a state 'INTERFACE_OPEN'. From 'INTERFACE_OPEN', a transition 'PDI_Connection_Closed/' leads back to 'INTERFACE_CLOSED'. Inside 'INTERFACE_OPEN', there is a state 'REPORTING_STATUS' with an initial state 'Initial1'. From 'REPORTING_STATUS', a transition 'PDI_Connection_Established/' leads to a state 'PDI_CONNECTION_ESTABLISHED'. Inside 'PDI_CONNECTION_ESTABLISHED', there are two parallel regions: 'Send_Messages' and 'Receive_Messages'. 'Send_Messages' has an initial state 'Initial2' leading to a state 'SENDING'. 'Receive_Messages' has an initial state 'Initial3' leading to a state 'RECEIVING'. Both 'SENDING' and 'RECEIVING' states have two small circles next to them, indicating they are final states.</p></div>	<p>This state machine diagram describes the requirements for the following functionalities:</p> <ul style="list-style-type: none"><li>- frame for setting up the interface from EIL perspective</li><li>- frame for receiving and sending messages for the status report from EIL perspective</li><li>- frame for receiving and sending messages while PDI connction is established from EIL perspective</li></ul>	-
Eu.RBC.5033	Def	Initial0		-
Eu.RBC.5034	Def	/{Initial0 - INTERFACE_CLOSED}		-
Eu.RBC.5035	Def	INTERFACE_CLOSED		-
Eu.RBC.5036	Def	Establishing_PDI_Connection/{INTERFACE_CLOSED - INTERFACE_OPEN}		-
Eu.RBC.5037	Def	INTERFACE_OPEN		-
Eu.RBC.5038	Def	Initial1		-



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5039	Def	/{Initial1 - REPORTING_STATUS}		-
Eu.RBC.5376	Def	REPORTING_STATUS		-
Eu.RBC.5380	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 2.1</div> <div>stm [Atomic State] REPORTING_STATUS [Functional Viewpoint - Interface Requirements - Functional Entity STD 2.1]</div> <div><p>The diagram shows a state machine for REPORTING_STATUS. It starts at an initial state 'Initial4' and transitions to 'WAITING_FOR_SEC_STATUS_REPORT' on the event 'Start_Sec_Status_Report/' with guard 't206out_Start_Sec_Status_Report := TRUE;'. From there, it enters a state 'SENDING_SEC_STATUS_REPORT' which contains a block of send actions: 'Msg_Signal_Status/send Msg_Signal_Status to P105inout;', 'Msg_Point_Status/send Msg_Point_Status to P105inout;', 'Msg_TVP_Status/send Msg_TVP_Section_Status to P105inout;', 'Msg_LX_Status/send Msg_LX_Status to P105inout;', 'Msg_IO_Element_Status/send Msg_IO_Element_Status to P105inout;', 'Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to P105inout;', 'Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to P105inout;', 'Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to P105inout;', and 'Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to P105inout;'. After this block, it transitions to 'WAITING_FOR_PRIM_STATUS_REPORT' on the event 'when( t224in_Sec_Status_Report_Complete )/' with guard 'send Sec_Status_Report_Completed to p2inout;'. From there, it enters 'CHECKING_PRIM_STATUS_REPORT' on the event 'when( t27in_Check_Prim_Status )/' with guard 't207out_Check_Prim_Status_Report := TRUE;'. This state contains the action 'Msg_BG_Status[D42in_Con_008200 OR D43in_Con_008201 OR D44in_Con_310900]/send Msg_BG_Status to p101inout;'. Finally, it transitions to a final state on the event 'when( t225in_Prim_Status_Report_Complete )/' with guard 't25out_Prim_Status_Report_Complete := TRUE;'.</p></div>	<div>This state machine diagram describes the requirements for the following functionalities:</div> <div><ul style="list-style-type: none"><li>- send the status messages to the Radio Block Centre for the status report</li><li>- receive the status messages from the Radio Block Centre for the status report</li><li>- check the received status report</li></ul></div>	-
Eu.RBC.5378	Def	Initial4		-
Eu.RBC.5386	Def	/{Initial4 - WAITING_FOR_SEC_STATUS_REPORT}		-
Eu.RBC.5387	Def	WAITING_FOR_SEC_STATUS_REPORT		-
Eu.RBC.5379	Def	Start_Sec_Status_Report/ t206out_Start_Sec_Status_Report := TRUE;{WAITING_FOR_SEC_STATUS_REPORT - SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5052	Def	SENDING_SEC_STATUS_REPORT		-
Eu.RBC.5347	Def	Msg_Signal_Status/send Msg_Signal_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5348	Def	Msg_Point_Status/send Msg_Point_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5349	Def	Msg_TVP_Status/send Msg_TVP_Section_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5350	Def	Msg_LX_Status/send Msg_LX_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5351	Def	Msg_IO_Element_Status/send Msg_IO_Element_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5353	Def	Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5354	Def	Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5345	Def	Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5346	Def	Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to P105inout;{State-internal in SENDING_SEC_STATUS_REPORT}		-
Eu.RBC.5381	Def	when(t224in_Sec_Status_Report_Complete)/ send Sec_Status_Report_Completed to p2inout;{SENDING_SEC_STATUS_REPORT - WAITING_FOR_PRIM_STATUS_REPORT}		-
Eu.RBC.5377	Def	Final		-
Eu.RBC.5053	Def	PDI_Connection_Established/{REPORTING_STATUS - PDI_CONNECTION_ESTABLISHED}		-
Eu.RBC.5444	Def	WAITING_FOR_PRIM_STATUS_REPORT		-
Eu.RBC.5445	Def	when(t27in_Check_Prim_Status)/ t207out_Check_Prim_Status_Report := TRUE;{WAITING_FOR_PRIM_STATUS_REPORT - CHECKING_PRIM_STATUS_REPORT}		-
Eu.RBC.5515	Def	CHECKING_PRIM_STATUS_REPORT		-
Eu.RBC.5531	Def	Msg_BG_Status[D42in_Con_008200 OR D43in_Con_008201 OR D44in_Con_310900]/send Msg_BG_Status to p101inout;{State-internal in CHECKING_PRIM_STATUS_REPORT}		-

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5516	Def	when(t225in_Prim_Status_Report_Complete)/ t25out_Prim_Status_Report_Complete := TRUE;{CHECKING_PRIM_STATUS_REPORT - Final}		-
Eu.RBC.5040	Def	PDI_CONNECTION_ESTABLISHED		-
Eu.RBC.5047	Def	Send_Messages		-
Eu.RBC.5048	Def	Initial2		-
Eu.RBC.5049	Def	/{Initial2 - SENDING}		-
Eu.RBC.5372	Def	SENDING		-
Eu.RBC.5375	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 2.2</div> <div>stm [Atomic State] SENDING [Functional Viewpoint - Interface Requirements - Functional Entity STD 2.2]</div> <div><div>●</div><div>Initial5</div><div><div>SENDING_MESSAGES</div><div>Msg_Signal_Status/send Msg_Signal_Status to P105inout; Msg_Point_Status/send Msg_Point_Status to P105inout; Msg_TVP_Status/send Msg_TVP_Section_Status to P105inout; Msg_LX_Status/send Msg_LX_Status to P105inout; Msg_IO_Element_Status/send Msg_IO_Element_Status to P105inout; Msg_Group_Failure[D40in_Con_007600 OR D41in_Con_008000 OR D45in_Con_999900]/send Msg_Group_Failure to P105inout; Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to P105inout; Cd_Signal_Cancelling[D40in_Con_007600 OR D46in_Con_310901]/send Cd_Signal_Cancelling to P106inout; Cd_Route_Cancelling[D45in_Con_999900]/send Cd_Route_Cancelling to P106inout; Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to P105inout; Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to P105inout; Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to P105inout; Cd_Preset_Signal_BG[D43in_Con_008201]/send Cd_Preset_Signal_BG to P106inout;</div></div></div>	<div>This state machine diagram describes the requirements for the following functionalities:</div> <div>- send the status messages to the Subsystem - Electronic Interlocking while PDI connction is established</div>	-
Eu.RBC.5373	Def	Initial5		-
Eu.RBC.5374	Def	/{Initial5 - SENDING_MESSAGES}		-
Eu.RBC.5050	Def	SENDING_MESSAGES		-
Eu.RBC.5331	Def	Msg_Signal_Status/send Msg_Signal_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5336	Def	Msg_Point_Status/send Msg_Point_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5337	Def	Msg_TVP_Status/send Msg_TVP_Section_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5338	Def	Msg_LX_Status/send Msg_LX_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5339	Def	Msg_IO_Element_Status/send Msg_IO_Element_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5340	Def	Msg_Group_Failure[D40in_Con_007600 OR D41in_Con_008000 OR D45in_Con_999900]/send Msg_Group_Failure to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5342	Def	Msg_Route_Status[D45in_Con_999900]/send Msg_Route_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5343	Def	Cd_Signal_Cancelling[D40in_Con_007600 OR D46in_Con_310901]/send Cd_Signal_Cancelling to P106inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5332	Def	Cd_Route_Cancelling[D45in_Con_999900]/send Cd_Route_Cancelling to P106inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5333	Def	Msg_ESA_Status[D40in_Con_007600]/send Msg_ESA_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5334	Def	Msg_LSA_status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_LSA_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5335	Def	Msg_WA_Status[D40in_Con_007600 OR D46in_Con_310901]/send Msg_WA_Status to P105inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5530	Def	Cd_Preset_Signal_BG[D43in_Con_008201]/send Cd_Preset_Signal_BG to P106inout;{State-internal in SENDING_MESSAGES}		-
Eu.RBC.5041	Def	Receive_Messages		-
Eu.RBC.5042	Def	Initial3		-
Eu.RBC.5045	Def	/{Initial3 - RECEIVING}		-
Eu.RBC.5368	Def	RECEIVING		-

ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5371	Req	<div>Functional Viewpoint - Interface Requirements - Functional Entity STD 2.3</div> <div>stm [Atomic State] RECEIVING [Functional Viewpoint - Interface Requirements - Functional Entity STD 2.3]</div> <div></div>	<p>This state machine diagram describes the requirements for the following functionalities:</p> <p>- receive the status messages from the Subsystem - Electronic Interlocking while PDI connction is established</p>	-
Eu.RBC.5369	Def	Initial6		-
Eu.RBC.5370	Def	/{Initial6 - RECEIVING_MESSAGES}		-
Eu.RBC.5046	Def	RECEIVING_MESSAGES		-
Eu.RBC.5320	Def	Cd_LX_Control[D40in_Con_007600 OR D41in_Con_008000 OR D45in_Con_999900]/send Cd_LX_Control to p102inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5321	Def	Msg_Flank_Protection_Status[D41in_Con_008000 OR D46in_Con_310901]/send Msg_Flank_Protection_Status to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5323	Def	Cd_IO_Element_Control[D40in_Con_007600 OR D41in_Con_008000 OR D46in_Con_310901 OR D45in_Con_999900]/send Cd_IO_Element_Control to p102inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5324	Def	Cd_Signal_Control[D41in_Con_008000]/send Cd_Signal_Control to p102inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5325	Def	Cd_Route_Control[D45in_Con_999900]/send Cd_Route_Control to p102inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5326	Def	Cd_Signal_Overlap_Control[D41in_Con_008000 OR D46in_Con_310901]/send Cd_Signal_Overlap_Control to p102inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5327	Def	Msg_Signal_Occupation[D40in_Con_007600 OR D46in_Con_310901]/send Msg_Signal_Occupation to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5328	Def	Msg_Route_Occupation[D45in_Con_999900]/send Msg_Route_Occupation to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5329	Def	Msg_Signal_Cancelling_Reply[D40in_Con_007600 OR D46in_Con_310901]/send Msg_Signal_Cancelling_Reply to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5330	Def	Msg_Route_Cancelling_Reply[D45in_Con_999900]/send Msg_Route_Cancelling_Reply to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5322	Def	Msg_Train_Data[D41in_Con_008000]/send Msg_Train_Data to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5528	Def	Msg_BG_Status[D42in_Con_008200 OR D43in_Con_008201 OR D44in_Con_310900]/send Msg_BG_Status to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5529	Def	Msg_Preset_Signal_BG_Reply[D43in_Con_008201]/send Msg_Preset_Signal_BG_Reply to p101inout;{State-internal in RECEIVING_MESSAGES}		-
Eu.RBC.5054	Def	PDI_Connection_Closed/{INTERFACE_OPEN - INTERFACE_CLOSED}		-
Eu.RBC.5264	Info	S_SCI_RBC_Sec_National	The logical component S_SCI_RBC_Sec_National represents the IM specific part of the interface. It complements the logical component S_SCI_RBC_Sec and shall be defined by national requirements.	-
Eu.RBC.6020	Req	<div>[Block] S_SCI_RBC_Sec_National [Functional Viewpoint - Interface Requirements - Functional Entity]</div> <div>ibd [Block] S_SCI_RBC_Sec_National [Functional Viewpoint - Interface Requirements - Functional Entity]</div> <div></div>		-
Eu.RBC.5433	Def	t206in_Start_Sec_Status_Report	The port t206in_Start_Sec_Status_Report represents the internal command to start sending the status report.	-



ID	Type	Requirement Part 1	Requirement Part 2	Appl.
Eu.RBC.5295	Def	t224in_Sec_Status_Report_Complete	The port t224in_Sec_Status_Report_Complete represents the internal event that all relevant status messages have been sent during SENDING_SEC_STATUS.	-
Eu.RBC.5502	Def	t225in_Prim_Status_Report_Complete	The port t225in_Prim_Status_Report_Complete represents the internal event that all received status messages have been processed during CHECKING_PRIM_STATUS_REPORT.	-
Eu.RBC.6021	Def	p101inout		-
Eu.RBC.6022	Def	p102inout		-
Eu.RBC.6102	Def	t207in_Check_Prim_Status_Report	The port t206in_Start_Sec_Status_Report represents the internal command to start sending the status report.	-