

# System Concept\_TCCS-Catalogue of Symbols

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### 1.1 Introduction

The issue of the different visualization implementations of railway industry systems leads to problems with training time as well as tool development. Across Europe, several stakeholders have a great interest in visualizing and monitoring railway operations, which involve tracks, assets, and more. The railway industry has common assets and operational concepts across Europe due to its historical development and the exchange of concepts over the years. However, few efforts have been directed toward standardizing the visual representation of these concepts. The neglect of these efforts leads to isolated visualization standards and, consequently, the duplication of development and training efforts for the implementation and usage of these standards.

### 1.2 Purpose

This document addresses the goal of standardizing the visualization of different users in the railway industry with varying interests. As the unification of vocabulary progresses, the goal is to base the visualization on a single source of truth for the vocabulary concept. The ERA Ontology currently offers a growing number of concepts for the railway industry, and based on it, different data models are being developed to serve various use cases. One of these data models is CCSTMS, which is entirely based on ERA terminologies and targets use cases such as ETCS L2 automated engineering, ATO segment profile generation, Balise telegram generation, route compatibility checks, and more. The Catalogue of Symbols is built on CCSTMS and, accordingly, the ERA Ontology.

### 1.3 Approach

The Catalogue of Symbols approach is to expand per domain through the continuous development of visualization concepts based on user contributions and needs. As the ERA Ontology, is flexible to expand, a back-propagation approach can be applied upon request. Document updates can be based on the following figure. This approach ensures that standardization concepts remain clear and based on standardized terminologies.

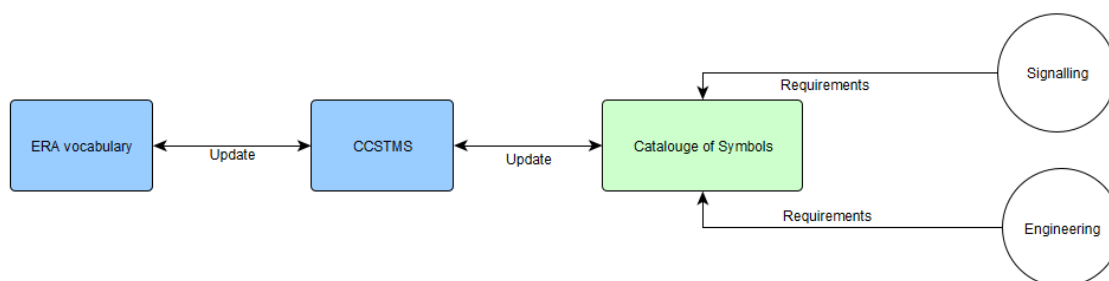


Figure 1 Catalogue of Symbols current development approach



Figure 2 Sample Information link across elements for Switch

## 1.4 How to use

The Catalogue of Symbols addresses not only the standardization of the visual aspects of assets but also their dynamic operations, if applicable. Hence, the Catalogue of Symbols is not only linked to object names but also to their properties and values. A sample use case is the signaling operation screen, where assets change colors and shapes according to their states. The Catalogue of Symbols document can be considered the user-interface end use, but it is linked to other documents that ensure the required visualization. These artifacts include:

- CCSTMS data file (XML, JSON) for topological and geometrical aspects of tracks and asset locations.
- SCI-CMD (XML, JSON), which provides a standard communication specification between different systems and assets.
- CCSTMS-UI extension for visualization.

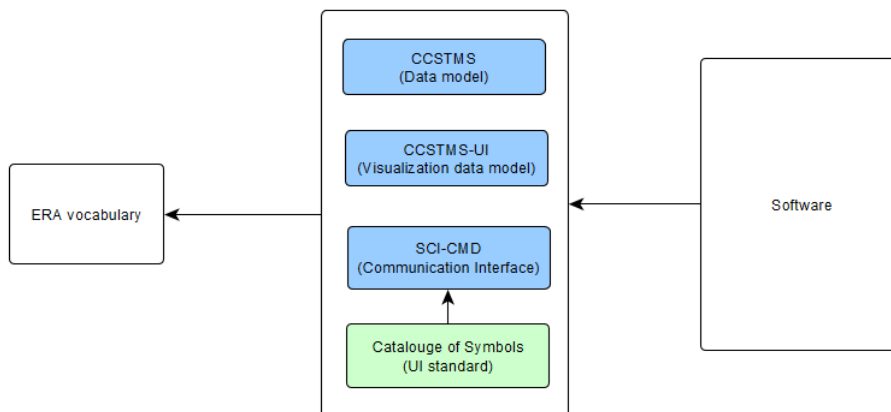


Figure 3 CCSTMS and Catalogue of Symbols as middleware

The product development approach requires the integration of CCSTMS in any required available format, as well as the UI extension. Both serve as configuration files for the visualization system, providing infrastructure information and an initial foundation for visualization. The CCSTMS-UI extension is linked to the Catalogue of Symbols through Id references, where the Catalogue of Symbols offers direct mapping between ERA Ontology information and visualization aspects.

The following figure illustrates the levels of information required to achieve the visualization goal:

- CCSTMS provides base infrastructure information, including topology and geometry, stored in a map subset.
- CCSTMS-UI adds higher-level information regarding the status of elements by offering styling information and visualizing linear-based CCSTMS elements.
- CCSTMS-UI extension references the Catalogue of Symbols SVG library, which includes point objects.

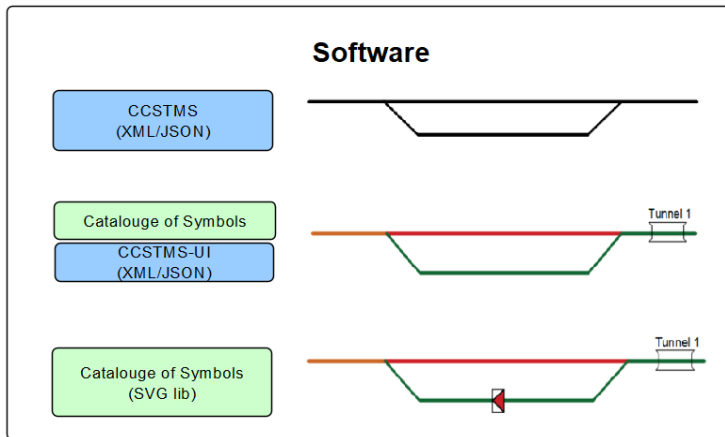


Figure 4 Figure Visualization levels using CCSTMS and Catalogue of Symbols

The Catalogue of Symbols could be used by different users to achieve their visualization goals. An example use case is monitoring the states of different elements in the field by interfacing with a desired system that uses SCI-CMD as a communication messaging standard. With knowledge of the communicated telegram content and the help of the Catalogue, the states of elements would be updated by mapping the telegram content to the Catalogue of Symbols. Figure 5 provides insights into how this process works. The operation screen use case is further illustrated in Figure 6, where domain-specific information, such as Signaling or Engineering, can be adapted by implementing different views with different CCSTMS Map data.

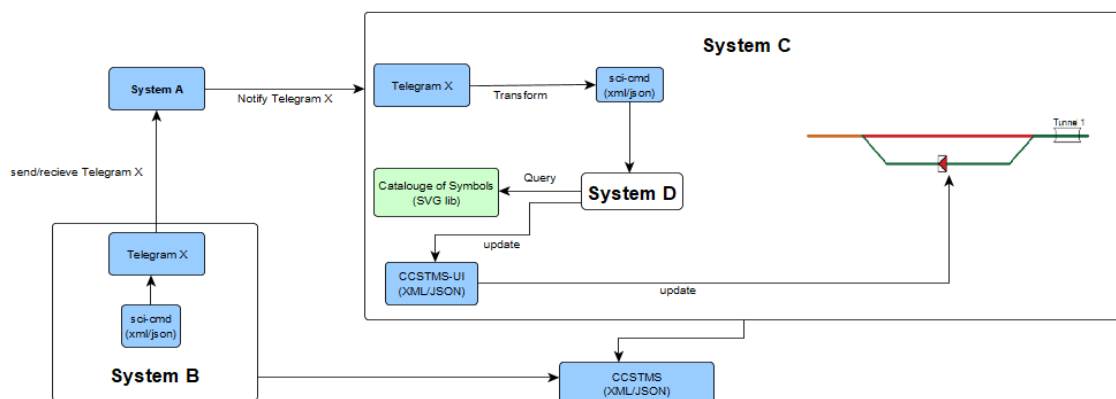
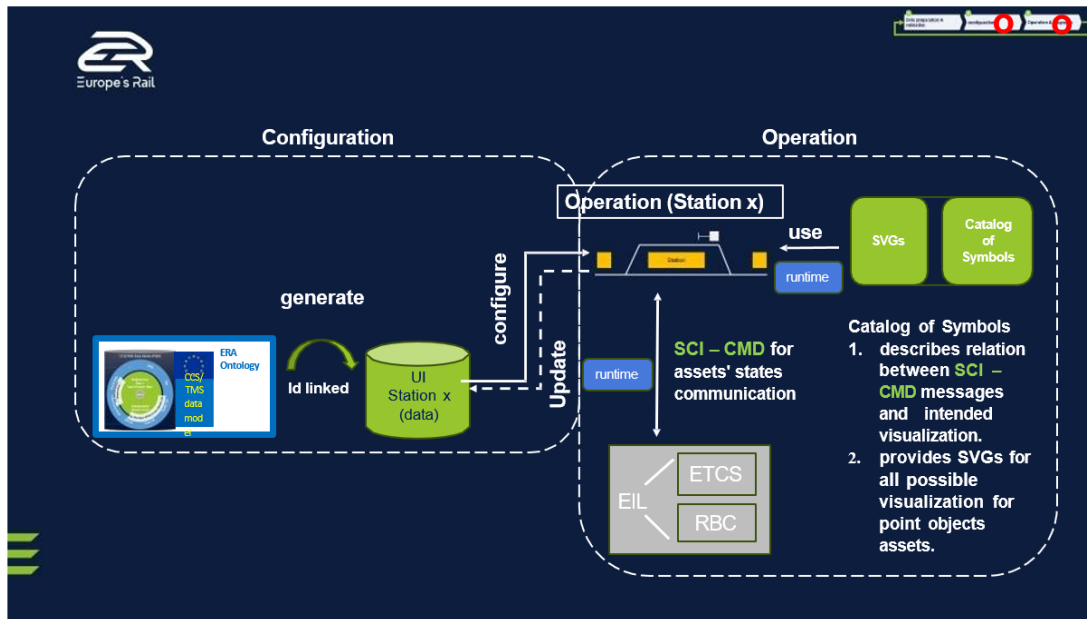


Figure 5 Catalogue of Symbols integration in a visualization system



1.4.1 Figure # Sample use-case for Operation

Variable	Description
!=	Not Equal to
&&	AND
	OR
<	Less than
<=	Less than or equal to
'==	Equal to
>	Greater than
>=	Greater than or equal to
A29_PROCEDURE_STATUS	Status information for procedure A29 in the ETCS system.
A41_PROCEDURE_STATUS	Status information for procedure A41 in the ETCS system.
A5_PROCEDURE_STATUS	Status information for procedure A5 in the ETCS system.
A6_PROCEDURE_STATUS	Status information for procedure A6 in the ETCS system.
ABOVE	Vertical offset direction - Up
ACCEPTED	A status flag indicating the value was approved or received.
ACCEPTED_DATA_VALUE	indicating the system-approved data value.

Variable	Description
acknowledge	action to confirm receipt or recognition of value
ACKNOWLEDGEMENT_ERTMS_ETCS_LEVEL_ANNOUNCEMENT	Ertms Etcs Level Announcement driver acknowledgement
activate	to enable or turn something on.
ACTIVE	Condition is active
ACTIVE_INPUT_FIELD	Represents if only one input field is active and presented
AD	Application Down
ADHESION_BUTTON_PRESSED	Indicates whether the adhesion button has been pressed
ADHESION_ENTRY_COMPLETE	Indicates whether the adhesion entry process has been completed successfully in the system.
ADHESION_MODIFICATION_PERMISSION	Denotes whether the system allows modifications to the adhesion settings.
ADHESION_ST02	Refers to a specific adhesion status identified by the code ST02 within the system.
ADHESION_STATUS	Indicates whether the driver is allowed to modify the adhesion setting.
ADHESION_WINDOW	Refers to the adhesion window object of the currently active sub-window.
ALIGNMENT	Refers to the proper alignment of the UI components within the system for correct display and interaction.
ALL_BUTTONS	Refers to a state where all relevant buttons in the system have been interacted with.
ALL_INPUT_FIELDS_HAVE_DATA	Checks whether all the input fields in the system or user interface have been filled with valid data.
ALPHA_NUMERIC	Refers to a variable that checks or accepts alphanumeric characters (letters and numbers) for input validation.
ANSWER_PART	Object(answer part)
ANY_KEY	Represents any key pressed on the system's input interface.
ATO	Refers to the Automatic Train Operation system responsible for automating train driving tasks.
ATO_BUTTON	Represents the button used to activate the Automatic Train Operation (ATO) system.

Variable	Description
ATO_INFORMATION_POSITION	Indicates the position of information relevant to the ATO system.
ATO_SELECTOR	Refers to a selector switch used to choose the operational mode of the Automatic Train Operation (ATO) system.
ATO_SELECTOR_WINDOW	determines the operational mode of the Automatic Train Operation (ATO) system
ATO_WINDOW	Refers to the Automatic Train Operation (ATO) window object of the currently active sub-window.
ATO03_DISPLAY	Refers to the specific display for ATO mode 03 within the system, showing operational information for this mode.
ATO04_DISPLAY	Represents the display for ATO mode 04, showing the status or information specific to this mode.
ATO17_DISPLAY	Refers to the display for ATO mode 17, providing details on the operational status in this mode.
ATO19_DISPLAY	Indicates the display showing status or information for ATO mode 19.
AUTOMATED_DRIVING_MODE	variable representing whether the automatic driving mode is active
AVAILABLE	Status flag indicating the value is ready for use.
AVAILABLE_GSMR_NETWORK_LIST	Represents the list of GSM-R networks detected and available for selection.
BACKGROUND	The visual or functional layer behind the main content of an application.
BACKGROUND_COLOUR	Background colour of the display
BAR	A display style representing speed as a bar
BELOW	Vertical offset direction - Down
BELOW_INPUT_FIELD	Position indicator to place content beneath the input field.
BELOW_INPUT_FIELD_3	half grid array
BELOW_INPUT_FIELD_4	total grid array
BLACK	Style indicator to set the color of an element to black.
BMM_REACTION_INHIBITION_BUTTON	A control used to input or activate the BMM (Brake Management Mode) reaction inhibition function
BMM_INHIBITION_BUTTON_PRESSED	Status flag indicating that the BMM inhibition button has been pressed.

Variable	Description
BORDER	Display style that shows a value within a bordered frame or outline.
BRAKE_RELEASE_CONDITIONS	Conditions required for brake release (e.g., being at standstill)
BRIGHTNESS_BUTTON	Represents the button used to adjust the brightness level of the display or interface.
BRIGHTNESS_WINDOW	Refers to the window in the UI that allows the user to adjust the brightness settings.
BTM_ALARM_REACTION_INIHIBITION	Indicates whether automatic reaction to BTM (Balise Transmission Module) alarms is currently inhibited.
BUTTON_LABEL	Defines the text displayed on the button
BUTTON_SELECTION	Represents the button or soft-key currently selected by the driver.
CAB_ACTIVE	Indicates that the current driving cab is active and authorized for control.
CAPTION_TEXT	Refers to the text displayed as a caption in the UI, often providing contextual information or titles.
CAPTION_TEXT_DISPLAYED	Indicates if caption text is displayed separately
CENTER	Refers to the center alignment of UI elements or content within the window.
CHANGE_WINDOWS_LAYOUT	Represents the action to change the layout of the windows in the user interface.
choose	Action to select a value from available options.
CIRCULAR_SELECTION	Predefined value for TYPE which gives selection menu in a loop kind of way
CLEAR	Command to erase mentioned input values from a field
close	Action to exit or dismiss a window, dialog, or element.
CLOSE_BUTTON	Refers to the button in the user interface used to close the current window or dialog.
COLOUR	Variable to store color value
COLOUR_TARGET	Color requested for target speed elements
COMMUNICATION_SESSION	Refers to the object holding state for the current ETCS communication session.

Variable	Description
COMPLETE	Indicates whether a particular process or task has been completed successfully.
CONFIRMED_TRAIN_LENGTH_INFO	Represents train length information that has been verified and confirmed.
CONNECTING	Represents the state where the system is in the process of establishing a connection.
CONNECTION_LOST	Indicates the safe radio connection has been lost
CONNECTION_UP	Indicates that the safe radio connection is active and functioning
CONTACT_LAST_RBC	Button identifier that lets the driver re-establish contact with the most recently used RBC.
CONTACT_LAST_RBC_PRESSED	Represents the state to re-establish contact with the most recently used RBC has been pressed.
CONTINUE_IN_SM_BUTTON	Refers to the button used to continue the process in the SM of the system.
CROSS_CHECK_RULE	Indicates whether the entered data complies with the cross-check rule
CSG	Circular Speed Guage
CSG_DISPLAY	Circular Speed Guage display
CSM	Ceiling Speed mode
CSM_TARGET_INFO	CSM (with target information)**
CURRENT_ERTMS_LEVEL	ERTMS level currently active
CURRENT_ERTMS_LEVEL_VALID	Indicates whether the current ETCS/ERTMS level has been verified as valid.
CURRENT_INPUT_FIELD_VALUE	variable storing the currently displayed (unaccepted) input
CURRENT_PROCEDURE	Defines the currently running operational or data-entry procedure.
CURRENT_TRAIN_LENGTH	Refers to the length of the train as currently measured or configured.
CURRENT_WINDOWS_LAYOUT	Indicates the arrangement of all active DMI windows at this moment.
CURSOR	Object defining the cursor

Variable	Description
D7_RADIO_CONDITIONS_FULFILLED	Indicates that the set of radio conditions labelled “D7” have been met.
D9_RADIO_CONDITIONS_FULFILLED	Indicates that the radio pre-conditions labelled “D9” are satisfied.
DARK_BLUE	Colour dark blue
DARK_GREY	Colour dark grey
ENTERED_VALUE	The value input by the user in a input field.
DATA_ENTRY	Input field used for entering data.
DATA_ENTRY_PROCESS	Process of entering and handling input data.
DATA_FIELD	Predefined value for TYPE which specifies the data field
DATA_VALUE	Variable representing the current input value
DELAY	Timer value in seconds
delete	Action to remove a value or item.
DELETE_BUTTON	Button used to trigger the deletion of a value or item.
deselect	Action to unselect a previously selected value or item.
disable	Disabled state of an object or a function
DISABLE_SENSITIVITY	Function to disable sensitivity in touchscreen areas
DISPLAY	Display object
DISPLAY_DIGITAL	Digital Display of variables
DISPLAY_FRAME	in which area frame should be displayed
DISPLAY_LAYOUT	Defines the overall DMI display layout being rendered.
DISTANCE_TO_TARGET_BAR	Display element for distance to target shown as a bar
DMI	Driver Machine Interface
document 5.4	Refers to the positioning and dimension specifications for objects when using document 5.4
DOWN	Represents the "Scale Down" action
DOWN_BUTTON	A button object representing 'Down' navigation
DOWNHILL	Indicates an downward gradient

Variable	Description
DRIVER_ID	Field used to store the unique identifier of the driver.
DRIVER_ACKNOWLEDGEMENT	Represents the driver's acknowledgement response that has been given.
DRIVER_ACKNOWLEDGEMENT_REQUIRED	Indicates that a driver acknowledgement is awaiting input.
DRIVER_ACKNOWLEDGEMENT_REQUIRED_BRAKE_RELEASE	Condition indicating whether driver acknowledgment is required for brake intervention
DRIVER_ENTERED_NETWORK_TYPE	Indicates that the driver has confirmed a network type selection.
DRIVER_ID_BUTTON_PRESSED	Status flag indicating whether the driver ID button has been pressed.
DRIVER_ID_MODIFICATION_RUNNING	Indicates whether the driver ID is currently in the process of being modified.
DRIVER_ID_STATUS	Indicates whether the driver ID has been successfully entered and validated.
DRIVER_ID_WINDOW	Refers to the window used for entering or editing the driver ID.
DRIVER_SET_VBC_CAPACITY	Indicates the Virtual Balise Cover (VBC) capacity value as set by the driver.
EACH_INPUT_FIELD	Refers to the loop or iterator traversing every input field of the train-data form.
EMPTY	Empty or null
enable	Enabled state of an object or a function
ENABLE_SENSITIVITY	Function to enable sensitivity in specific areas
END_POSITION	Ending position of a variable
ENHANCED_NUMERIC	A type of keyboard layout
ENTER_KEY	Key used to confirm or submit input.
ENTER_RBC_DATA_BUTTON_PRESSED	Button identifier that opens the data-entry window for manual RBC contact information.
ENTERED	Indicates that a value has been input or submitted.
ENTRY_COMPLETE_CHECK_WINDOW	Represents the window where the completion status of an entry process is checked.
EOA	Refers to the End of Authority, a marker in the railway system that indicates the end of the train's operational authority.

Variable	Description
EOA_button	Refers to the button used to confirm or interact with the End of Authority (EOA) in the system.
ERTMS	European Rail Traffic Management System
ERTMS/ETCS _LEVEL_WINDOW	Refers to the window for selecting or displaying the ETCS level
ERTMS_ATO_REQUEST_TRAIN_HOLD	ERTMS/ATO onboard request to display "Train Hold"
ERTMS_ETCS_LEVEL_ANNOUNCEMENT	Ertms Etcs Level Announcement
ERTMS_ETCS_LEVEL_ANNOUNCEMENT_DISPLAY	Represents the display for showing the ETCS level announcement in the ERTMS system.
ETCS	European Train Control System
ETCS _LEVEL_WINDOW	Refers to the window for selecting or displaying the ETCS level within the system.
EXISTS	Indicates that a value, session, or item is present or available.
exit	Action to leave or close a process or session.
EXIT_SHUNTING_BUTTON_PRESSED	Represents the state when the button to exit shunting mode has been pressed.
EXIT_SM_BUTTON_PRESSED	Refers to the button pressed to exit the current SM process.
FAIL	Indicates the failure status or condition within the system.
FAILED	Status indicating a session or process did not complete successfully.
FIRST_AVAILABLE_AREA	Refers to the first available space or area that is empty
FIRST_SELECTION_LIST	Represents the first selection in a list of options or choices presented in the user interface.
FIXED_TRAIN_DATA_ENTRY	Flags that only fixed (non-editable) train data entry is permitted.
FLASHING_STYLE	Type or style of flashing
FLASHING_STYLE	Selected flashing style for indicators or buttons
FLEXIBLE_TRAIN_DATA_ENTRY	Flags that flexible (driver-editable) train data entry is permitted.
FOREGROUND	The active or visible layer in front of the background.
FRMCS	Represents the presence or status of the Future Railway Mobile Communication System stack.

Variable	Description
FRMCS + GSMR	Indicates that both FRMCS and GSM-R capabilities are available or selected simultaneously.
FRMCS_CONNECTION_TIME_ELAPSED	Indicates that the maximum allowed time for an FRMCS connection attempt has expired.
FRMCS_NETWORK	Refers to the specific FRMCS network object currently addressed.
FRMCS_NETWORK_REGISTRATION_STATUS	Status indicator showing the registration state of the FRMCS (Future Railway Mobile network).
FRMCS_REGISTERED_RADIO_NETWORK	Indicates the FRMCS network to which the onboard radio has successfully registered
FS	Full supervision
FULL	Indicates that the capacity or value has reached its maximum limit.
GEO_POSITION	geographical position of the train
GEO_POSITION_STATUS	geographical position of the train is known
GRADIENT_DIRECTION	The direction of the gradient
GRADIENT_ELEMENT	The element representing the gradient
GRADIENT_NUMBER	Represents the gradient or slope of the track, often used to calculate speed and braking requirements.
GSMR	Refers to the Global System for Mobile Communications – Railway, the standardized radio communication system used for ETCS/ERTMS Level 2 and 3 train control.
GSMR Network ID	Refers to the identifier for the GSM-R (Global System for Mobile Communications – Railway) network used for communication between train and trackside systems.
GSMR_CONNECTION_TIME_ELAPSED	Indicates that the maximum allowed time for a GSM-R connection attempt has expired.
GSMR_NETWORK	Refers to the GSM-R network object currently in use.
GSMR_NETWORK_ID_ENTERED	Indicates that the driver has entered a GSM-R network ID.
GSMR_NETWORK_ID_WINDOW	Refers to the window for manual entry of the GSM-R network ID.
GSMR_NETWORK_LIST	Refers to the current GSM-R network list object (same purpose as above but different tag).

Variable	Description
GSMR_NETWORK_REGISTRATION	Indicates the status of GSM-R network registration
GSMR_TERMINAL_1_REGISTRATION	Indicates whether GSM-R terminal 1 is registered to a network.
GSMR_TERMINAL_2_REGISTRATION	Indicates whether GSM-R terminal 2 is registered to a network.
GSMR_TERMINALS_REGISTERED	Indicates the number of GSM-R terminals onboard that are successfully registered to the selected GSM-R network.
HEIGHT	Height of any object
HOOK	Object(hook)
HOOK_AND_BAR	Style where both a hook and a bar are displayed
HOOK_HEIGHT	Height of reference hook
HOOK_ONLY	Style where only the hook (marker) is displayed
HOOK_POSITION	Hook Position Value
HOOK_V_PERMIT	Hook of permitted speed
HOOK_V_TARGET	Hook of target speed
HOOK_WIDTH	Width of reference hook
HOOKS_OVERLAP	Condition to check if two or more hooks overlap
ICON	A small graphical symbol representing an action, object, or status.
ICON_DISPLAYED	Indicates if only icon is displayed
ICON_TEXT_DISPLAYED	Indicates if text upon icon is to be displayed
INACTIVE	condition is inactive
INDENT	Indentation value
INDENT_LEFT	Refers to the left indentation value used for aligning or positioning UI elements or text.
INDICATION_MARKER	Represents a visual marker or symbol used to indicate a specific status or condition in the system.
INFINITE	Represents a value that is infinite or undefined, often used in contexts like time or distance where no limit is imposed.
INITIAL_KEY	Refers to the key used to initialize a system, process, or secure communication.

Variable	Description
INITIATE_SM_BUTTON	Represents the button used to initiate a SM process or transition.
INPUT_FIELD	Represents a field in the user interface where the user can enter data or select an option.
INPUT_FIELD_CHANGED_BY_EXTERNAL_INTERFACE	Indicates whether an input field has been modified or updated by an external interface.
INPUT_FIELD_SELECTION	Represents the currently selected input field and its associated type
INPUT_FIELD_STATE	Variable tracking user interaction with a field which can either be selected or not selected. Variable tracking the state of the input field
INPUT_FIELD_VALUE_ACCEPTED	Boolean flag indicating if entered data is accepted
INTS	Intervention Status Information
INVALID	Indicates that the given data or condition is not valid or does not meet the required criteria.
IS	Isolation
IS_MODE	Isolation mode
KEYBOARD	Refers to the on-screen keyboard or physical keyboard used for entering data in the system.
KEYBOARD_KEY_1	Represents the first key on the keyboard interface.
KEYBOARD_KEY_10	Refers to the tenth key on the keyboard interface.
KEYBOARD_KEY_11	Represents the eleventh key on the keyboard interface.
KEYBOARD_KEY_12	Refers to the twelfth key on the keyboard interface.
KEYBOARD_KEY_2	Represents the second key on the keyboard interface.
KEYBOARD_KEY_3	Refers to the third key on the keyboard interface.
KEYBOARD_KEY_4	Represents the fourth key on the keyboard interface.
KEYBOARD_KEY_5	Refers to the fifth key on the keyboard interface.
KEYBOARD_KEY_6	Represents the sixth key on the keyboard interface.
KEYBOARD_KEY_7	Refers to the seventh key on the keyboard interface.
KEYBOARD_KEY_8	Represents the eighth key on the keyboard interface.

Variable	Description
KEYBOARD_KEY_9	Refers to the ninth key on the keyboard interface.
KEYBOARD_LIMIT	Property indicating if input is restricted to a Yes/No keyboard
KEYBOARD_TYPE	Represents the keyboard type (numeric, enhanced numeric, alphanumeric, etc.) shown based on the selected input field
KEYBOARD_TYPE_SELECTIONS	Represents the available selections or types of keyboards available for use.
L_VALUE_V	Length of speed variable
LANGUAGE_BUTTON	Refers to the button used to change or select the system language.
LANGUAGE_WINDOW	Represents the window in the user interface that displays available language options or settings.
LENGTH_GRADIENT_ELEMENT	Refers to the length of a gradient element used in track or operational calculations, influencing speed and braking.
LEVEL_BUTTON_PRESSED	Indicates whether the button to select or change the ETCS level has been pressed by the driver.
LEVEL_ENTRY_VALIDATION	Indicates whether the driver's ETCS level entry has passed the system's validation checks.
LEVEL_PRIORITY_TABLE_BUTTON	Represents the button used to access or modify the level priority table in the system.
LS	Limited Supervision
LSSMA	Last Safe Speed Related to the Movement Authority
LSSMA_CONDITION	to check if LSSMA display is required (returns TRUE/FALSE)
LSSMA_NUMBER	LSSMA numeric value
[s]s	Time in seconds
[m]m:ss	Time in minutes and seconds
M_COLOUR_BACKGROUND	Defines the input field's background color
M_COLOUR_data	Defines the text color in the input field
M_COLOUR_DN	Color of Digital Number
M_COLOUR_LABEL	Refers to the color label associated with a specific parameter or status in the system.
M_SP	Represents a specific parameter related to speed or position.

Variable	Description
MAIN_WINDOW	Refers to the primary DMI window currently displayed.
MAINTAIN_SHUNTING_BUTTON	Represents the button used to maintain or toggle shunting mode in the system.
MAINTAIN_SHUNTING_BUTTON_PRESSED	Indicates whether the button to maintain or toggle shunting mode has been pressed.
MAX_SR_DISTANCE	Refers to the maximum distance allowed for the safe running of the trains.
MEDIUM_GREY	Colour Medium Grey
MENU_SELECTION	Variable tracking the total number of selectable menu items
MENU_SELECTIONS	Represents the number of predefined choices available in a dedicated keyboard
MIDDLE	Indicates the central position within a frame or window.
MIN_LENGTH_FOR_GRADIENT_DIRECTION	The minimum length required for the gradient element to display the gradient direction
MIN_LENGTH_FOR_GRADIENT_NUMBER	The minimum length required for the gradient element to display the gradient number
MISSION_WITH_ONE_RADIO_BUTTON	Button identifier that starts the “mission with one radio system” procedure, enabling single radio communication for the mission.
MISSION_WITH_ONE_RADIO_SYSTEM_BUTTON_PRESSED	Button identifier that starts the “mission with one radio system” procedure.
MISSION_WITH_ONE_RADIO_WINDOW	Refers to the window shown when a mission requires only one radio connection.
MISSION_WITH_ONLY_ONE_RADIO_SYSTEM_WINDOW	Represents the window shown when the system is operating with only one radio system
MO18_DISPLAYED	Refers to the display or status indicating that the MO18 (Mode 18) is currently shown or active in the system.
MODE	Defines the current operational mode of the onboard unit according to ETCS specifications.
MODE_ACKNOWLEDGEMENT	Acknowledgement of current mode
MODE_ACKNOWLEDGEMENT_POSITION	Refers to the position in the system where the mode acknowledgement status is displayed or confirmed.

Variable	Description
MODE_SWITCH	Refers to the control or action used to switch between different operational modes in the system.
MODIFIED_INPUT_FIELD_DATA_STATUS	Indicates the status of the modified data in the input field
MORE_BUTTON	Button used to display additional options or information.
NEW_ERTMS_LEVEL	Represents a newly selected or proposed ETCS level awaiting confirmation.
NEXT	Variable defining the next empty value
NEXT_BUTTON	A button object representing 'Next' navigation
NEXT_INPUT_FIELD	Variable defining the next field in input
NEXT_INPUT_FIELD_DATA_STATUS	Represents the status of the next input field data
NEXT_LINE	Refers to the window for manual entry of the GSM-R network ID.
NEXT_RELATED_INPUT_FIELD	Whether a next window with related input fields exists (YES)
NEXT_TOPIC_WINDOW	Indicates if a next window exists for the same data view topic (TRUE)
NL	National Line
NO	Refers to the current GSM-R network list object
NO_BUTTON	Button used to indicate a negative response or to decline an action.
NO_COMPATIBLE_VERSION	Indicates that no compatible software version exists between the RBC (Radio Block Centre) and the OBU (On-Board Unit).
NO_CONNECTION	Indicates there is no active connection
NO_RESPONSE_FROM_RBC	Indicates that no communication or reply was received from the Radio Block Centre (RBC).
NON_LEADING	ERTMS/ETCS on-board equipment mode when it is connected to an active cab which is not in the leading engine of the train.
NON_LEADING_BUTTON_PRESSED	Status flag indicating the non-leading mode button has been pressed.
NON_LEADING_SIGNAL	Represents whether the train is receiving signal information not intended for the leading vehicle.
NON_SLIPPERY_RAIL	Indicates normal track adhesion; no slippery rail conditions detected or active.

Variable	Description
NONE	Indicates the absence of a value, selection, or condition.
NOS	Normal Status Information
NOT AVAILABLE	Indicates that the requested information or resource is currently unavailable.
NOT_REGISTERED	Indicates that the system or device is not registered on the network.
NOT_SELECTED	Indicates that an input field or value has not been chosen or activated.
NOT_CONSISTANT	Variable indicating that data value is not consistent
NTC	National Train Control
NTC_BUTTON	NTC buttons
NTC_INDICATOR	NTC indicators
NTC_LEVEL	National Train Control ERTMS Level
NUMERIC	Type of Keyboard layout
OBJECT	The requested item, entity, or element within the system.
OBJECTS_2	Refers to the group of display objects excluding keyboard keys, echo texts, and 'data entry complete' objects, following Table 23
OBJECTS_3	Refers to the group of display objects excluding keyboard keys, echo texts, and 'data entry complete' objects, following Table 23
OBJECTS_EXCLUDING_KEYBOARD	Refers to all objects displayed excluding keyboard keys
ONBOARD_DEFAULT_LEVELS_BUTTON	Button used to access or manage default ERTMS/ETCS levels stored onboard the train.
ONBOARD_EMERGENCY_STOP	Represents the status of any emergency stop command issued from within the train.
ONBOARD_EMERGENCY_STOP	Represents the status of any emergency stop command issued from within the train.
ONBOARD_MODE	one of the modes
ONBOARD_RADIO_SYSTEM	Indicates which radio subsystem is currently active on the train.
ONBOARD_VBC	Indicates whether Virtual Balise Cover (VBC) functionality is supported and active onboard.
ongoing	Indicates that a given process or validation is still in progress.

Variable	Description
ONLY_ONE_RADIO_MISSION	Indicates that the current mission permits control through only a single radio path.
ONLY_ONE_RADIO_MISSION_BUTTON	Represents a button in the user interface that reveals additional options or information when pressed.
open	Action to launch or make a window, session, or element visible and active.
OPERATIONAL_CROSS_CHECK_RULE	Indicates if the entered data fails the operational cross-check rule
OPERATIONAL_PERMITTED_RANGE_CHECK	Indicates whether the entered data is within the operational range defined for the input field
OPERATIONAL_RANGE_CHECK	Indicates if the entered data fails the operational range check
OS	On sight
OTHER_INPUT_FIELDS	Refers to additional input areas aside from the primary one, used for entering various data.
OVERLAY	to overlay one object over other
Override_button	Button used to bypass or manually override an automatic system or function.
OVERRIDE_FUNCTION_ACTIVE	indicating whether the override function is active
OVERRIDE_TRIGGER_SPEED_LIMIT	Represents the speed threshold above which an override cannot be triggered.
OVERRIDE_WINDOW	Refers to the window in the user interface that allows the driver to initiate or interact with the override function.
OVERRIDE_WINDOW_S0	Refers to a specific override window state or mode (S0), typically representing an initial or default override configuration.
OVERRIDE_WINDOW_S1	Refers to a specific override window state or mode (S1), likely representing a different level or configuration for override.
OVERRULE	Allows the driver to override the operational range check rule
OVS	Over-speed Status Information
PARENT_WINDOW	Refers to the parent window object of the currently active sub-window.
PASSIVE_SHUNTING_SIGNAL	Refers to a detected passive shunting signal relevant to the current track segment.
PERMITTED_RANGE_CHECK	Indicates whether the entered data is within the permitted range

Variable	Description
PERMITTED	Refers to whether an action or entry is permitted within the system's defined rules and restrictions.
PL23	Refers to a specific procedure or rule defined by the ETCS system, denoted by PL23
PL37	Refers to a specific procedure or rule defined by the ETCS system, denoted by PL37
PLANNING_INFORMATION	Contains planning information e.g. PASP, Distance scale..
POINTER	Actual Speed
POSITION	Position value of a object
POSITION_BOX	Position inside QUESTION_BOX
POSITION_VALIDATION	Refers to the process of validating the current position of the vehicle within the system.
POSITION_VALIDATION_RECIEVED	Indicates whether the position validation data has been successfully received and processed by the system.
PREDEFINED	Refers to a predefined setting or value that is set by the system or configuration.
PREDEFINED_CHOICES	Represents the predefined options or choices available to the user.
press	Action to push or activate a button.
PRESSED_KEY	Refers to the key that has been pressed by the user on the system's keyboard or input device.
PREVIOUS_PROCEDURE	Represents the last procedure or step that was executed in the system
PREVIOUS_BUTTON	A button object representing 'Previous' navigation
PREVIOUS_LEVEL	Stores the ETCS/NTC level that was active immediately before the current one.
PREVIOUS_PROCEDURE	Refers to the procedure that was active immediately before the current one.
PREVIOUS_RELATED_INPUT_FIELDS	Whether a previous window with related input fields exists (YES or NONE)
PROCEDURE	Refers to a specific operational sequence or set of steps that the system follows to achieve a particular task or result.

Variable	Description
PT	Post-Trip
Q_DISPLAY_SBI	Speed at Service Brake Intervention
QUESTION_BOX	Object(question box)
RADIO_DATA_BUTTON	Represents the button used to access or modify radio data settings in the system.
RADIO_NETWORK_TYPE	Refers to the type of radio network being used, such as GSM-R or other communication protocols.
RADIO_CONDITIONS_FULFILLED	Indicates whether the necessary conditions for radio communication are fulfilled and the system is ready for radio operations.
RADIO_DATA_BUTTON_PRESSED	Represents the state when the button to modify or access radio data settings has been pressed.
RADIO_DATA_WINDOW	Refers to the DMI window used for entering or viewing radio parameters.
RADIO_NETWORK_ID_BUTTON	Button identifier that opens the window for entering or selecting a GSM-R network ID.
RADIO_NETWORK_ID_BUTTON_PRESSED	Indicates that the button to access the GSM-R network ID input window has been pressed.
RADIO_NETWORK_TYPE	Defines the selected radio network category in use (e.g., GSM-R, FRMCS).
RADIO_NETWORK_TYPE_BUTTON	Button identifier that opens the dialogue for selecting the desired radio-network type. Refers to the window where the driver selects the network type for RBC communication.
RADIO_NETWORK_TYPE_BUTTON_PRESSED	Indicates that the button for selecting the radio network type has been pressed.
RADIO_NETWORK_TYPE_WINDOW	Refers to the window where the driver can select the radio network type for RBC communication.
RBC_CONTACT_INFO	Represents the contact information of the RBC (Radio Block Center), used for communication purposes.
RBC_CONTACT_INFO_STATUS	Refers to the status of the RBC contact information, indicating whether it is valid or unavailable.
RBC_CONTACT_INFO_VALID	Indicates whether the RBC contact information is valid and usable for communication.

Variable	Description
RBC_DATA_ENTRY_COMPLETE	Indicates that all required RBC data have been successfully entered.
RBC_DATA_WINDOW	Refers to the window in the DMI where the driver can view or enter RBC-related data.
RBC_MA_RECEIVED	Indicates that the Movement Authority (MA) message from the RBC has been successfully received.
RBC_MESSAGE	Refers to a message received from the RBC, often related to movement authority, track conditions, or communication status.
RBC_MESSAGE_RECEIVED	Indicates that an RBC message has been successfully received and processed by the system.
RBC_REQUEST_WAIT_TIMEOUT	Represents the timeout period for waiting for a response from the Radio Block Center (RBC) after a request is made.
RBC_SESSION	Indicates whether a communication session with the Radio Block Center is currently established.
RBC_SH_REFUSED	Refers to the status indicating that a request for SH has been refused by the RBC.
RBC_SM_AUTH_RECEIVED	Indicates that a SM authorization message has been received from the RBC.
RBC_SM_REFUSED	Represents the status indicating that a SM request has been refused by the RBC.
RBC_SR_AUTH_RECEIVED	Refers to the authorization message received from the RBC related to the SR mode.
RBC_TRAIN_	Represents the identification of a train in the context of the RBC communication system.
RBC_TRAIN_.POSITION_VALIDATION	Represents the onboard flag that a position validation request was sent to the RBC.
RBC_TRAIN_.POSITION_VALIDATION_RECIEVED	Indicates that a position-validation response has been received from the RBC (typo in name preserved).
RBC_TRANSITION_ORDER_ONBOARD	Indicates that a transition order to a different RBC is stored onboard.
RECIEVED	Indicates that the data or message has been received by the system.
RED	Colour red

Variable	Description
REJECTED	Indicates that a request or message has been rejected by the system or the receiving component.
REMAINING_DISTANCE_TO_TARGET_DIGITAL	Digital display of remaining distance to target
REMAINING_TIME	Available time
REMOVE_VBC	Refers to the action or command to remove the VBC in the system.
REMOVE_SYMBOL	Represents the action to remove a specific symbol from the display or user interface.
REMOVE_VB_BUTTON	Refers to the button used to remove or deactivate a Virtual Balise (VB) in the system.
REMOVE_VBC_VALIDATION_WINDOW	Refers to the removal or deactivation of a Virtual Balise Command (VBC) in the system
REQUESTED	Indicates that a value, mode, or frame has been asked for but not yet confirmed or activated.
RESET	to return a system, value, or setting to its initial state.
RESOLUTION_CHECK	Verifies if the data meets the resolution constraints
REVALIDATE	Indicates a command or flag to re-validate the data currently displayed.
REVALIDATED	Value has been revalidated
REVERSING_AREA	Area where the train could potentially reverse
REVOKE_BMM_BUTTON	Refers to the button used to revoke or disable the BMM in the system.
REVOKE_BMM_BUTTON_PRESSED	Indicates that the button to revoke the BMM has been pressed.
RIGHT	Refers to the direction "right", used for navigation, movement, or operational purposes within the system.
RSM	Release Speed Monitoring
RV	Reversing mode
S5-4_RADIO_CONDITIONS_FULFILLED	Indicates whether the required radio conditions for communication are fulfilled according to the S5-4 procedure, ensuring reliable radio communication.

Variable	Description
SAFE_CONSIST_LENGTH_INFO	Refers to the information about the train's safe consist length received or calculated.
SAFE_CONSIST_LENGTH_INFO_ST ATUS	Indicates the status of the safe consist length information (e.g., valid, pending, or invalid).
SAFE_RADIO_CONNECTION_STATUS	Status of the safe radio connection
SAME_KEY_PRESSED_IN_2_S	Indicates that the same key has been pressed within a 2-second time window.
SB	Stand By
SCREEN_TECHNOLOGY	Using Touch screen or Soft key
SECOND_INPUT_FIELD	Represents the second input field in the user interface, where the user can enter or select data.
SELECTION_LIST	Refers to a list of options from which the user can select a specific value or choice in the system.
select	Action to choose a value or activate a button.
SELECTED	Indicates that a specific item, input field, or option has been selected in the user interface.
SELECTED_IF_VALUE_DATA	State where the input field is selected, and the entered or displayed data is the current valid value.
SELECTED_IF_VALUE_OF_PRESSE D_KEY	Indicates that the input field is selected and contains a valid value based on the pressed key
SELECTED_TEXT	Represents the text that has been selected in the system
SELECTION_TYPE	Defines the type of input field selection, such as numeric, enhanced numeric, alphanumeric, or dedicated choice-based keyboard
send	Action to transmit or submit a value.
SESSION_OPENING_STATUS	Represents the progress or result of the communication-session opening attempt.
SET_VBC	Refers to the action or command to set or configure the Virtual Balise Command (VBC) within the system.
SET_PROCEDURE	Represents the current Set procedure state (e.g., Set VBC, Set Data).

Variable	Description
SET_VB_BUTTON	Refers to the button used to set or configure a Virtual Balise (VB) in the system.
SET_VBC_VALIDATION_WINDOW	Represents the window used for validating the configuration or setup of the Virtual Balise Command (VBC).
SET_VBC_WINDOW	Refers to the window in the user interface used for setting up or configuring the Virtual Balise Command (VBC).
SETTINGS_BUTTON	Refers to the button that opens or interacts with the settings menu or configuration window.
SETTINGS_WINDOW	Represents the window that displays system or operational settings.
SETTINGS_WINDOW_STATUS	Indicates whether the Settings window is open, closed, or in background.
SETUP_FAILED	Represents the state where the system setup or configuration process has failed.
SF	System Failure
SF_MODE	System Failure mode
SH	Shunting Mode
show	Action to display or make an object or element visible in the interface.
SHUNTING	Refers to the operational mode where the train is moving in a limited or controlled manner
SHUNTING_BUTTON	Represents the button used to activate or toggle the shunting mode
SHUNTING_BUTTON_PRESSED	Indicates that the shunting button has been pressed to initiate or toggle shunting mode.
SHUNTING_DIALOGUE_SEQUENCE	Refers to the sequence of dialogue or prompts shown to the user when engaging in shunting mode
SLIPPERY_RAIL	Indicates a condition where the rail is slippery, potentially due to weather or environmental factors
SM	Sleeping Mode
SM_DIALOGUE_SEQUENCE	Represents the dialogue sequence used to interact with the operator during the Sleeping Mode (SM) process or transition.
SN	Speed National

Variable	Description
SOFT_KEY_TECHNOLOGY	Indicator for whether soft key technology is used
SOFT_KEY_TECHNOLOGY GEO_POSITION_STATUS	Represents the status of the geo-positioning system when using soft key technology, indicating the current position of the train.
SOM_POSITION_REPORT	Refers to a report detailing the position of the train.
SOM_POSITION_REPORT_INVALID_ POSITION	Indicates that the position report received from the system is invalid, possibly due to errors in position detection.
SOM_POSITION_REPORT_SAFE_C ONSIST_LENGTH	Refers to the position report indicating the safe consist length of the train, ensuring safe operation within track limits.
SOM_POSITION_REPORT_UNKNOW N_POSITION	Indicates that the position of the train is unknown or cannot be determined at the moment.
SPECIAL_BUTTON	Represents a button in the system that has a special or unique function
SPECIAL_WINDOW	Refers to a window in the user interface designed for special functions or settings
SR	Staff Responsible
SR_DISTANCE_ONBOARD	Represents the distance measurement on board the train
SR_DISTANCE_VALUE	Represents the specific value of the distance related to staff responsibilities or operational checks.
SR_SPEED_DISTANCE	Refers to the calculated or monitored speed-distance parameter related to the staff responsible (SR) mode.
SR_SPEED_DISTANCE_BUTTON	Represents the button used to interact with or configure the SR speed-distance settings.
SR_SPEED_DISTANCE_BUTTON_P RESSED	Indicates that the SR speed-distance button has been pressed to activate or change the settings.
SR_SPEED_DISTANCE_WINDOW	Refers to the window in the system that displays or allows interaction with the SR speed-distance settings.
SR_SPEED_VALUE	Represents the specific speed value associated with the SR mode or parameter.
STANDARD_10	Refers to a standard procedure or parameter defined as "10"
STANDSTILL	Indicates that the train is not moving
start	Action to initiate a process or session.
START_BUTTON	Represents the button used to initiate the start process

Variable	Description
START_BUTTON_PRESSED	Indicates that the start button has been pressed, signaling the initiation of the start process.
START_OF_MISSION	Represents the beginning of a mission
START_OF_MISSION_INITIATION_CONDITIONS	Indicates whether all prerequisites for Start-of-Mission have been satisfied.
START_POSITION	Starting position of a variable
START_UP_DIALOGUE_SEQUENCE	Refers to the sequence of prompts or dialogue shown to the user when starting up a system or procedure.
STATUS_INFORMATION	Train speed or safety conditions
STM	Specific Transfer Module
STM_CUSTOM_DMI	Indicates if the STM uses a customizable Driver Machine Interface
STM_INFO	STM supervision information state
STM_NATIONAL_TRIP	Refers to a trip or journey specific to national regulations or configurations
STM_REQUEST_DISPLAY_MODE	Display mode requested by the STM (e.g., BAR)
STM_REQUEST_ICON	Request from STM for displaying an icon
STM_UNIFIED_DMI	Indicates usage of unified DMI service
STM_V_SUPERVISION_DISPLAY	STM Request to Display Speed in Bar style
stop	Refers to the action or process of stopping the system
STYLE	Defines the visual appearance or format of a displayed element.
SUCCESS	Status indicating a process, action, or session completed successfully.
SUPERVISION_STATUS	represents the current supervision status being applied by a train control system
SWITCH_BUTTON	Represents the button used to switch or change between different entry modes in the system.
SWITCH_BUTTON_PRESSED	Flags that the driver pressed a "Switch" button to change entry mode or source.
SWITCHABLE_TRAIN_DATA_ENTRY	Indicates that the operator can switch between fixed and flexible entry modes.
SX	Shunting Mode

Variable	Description
SYSTEM_VERSION	Refers to the version of the system being used by the train
SYSTEM_VERSION_BUTTON	Represents the button used to access or display the system version information in the interface.
TABLE_22_SPECIFICATION	Refers to the positioning and dimension specifications for objects when using Table 22
TABLE_23_SPECIFICATION	Refers to the positioning and dimension specifications for objects when using Table 23
TABLE_9	Refers to the positioning and dimension specifications for objects when using Table 9
TECHNICAL_CROSS_CHECK	Variable representing the state of the technical cross-check rule
TECHNICAL_RANGE_CHECK	Validates whether entered data meets technical range requirements
TECHNICAL_RESOLUTION_CHECK	Indicates whether the entered data meets the pre-configured technical resolution
terminate	Action to end a session or process.
TERMINATED	Status indicating a session or process has ended.
TERMINATED_NO_COMPATIBLE_VERSION	Indicates that the session was terminated because no compatible protocol version was found.
TERMINATION_REASON	Represents the reason or cause for the termination of a session or process
TEXT_MESSAGES	Text Messages
TOGGLED_OFF	Display is hidden/inactive
TOUCH_SCREEN_TECHNOLOGY	Indicator for whether touchscreen technology is used
TOUCH_SCREEN_TECHNOLOGY_GEO_POSITION_STATUS	Represents the geo-positioning status when using touchscreen technology
TOUCH_SCREEN_TECHNOLOGY_ONBOARD_MODE	Refers to the onboard mode settings or configurations when touchscreen technology is in use
TOUCH_SCREEN_TECHNOLOGY_TUNNEL_STOPPING_AREA	Refers to the touchscreen-based interface or display that shows tunnel stopping area information
TR	Trip
TRACKSIDE_LEVELS_PRIORITY_TABLE	Refers to the priority table for ETCS/STM track-side level information transmitted to the cab.

Variable	Description
Train Data	Refers to the data related to the train's configuration
Train Integrity	Represents the verification or status of the train's composition
Train Running Number	Refers to the unique identifier or number assigned to a specific train
TRAIN_ACCEPTED	Indicates that the RBC has accepted the train for mission continuation.
TRAIN_DATA_ACK	Indicates that the previously entered train data has been acknowledged by the onboard system.
TRAIN_DATA_ACK_RECEIVED	Indicates reception of the train-data acknowledgement from trackside
TRAIN_DATA_ACKNOWLEDGED	Indicates that the train data has been successfully acknowledged by the system
TRAIN_DATA_AVAILABLE	Indicates that a set of train data is already stored and ready for use.
TRAIN_DATA_BUTTON_PRESSED	Refers to the button pressed by the operator to enter, update, or confirm train data in the system.
TRAIN_DATA_ENTRY_COMPLETE	Indicates that all required train-data fields have been completed.
TRAIN_DATA_INPUT_FIELD	Represents the input field where train data can be entered or modified by the operator.
TRAIN_DATA_STATUS_VALID	Indicates that the stored train data set is valid
TRAIN_DATA_VALID	Represents whether the onboard system has received and accepted complete train data.
TRAIN_DATA_VALIDATION_ENTERED_REVALIDATED	Indicates that the driver has re-validated previously entered train data.
train_data_validation_process	Refers to the process that validates the train data entered into the system
TRAIN_DATA_VALIDATION_WINDOW	Refers to the window that displays or requests confirmation of entered train data.
TRAIN_DATA_VALUE_EXTERNAL	Represents a value obtained from an external source
TRAIN_DATA_VALUE_ONBOARD	Represents a value sourced from existing onboard configuration.

Variable	Description
TRAIN_DATA_VALUE_PRECONFIGURED	Represents a value sourced from pre-configured defaults.
TRAIN_DATA_WINDOW	Refers to the window in the user interface where train data is displayed, entered, or modified.
TRAIN_INTEGRITY_BUTTON	Represents the button used to check or confirm the integrity of the train, ensuring all components are properly connected.
TRAIN_INTEGRITY_BUTTON_PRESSED	Indicates that the button for checking or confirming train integrity has been pressed.
TRAIN_NUMBER	Refers to the unique identifier or number assigned to a specific train
TRAIN_NUMBER_VALID	Specifies whether the entered train number has been accepted as valid by the system.
Train_position_data	Refers to the data representing the train's position
TRAIN_POSITION_DATA_STATUS	Indicates validity status of the current train-position data block.
TRAIN_POSITION_LRBG	Refers to the train's most recent valid position relative to the Last Relevant Balise Group (LRBG).
TRAIN_POSITION_LRBG_DATA	Refers to position data computed relative to the last relevant balise group.
TRAIN_POSITION_LRBG_DATA_VALID	Indicates whether the train's position data related to the Last Relevant Balise Group (LRBG) is valid and accurate.
TRAIN_POSITION_VALID	Indicates that the current train position has been determined and is valid.
TRAIN_RUNNING_NUMBER	Represents the train running number value stored onboard.
TRAIN_RUNNING_NUMBER_BUTTON_PRESSED	Represents the action of pressing the button to enter or confirm the train running number.
TRAIN_RUNNING_NUMBER_PRESSED	Status flag indicating the train running number button was pressed.
TRAIN_RUNNING_NUMBER_STATUS	Represents the current status of the train running number
TRAIN_RUNNING_NUMBER_VALID	Indicates whether the entered or selected train running number is valid and meets the system's requirements.
TRAIN_RUNNING_NUMBER_WINDOW	Refers to the window for inputting the train running number
TRAIN_STATUS	Variable representing the current status of the train



Variable	Description
TSM	Target Speed Monitoring
TUNNEL_STOPPING_AREA	Area on screen indicating stop in a tunnel.
TYPE	Defines the mode, format or classification of a component
TYPE_OF_INCONSISTANCY	Specifies the category or nature of a detected mismatch or error.
UN	Unfitted
UNKNOWN	Any other value apart from the specified set of values
UNLINKED_BALISE_GROUP	Indicates a balise group not linked to a predefined track location.
UP	Represents the "Scale Up" action
Up_button	Predefined value for TYPE which specifies up button: A button object representing 'Up' navigation
UPHILL	Indicates an upward gradient
UPPER_LIMIT	The maximum value allowed or displayed for an item.
USE_SHORT_NUMBER_BUTTON	Button identifier that lets the driver dial the RBC via a short (abbreviated) number.
USE_SHORT_NUMBER_BUTTON_PRESSED	Indicates that the "Use Short Number" button has been pressed.
V	Current Train Speed
V_RELEASE_STYLE	Specifies the display style of the release speed bar
V_SBI	Service Braking Intervention speed.
V_STYLE	Specifies the display style of the supervision speed bar
V_SUPERVISION	Supervision mode speeds
VAILD_ERTMS_LEVEL	Checks if CURRENT_ERTMS_LEVEL is vaid
VALID_BUTTON_ACTIVATION	Boolean flag indicating whether the driver has performed a valid button activation on a delay-type button.
VALID_COMM_RBC_SESSION_VERSION_GT_2_2	Indicates whether a valid communication session with the RBC is established using a version greater than 2.2.
VALIDATED	Indicates that a specific item, value, or process has been successfully checked and confirmed as valid.
VALIDATED_LEVEL	Represents the ETCS level that has been confirmed as valid by wayside and onboard.

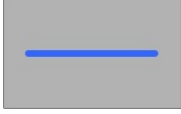



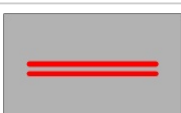
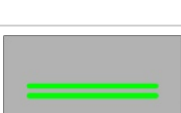
Variable	Description
VALIDATION_PROCESS	Refers to the process used to verify and confirm the validity of certain system data or parameters.
VALIDATION_PROCESS_DATA	Represents the data involved in the validation process
VALIDATION_WINDOW	Refers to the window in the user interface that displays or interacts with the data being validated.
VALUE_FROM_PREVIOUS_S3-1	Refers to a value taken from a previous state or procedure (S3-1)
VALUE_FROM_PREVIOUS_S6-1	Refers to a value taken from a previous state or procedure (S6-1)
VALUE_FROM_PREVIOUS_S7-1	Represents a value taken from a previous state or procedure (S7-1)
VALUE_PROPOSED	Indicates a value that has been proposed or suggested for use
VBC_REMOVE_CODE	Refers to the code used to remove or deactivate a Virtual Balise Command (VBC) in the system.
VBC_REMOVE_VALUE	Represents the value associated with the removal or deactivation of a Virtual Balise Command (VBC).
VBC_SET_CODE	Refers to the code used to set or activate a Virtual Balise Command (VBC) within the system.
VBC_VALIDATE_VALUE	Represents the value used to validate the settings or configuration of a Virtual Balise Command (VBC).
VERTICAL_CENTRE	Refers to the vertical alignment or center position in a user interface
VOLUME	Represents the system's audio or sound level
VOLUME_BUTTON	Represents the button used to adjust the volume level in the system.
VOLUME_WINDOW	Refers to the window or interface where the user can adjust or view the volume settings.
wait	halts execution until the given condition becomes true
WAS	Warning Status Information
WHITE	Colour White
WHOLE_AREA	Flashing style where the entire object toggles visibility
WIDTH	Width of any object


Variable	Description
window	Window screen
window_grid_areas	Represents the specific areas of the screen/grid that the window covers
window_text_label	Refers to the window's title text label
WINDOW_TITLE	Title of the Window
YELLOW	Colour Yellow
YELLOW_FRAME	Flashing style where a yellow frame surrounds the object
Yes_button	Button object for the [Yes] button
yes_no_choice	Variable indicating whether input is Yes/No type
ZOOM_AREA	Function related to zoom area
FALSE	If condition is false
TRUE	If condition is true

## 1.5 Operational Screen


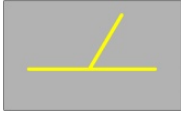
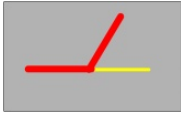
### 1.5.1 TrackEdgeSection

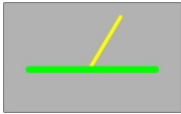



Description	Command (SCI-CMD)	Symbol	SVG file
Secured free track section	11392.current_status_data=true		No
Secured free track section with train route set	11392.route_marking_and_occupancy=1		No



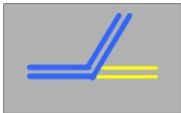
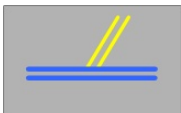

Description	Command (SCI-CMD)	Symbol	SVG file
Secured free track section with shunting route set	11392.route_marking_and_occupancy=2		No
Secured occupied track section	11392.route_marking_and_occupancy=3		No
Track section without current state data	11392.current_status_data=false		No
Secured free track section, traffic is blocked	11392.current_status_data=true AND 11392.locked=true		No
Secured occupied track section, traffic is blocked	11392.route_marking_and_occupancy=3 AND 11392.locked=true		No
Secured free track section with train route set, traffic is blocked	11392.route_marking_and_occupancy=1 AND 11392.locked=true		No

Description	Command (SCI-CMD)	Symbol	SVG file
Secured free track section with shunting route set, traffic is blocked	11392.route_marking_and_occupancy =2 AND 11392.locked =true		No

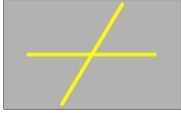
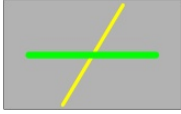
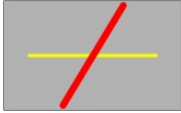
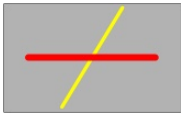
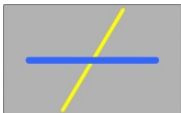
### 1.5.2 SimplePoint



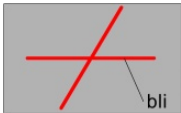


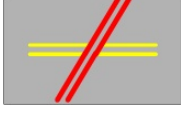
Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, right	11403.position =true AND 11403.route_marking_and_occupancy =3		No
Free	(11403.position =false OR 11403.position =true) AND 11403.current_status_data=true		No
Occupied, Left	11403.position =false AND 11403.route_marking_and_occupancy =3		No

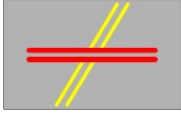
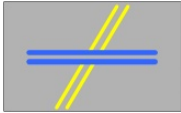


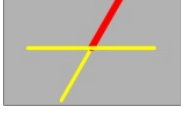
Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, left, train route set	11403.position =false AND 11403.route_marking_and_occupancy =1		No
Occupied, right, train route set	11403.position =true AND 11403.route_marking_and_occupancy =1		No
Occupied, right, shunting route set	11403.position =true AND 11403.route_marking_and_occupancy =2		No
Occupied, left, shunting route set	11403.position =false AND 11403.route_marking_and_occupancy =2		No
Without current state data	11403.current_status_data=false		No
Free, traffic blocked	(11403.position =false OR 11403.position =true) AND 11403.current_status_data=true AND 11403.locked=true		No
Occupied, Left, traffic blocked	11403.position =false AND 11403.route_marking_and_occupancy =3 AND 11403.locked=true		No

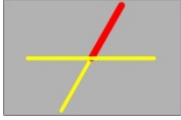

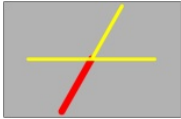
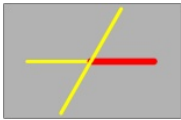
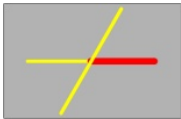
Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, right, traffic blocked	11403.position =true AND 11403.route_marking_and_occupancy =3 AND 11403.locked=true		No
Occupied, right, train route set, traffic blocked	11403.position =true AND 11403.route_marking_and_occupancy =1 AND 11403.locked =true		No
Occupied, left, shunting route set, traffic blocked	11403.position =false AND 11403.route_marking_and_occupancy =2 AND 11403.locked =true		No
Occupied, right, shunting route set, traffic blocked	11403.position =1 AND 11403.route_marking_and_occupancy =2 AND 11403.locked =true		No
Occupied, left, train route set, traffic blocked	11403.position =false AND 11403.route_marking_and_occupancy =true		No

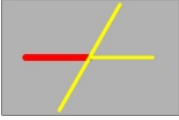
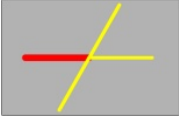
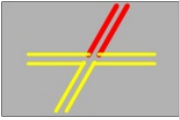
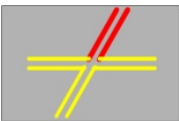
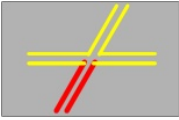
### 1.5.3 Crossing

Description	Command (SCI-CMD)	Symbol	SVG file
Free	11393.current_status_data=true		No
Occupied, right, train route set	11393.position=true AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=1		No
Occupied, Left	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=3		No
Occupied, right	11393.position=true AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=3		No
Occupied, right, shunting route set	11393.position=true AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=2		No

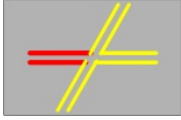
Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, left, train route set	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=1		No
Occupied, left, shunting route set	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=1		No
Without current state data,	11393.current_status_data=false		No
Free, traffic blocked	1393.current_status_data=true AND 11393.locked=true		No
Occupied, right, train route set, traffic blocked	11393.position=true AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=1 AND 11393.locked=true		No
Occupied, left, traffic blocked	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy=3 AND 11393.locked=true		No

Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, right, traffic blocked	11393.position=trueAND 11393.current_status_data=true AND 11393.route_marking_and_occupancy =3 AND 11393.locked=true		No
Occupied, right, shunting route set, traffic blocked	11393.position=true AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy =2 AND 11393.locked=true		No
Occupied, left, train route set, traffic blocked	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy =1 AND 11393.locked=true		No
Occupied, left, shunting route set, traffic blocked	11393.position=false AND 11393.current_status_data=true AND 11393.route_marking_and_occupancy =2 AND 11393.locked=true		No
Free, train route set, above occupied	11393.current_status_data=true AND 11393.position=false AND 11393.occupancy_right_part =1		No


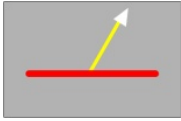
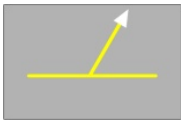
Description	Command (SCI-CMD)	Symbol	SVG file
Free, train route set, above occupied	11393.current_status_d ata=true AND 11393.position=true AND 11393.occupancy_ right_part =1		No
Free, train route set, below occupied	11393.current_status_d ata=true AND 11393.position=false AND 11393.occupancy_ left_part =1		No
Free, train route set, below occupied	11393.current_status_d ata=true AND 11393.position=true AND 11393.occupancy_ left_part =1		No
Free, train route set, right occupied	11393.current_status_d ata=true AND 11393.position=false AND 11393.occupancyright_p art_postive=1		No
Free, train route set, right occupied	11393.current_status_d ata=true AND 11393.position=true AND 11393.occupancyright_p art_postive=1		No

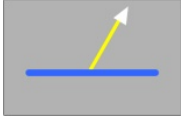
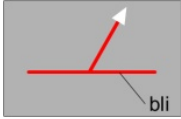
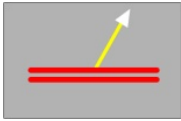
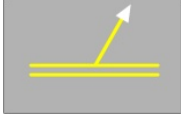
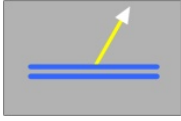
Description	Command (SCI-CMD)	Symbol	SVG file
Free, train route set, left occupied	11393.current_status_data=true AND 11393.position=true AND 11393.occupancy_left_part_postive=true		No
Free, train route set, left occupied	11393.current_status_data=true AND 11393.position=false AND 11393.occupancy_left_part_postive=true		No
Free, train route set, above occupied, traffic blocked	11393.current_status_data=true AND 11393.position=true AND 11393.OCCUPANCY_RIGHT_PART-=1 AND 11393.locked=true		No
Free, train route set, above occupied, traffic blocked	11393.current_status_data=true AND 11393.position=false AND 11393.OCCUPANCY_RIGHT_PART-=1 AND 11393.locked=true		No
Free, train route set, below occupied, traffic blocked	11393.current_status_data=true AND 11393.position=false AND 11393.OCCUPANCY_LEFT_PART-=1 AND 11393.locked=true		No


Description	Command (SCI-CMD)	Symbol	SVG file
Free, train route set, below occupied, traffic blocked	11393.current_status_data=true AND 11393.position=true AND 11393.OCCUPANCY_LEFT_PART-=1 AND 11393.locked=true		No
Free, train route set, right occupied, traffic blocked	11393.current_status_data=true AND 11393.position=true AND 11393.occupancyright_part_postive=1 AND 11393.locked=true		No
Free, train route set, right occupied, traffic blocked	11393.current_status_data=true AND 11393.position=false AND 11393.occupancyright_part_postive=1 AND 11393.locked=true		No
Free, train route set, left occupied, traffic blocked	11393.current_status_data=true AND 11393.position=true AND 11393.occupancy_left_part_postive=true AND 11393.locked=true		No

Description	Command (SCI-CMD)	Symbol	SVG file
Free, train route set, left occupied, traffic blocked	11393.current_status_data=true AND 11393.position=false AND 11393.occupancy_left_part_postive=true AND 11393.locked=true		No

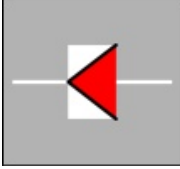
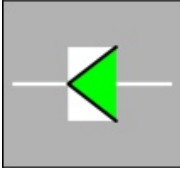
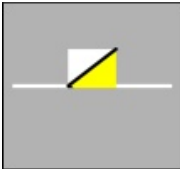
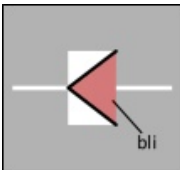
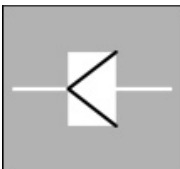
#### 1.5.4 Derailer

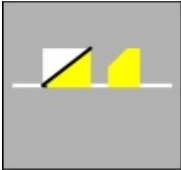
Description	Command (SCI-CMD)	Symbol	SVG file
Occupied, put up	11403.position=false AND 11403.current_status_data=true AND 11403.route_marking_and_occupancy=3		No
Occupied, put down	11403.position=true AND 11403.current_status_data=true AND 11403.route_marking_and_occupancy=3		No
Free	11403.position=true AND 11403.current_status_data=true		No

Description	Command (SCI-CMD)	Symbol	SVG file
Free, shunting route set, put down	11403.position =true AND 11403.current_status_data=true AND 11403.route_marking_and_occupancy=2		No
Without current state data.	11403.current_status_data=false		No
Occupied, put down, traffic blocked	11403.position =true AND 11403.current_status_data=true AND 11403.locked=true AND 11403.route_marking_and_occupancy=3		No
Free, traffic blocked	11403.position=true AND 11403.current_status_data=true AND 11403.locked=true		No
Free, shunting route set, put down, traffic blocked	11403.position=true AND 11403.current_status_data=true AND 11403.locked=true AND 11403.route_marking_and_occupancy=2		No

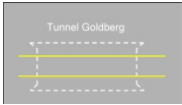
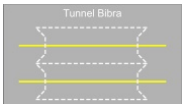
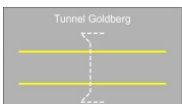
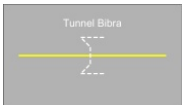
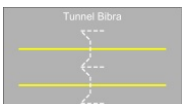

Description	Command (SCI-CMD)	Symbol	SVG file
Free, Occupied, put up, traffic blocked	11403.position=false AND 11403.current_status_data=true AND 11403.locked=true AND 11403.route_marking_and_occupancy=3		No

### 1.5.5 ETCSmarker

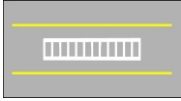
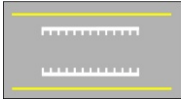

Description	Command (SCI-CMD)	Symbol	SVG file
ETCS Stop Marker Stop	11401.current_status_data=true		Yes
ETCS Stop Marker Go	11401.current_status_data=true and (11401.drive=1 or 11401.drive_and_stop_at_next_signal=true)		Yes
	11401.current_status_data=true and 11401.etc_ma=true		Yes
Without status data	11401.current_status_data=false		Yes
Out-of-Service	11401.current_status_data=true and 11401.signal_unused=true		Yes

Description	Command (SCI-CMD)	Symbol	SVG file
	11401.current_status_data=true and 11401.etc_ma=true		Yes

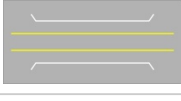
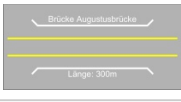
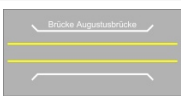
### 1.5.6 Tunnel

Description	Remarks	Symbol	SVG file
single-tube tunnel	length is variable tunnel follows track position		No
twin-tube tunnel	length is variable tunnel follows track position		No
single tube, tunnel portal, representation of a (example two-track)	length is variable		No
single tube, tunnel portal, representation of a (example single-track)	length is variable		No
twin-tube, tunnel portal	length is variable		No
Tunnel crossing	Width variable		No





### 1.5.7 Platform



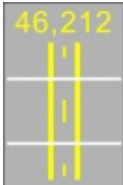

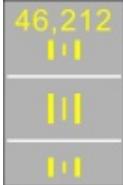
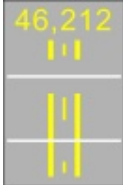
Description	Remarks	Symbol	SVG file
double-sided, rail-mounted platform edge	length is variable		No
double-sided, arrangement of a, platform edge with large, track spacing on the touching side.	length is variable		No
double-sided, rail-mounted edge,	length is variable		No

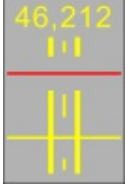


### 1.5.8 Bridge

Description	Remarks	Symbol	SVG file
double-track bridge	length is variable		No
double-track bridge with naming and length	length is variable		No
double-track bridge with naming	length is variable		No

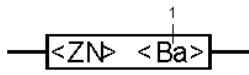

### 1.5.9 Level Crossing



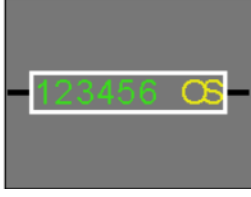
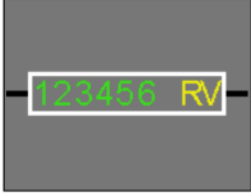
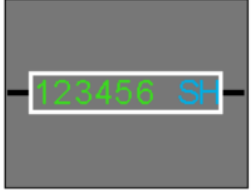


Description	Command (SCI-CMD)	Symbol	SVG file
	11414.current_status_data=true		No
Accessibility barrier set for track	11414.current_status_data=true		No
Accessibility barrier set for interference stop	11414.current_status_data=true		No
Without current status – Track related	( 11413.current_status_data=false AND (11414.current_status_data=false OR 11414.replacement_mode=false) ) or ( 11413.current_status_data=false AND (11414.current_status_data=true AND 11414.replacement_mode=true) ) AND 11414.current_status_data=true		No

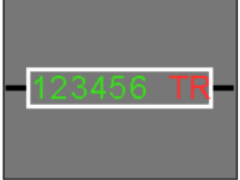



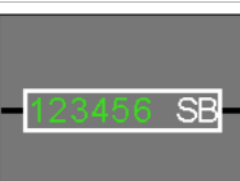

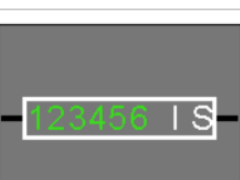
Description	Command (SCI-CMD)	Symbol	SVG file
Without current status – Level Crossing related	11414.current_status_ data=false		No
Full barrier closure without GFR	11414.current_status_ data=true AND (11414. caution_message =true OR 11414.caution_messag e_flashing =true )		No
Hp-System double track, unclaimed, not technically se cured	11414.current_status_ data=true AND 11413.status_regardin g_track =0		No
Hp-System double track, lower track, technically secu red	11414.current_status_ data=true AND 11413.status_regardin g_track =0		No
Hp-System double track, both tracks technically secur ed	11414.current_status_ data=true AND 11413.status_regardin g_track =0		No
Hp-System double track, upper track technically secur ed	11414.current_status_ data=true AND 11413.status_regardin g_track =0		No



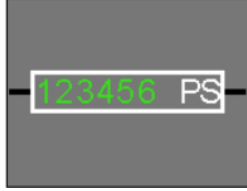
Description	Command (SCI-CMD)	Symbol	SVG file
Hp-System double track, upper track technically secured	11414.current_status_data=true AND 11413.status_regarding_track=3		No
	11414.current_status_data=true		No
	11414.current_status_data=true		No

### 1.5.10 Train Mode

Description	Command (SCI-CMD)	Symbol	SVG file
<p>-The operating mode [1] is displayed as part of the train number. It will be shown to the right of the train number with two letters separated by one space.</p> <p>-the box indicating train is running in ETCS encloses both the train number and the operating mode</p>	1 gn, ge, bl, rt, ws		
<p>- Not Running in ETCS</p> <p>- Operating mode not defined (National System)</p>	12410.m_mode = 13		No

Description	Command (SCI-CMD)	Symbol	SVG file
Automatic Driving			No
Full Supervision	12410.m_mode = 0		No
On Sight	12410.m_mode = 1		No
Reversing	12410.m_mode = 14		No
Shunting	12410.m_mode = 3		No
Supervised Maneuver	12410.m_mode = 12		No
Staff Responsible	12410.m_mode = 2		No

Description	Command (SCI-CMD)	Symbol	SVG file
Trip	12410.m_mode = 7		No
Post Trip	12410.m_mode = 8		No
Unfitted	12410.m_mode = 4		No
Sleeping	12410.m_mode = 5		No
Stand By	12410.m_mode = 6		No
System Failure	12410.m_mode = 9		No
Isolation	12410.m_mode = 10		No

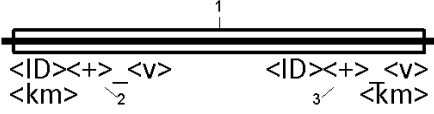
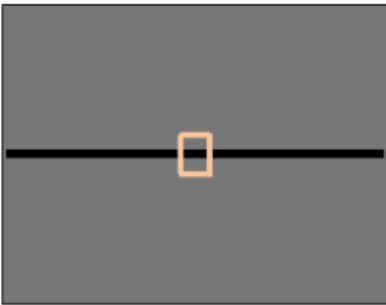

Description	Command (SCI-CMD)	Symbol	SVG file
No Power			No
Non Leading	12410.m_mode = 11		No
Passive Shunting	12410.m_mode = 15		No



## 2 Operation

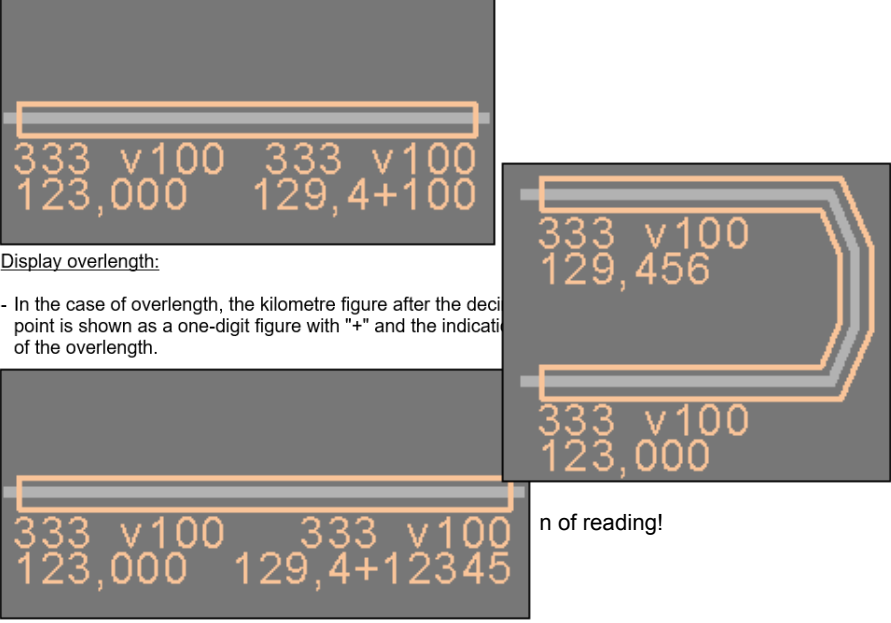
### 2.1 Temporary Speed Restrictions (TSR)

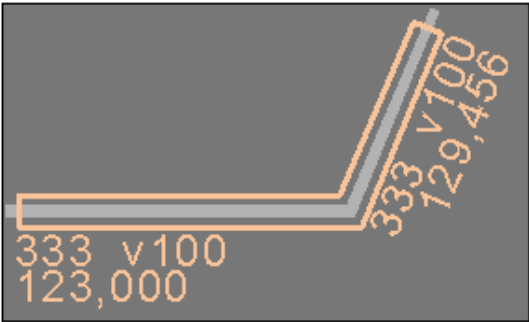
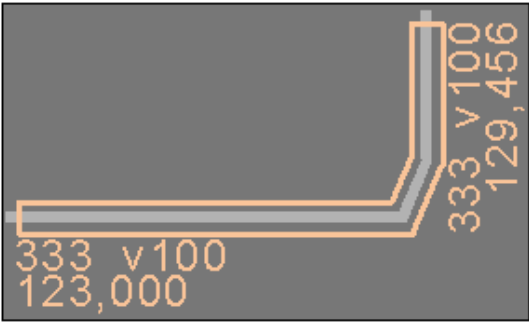
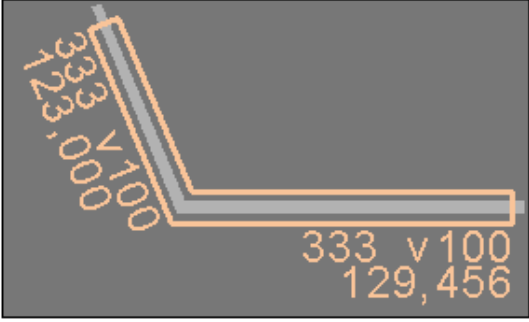
#### 2.1.1 Representation of TSR

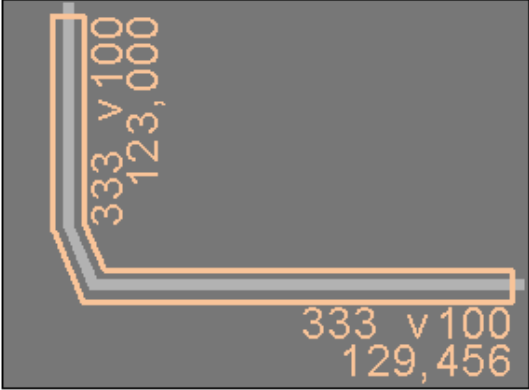
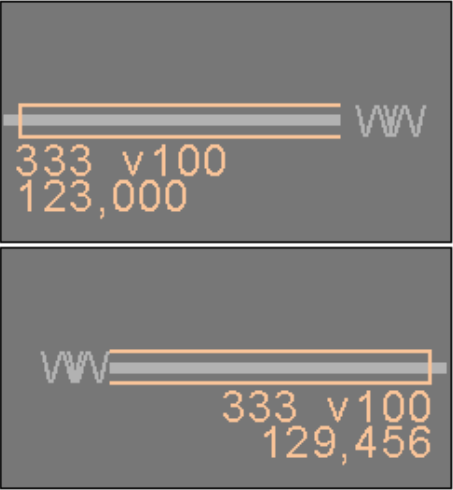
symbol Name	Symbol / description	Start Condition	End Condition

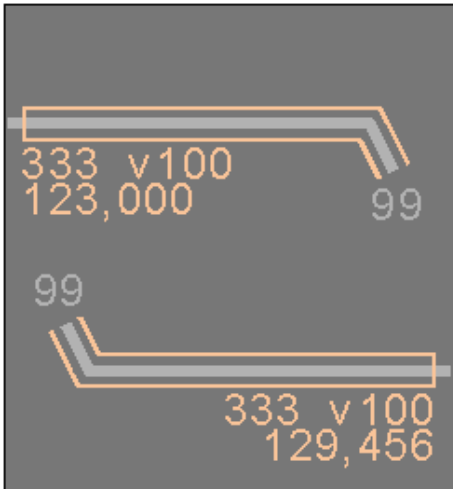
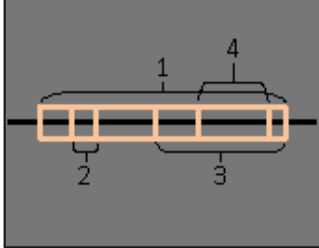

Symbol / description	Start Condition	End Condition
<p>SP T2 TS -12 35 37</p>  <p>&lt;ID&gt;&lt;+&gt; &lt;v&gt; &lt;ID&gt;&lt;+&gt; &lt;v&gt; &lt;km&gt; &lt;km&gt;</p> <p>Special features of the inscription:</p> <ul style="list-style-type: none"> <li>- For two-digit ID with leading zero</li> <li>- Numerical speed indication moving up to the leading "v"</li> <li>- For kilometre indications smaller than 1km, the location is still indicated in [km] (the leading zero is shown in front of the decimal point).</li> </ul> <p>Display Temporary Speed Restrictions (TSR) on the ETCS view magnifier:</p> <p>1, 2, 3 pf active ge not active</p> <ul style="list-style-type: none"> <li>- The display symbol [1] of the TSR is a rectangle with fixed height and dynamic width</li> <li>- The labels [2] &amp; [3] contain the ID, the optional overlay indicator "+", the kilometre marking and the speed indication ("_" as a placeholder for the space character)</li> </ul>		
<p>Ov erv iew</p>  <p>Display minimum width of restrictions with dynamic expansion:</p> <ul style="list-style-type: none"> <li>- Minimum width for the display of restrictions with dynamic expansion is the width of an alphanumeric character.</li> </ul>		
<p>Zo om</p>  <p>Display in basic state, without special features:</p> <ul style="list-style-type: none"> <li>- Labelling on both sides and below</li> <li>- Two-line lettering</li> <li>- ID three digits in the first line</li> <li>- TSR speed indication three-digit with leading "v" in the first line</li> <li>- Kilometres before and after the decimal point, each with three digits in the second line</li> </ul>		


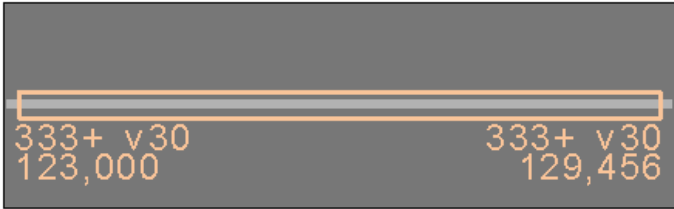
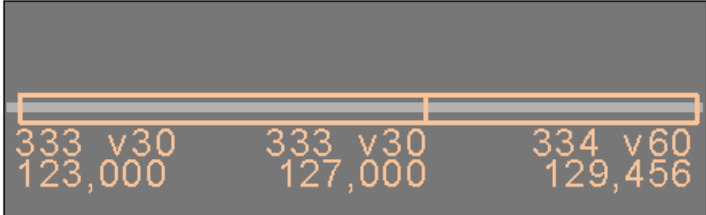
symbol Name	Symbol / description	Start Condition	End Condition
Zom 2	 <p>Display short restriction: - Labelling on left side only</p> <p>Note: The right-bound text shall be suppressed if a minimum distance of two alphanumeric letters between two text elements can not be met.</p>		
Zom 3	 <p>Special features of the inscription:</p> <ul style="list-style-type: none"> <li>- For two-digit ID with leading zero</li> <li>- Numerical speed indication moving up to the leading "v"</li> <li>- For kilometre indications smaller than 1km, the location is still indicated in [km] (the leading zero is shown in front of the decimal point).</li> </ul>		

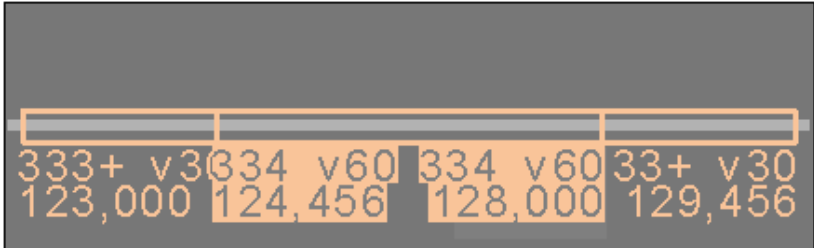
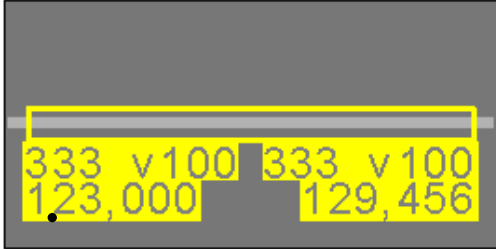
symbol Name	Symbol / description	Start Condition	End Condition
Zom 4	 <p><u>Display overlength:</u></p> <ul style="list-style-type: none"> <li>- In the case of overlength, the kilometre figure after the decimal point is shown as a one-digit figure with "+" and the indication of the overlength.</li> </ul> <p><u>Display overlength - maximum indication of overlength:</u></p> <ul style="list-style-type: none"> <li>- maximum permissible overlength is up to five numeric characters.</li> </ul> <p><u>Alignment of the inscription - complete rotation:</u></p> <ul style="list-style-type: none"> <li>- Both parts of the caption are placed below the associated ends of the restriction</li> </ul>		

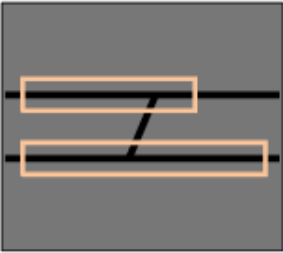
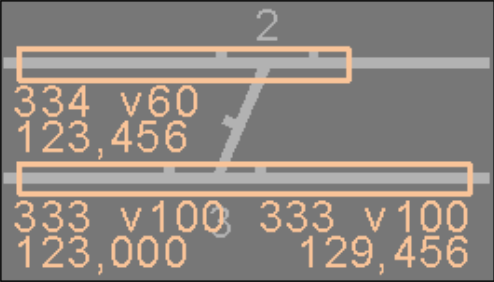
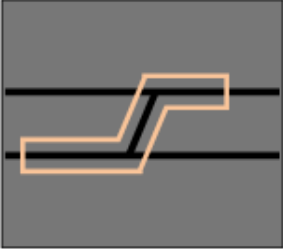
symbol Name	Symbol / description	Start Condition	End Condition
Zom 5	 <p><u>Alignment of the lettering - diagonally to the right:</u></p> <ul style="list-style-type: none"> <li>- Right-hand side labelling follows the restriction course.</li> </ul>  <p><u>Alignment of the lettering - horizontal right-hand side:</u></p> <ul style="list-style-type: none"> <li>- Right-hand side labelling follows the restriction course.</li> </ul>		
Zom 6	 <p><u>Alignment of the lettering - diagonally to the left:</u></p> <ul style="list-style-type: none"> <li>- Left-hand labelling follows the restriction course.</li> </ul>		

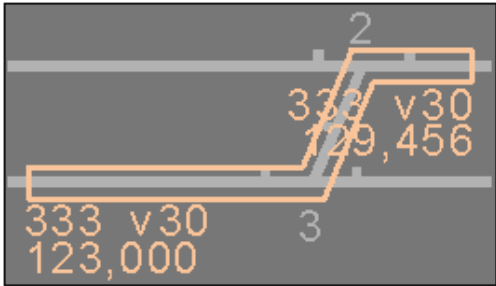
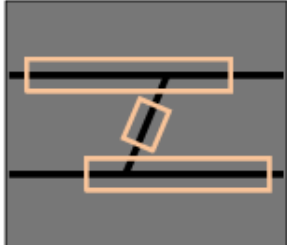
symbol Name	Symbol / description	Start Condition	End Condition
Zom 7	 <p>Alignment of the lettering - horizontal left-hand side: - Left-hand labelling arranges itself on the right-hand side of the restriction course.</p>		
Zom 8	 <p>Display in the basic state, on the cross-display connector: - Labelling on both sides and below at the ends of the restriction.</p>		

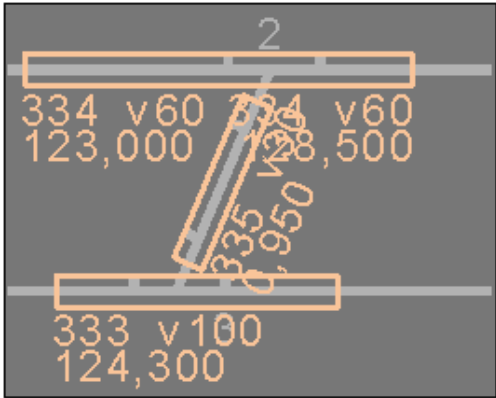
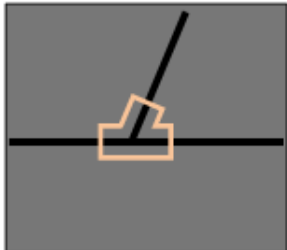
symbol Name	Symbol / description	Start Condition	End Condition
Zom 9	 <p><u>Display in basic status, connector in the same display screen:</u></p> <ul style="list-style-type: none"> <li>- Labelling on both sides and below at the ends of the restriction.</li> </ul>		
Zom 10	 <p><u>Display overlay of restrictions TSR:</u></p> <ul style="list-style-type: none"> <li>- Display of four overlapping restrictions (1 - 4) overview in the order of line mileage.</li> </ul> <p>Note: TSR are displayed on the</p>		
Zom 12	 <p><u>Display of overlays:</u></p> <ul style="list-style-type: none"> <li>- ID three digits, with overlay indicator "+" following.</li> </ul> <p>If a TSR overlays one or more shorter TSR of same priority, then "+" is shown. Also, if a more restrictive TSR is overlaying one or more TSR, then also a "+" is shown.</p>		

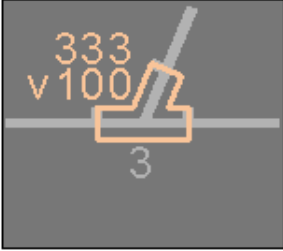
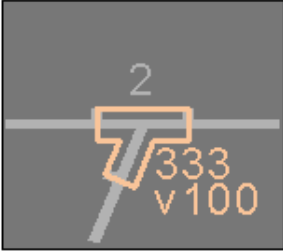
symbol Name	Symbol / description	Start Condition	End Condition
Zonom 14	 <p>TSR ID334 shall be shown as TSR ID334 is more restrictive than ID333.</p> <p><u>Display overlay without overlap:</u></p> <ul style="list-style-type: none"> <li>- TSR ID333 with v60</li> <li>- TSR ID334 with v30</li> </ul>		
Zonom 15	 <p>TSR ID334 is completely covered by TSR ID333 because TSR ID333 is more restrictive. TSR ID334 shall not be shown. For TSR ID333 a "+" shall be shown.</p> <p><u>Display overlay with complete coverage:</u></p> <ul style="list-style-type: none"> <li>- TSR ID333 with v30</li> <li>- TSR ID334 with v60</li> </ul>		
Zonom 16	 <p>Indication of TSR ID334 is partially covered by TSR ID333, because TSR ID333 is more restrictive. The left text and symbols of TSR ID334 shall be covered. For short restrictions that are partially covered, the text shall be right- instead of leftbound.</p> <p><u>Display overlay with partial overlay:</u></p> <ul style="list-style-type: none"> <li>- TSR ID333 with v30 starts at 123,000km and ends at 127,000km.</li> <li>- TSR ID334 with v60 starts at 125,000km and ends at 129,456km.</li> </ul>		

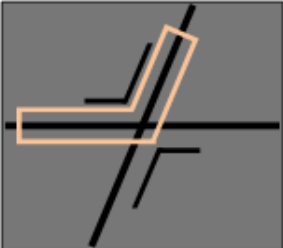
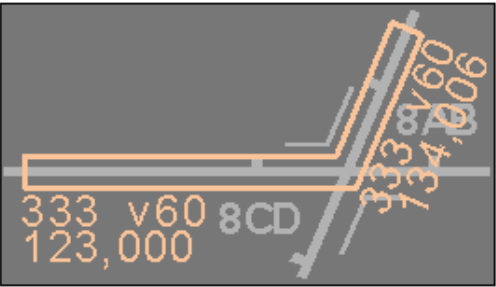
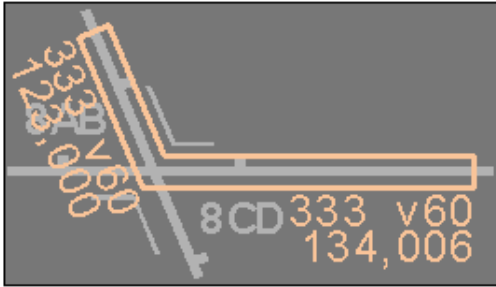
symbol Name	Symbol / description	Start Condition	End Condition
Zom 17	 <p>Indication of TSR ID334 is completely covered, because TSR ID333 is more restrictive.</p> <p><u>Highlight by "displaying" a completely covered line:</u></p> <ul style="list-style-type: none"> <li>- TSR ID333 overlaps TSR ID334</li> <li>- Highlighting the ID334 location using the "Show" function</li> </ul> <p>e.</p> <p>Because of application of the function "indicate" on TSR ID334, symbol and text shall be shown again.</p> <p>For highlighting the text, the background shall be provided in the color of the relevant restriction:</p> <p>TSR = peach, ETCS blockage = red, BA/HA = blue, no active restriction = yellow.</p>		
Zom 18	 <p>Because of application of the function "indicate" on a non-active restriction, the following indications shall apply:</p> <p>Symbol and text shall be shown again</p> <p><u>Highlighting by "displaying" non-active sites:</u></p> <ul style="list-style-type: none"> <li>- TSR ID333 is not in active state</li> <li>- Highlighting of location ID333 through the "Show" function</li> </ul> <p>be shown in yellow</p> <p>For highlighting the text, the background shall</p>		

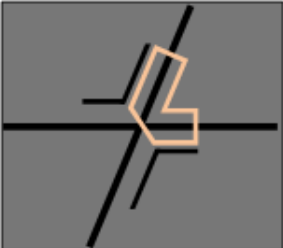
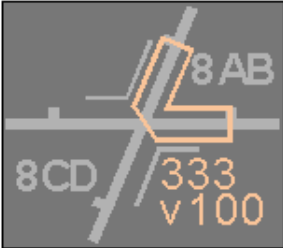

symbol Name	Symbol / description	Start Condition	End Condition
Zom 19	 <p><u>Display of two parallel restrictions:</u> - Course uninfluenced by each other</p>		
Zom 20	 <p><u>Display two parallel restrictions:</u> - Two-line lettering must fit between two parallel restrictions.</p>		
SP T2 TS -12 35 40 Overview	 <p><u>Display following across points:</u> - No labelling available</p>		

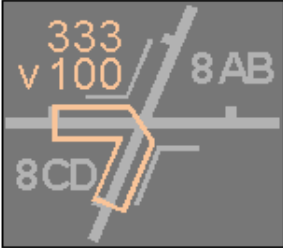
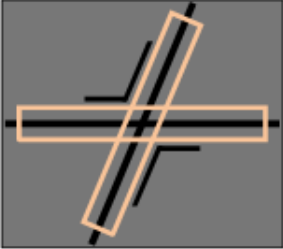
symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p><u>Display following across points:</u></p> <ul style="list-style-type: none"> <li>- The restriction follows the course of the track and points.</li> <li>- This may result in an overlap between the label and the display symbol.</li> </ul>		
Overview	 <p><u>Superimposition of labels:</u></p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>		

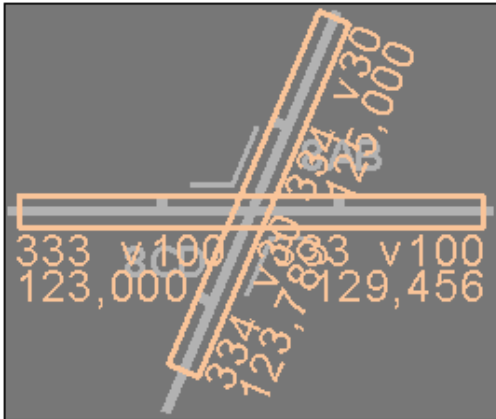

symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p><u>Superimposition of labels:</u></p> <ul style="list-style-type: none"> <li>- Partial overlapping of the labelling of TSR ID335 with the display symbol of TSR ID333</li> <li>- Partial overlapping of the labelling of TSR ID334 with the labelling of TSR ID335</li> </ul>		
Overview	 <p><u>Display with point reference, entire point:</u></p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>		

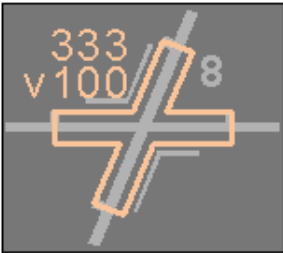
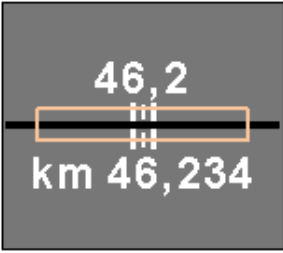

symbol Name	Symbol / description	Start Condition	End Condition
Zocom	 <p><u>Display with point reference, entire point:</u></p> <ul style="list-style-type: none"> <li>- Display for restriction on the "Point" node.</li> <li>- Restriction is valid for the entire point.</li> <li>- Labelling is displayed at the larger angle of the branching track (here top left)</li> <li>- Regardless of the extension, only one label is displayed.</li> <li>- The labelling is displayed without overlapping.</li> <li>- The actual speed is indicated in the second line.</li> <li>- Without kilometre indication</li> </ul>		
	 <p><u>Display with point reference, entire point (ex. rotated):</u></p> <ul style="list-style-type: none"> <li>- Representation of the inscription at the bottom right</li> </ul>		

Symbol Name	Symbol / description	Start Condition	End Condition
Overview	 <p>Indication also valid for diamond point</p> <p><u>Display restriction following the DKW course:</u></p> <ul style="list-style-type: none"> <li>- Restriction follows the course of a branching strand of the DKW</li> <li>- No labelling available</li> </ul>		
Zoom	 <p>Indication also valid for diamond point</p> <p><u>Display following the DKW course:</u></p> <ul style="list-style-type: none"> <li>- Restriction follows the course of a branching strand of the DKW</li> <li>- Labelling follows the angle of a branching strand</li> </ul>		
	 <p>Indication also valid for diamond point</p> <p><u>Display following the DKW course:</u></p> <ul style="list-style-type: none"> <li>- Example for other angle</li> </ul>		

symbol Name	Symbol / description	Start Condition	End Condition
Overview	 <p>Indication also valid for diamond point</p> <p><u>Display with node reference, point section AB of the DKW, entire point:</u></p> <p>- No labelling available</p>		
Zoom	 <p>Indication also valid for diamond point</p> <p><u>Display with node reference, point section AB of the DKW, entire point:</u></p> <p>- Restriction lies on entire point section AB</p>		
Overview	 <p>Indication also valid for diamond point</p> <p><u>Display with node reference, point part CD of the DKW, entire point:</u></p> <p>- No labelling available</p>		



symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p>Indication also valid for diamond point</p> <p><u>Display with node reference, point part CD of the DKW, entire point:</u></p> <ul style="list-style-type: none"> <li>- Restriction lies on entire point section CD</li> </ul>		
Overview	 <p>Indication also valid for crossings and single diamond point</p> <p><u>Display when restrictions are superimposed on a DKW:</u></p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>		

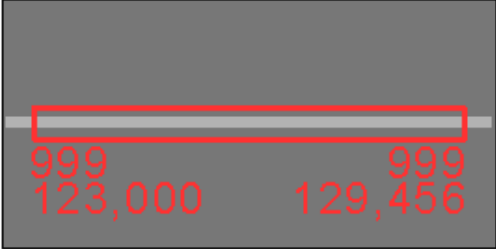
symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p>Indication also valid for crossings and single diamond point</p> <p><u>Display when restrictions are superimposed on a DKW:</u></p> <ul style="list-style-type: none"> <li>- The restrictions ID333 and ID334 overlap but do not influence each other.</li> </ul>		
Overview			

Symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p><u>Display with node reference, total intersection:</u></p> <ul style="list-style-type: none"> <li>- Display for restriction on the "Crossing" node</li> <li>- Restriction is valid for the entire intersection</li> <li>- Labelling is displayed on the larger angle at the top left of the branching track</li> <li>- Regardless of the extension, only one label is displayed</li> <li>- The speed is indicated in the second line</li> <li>- Without kilometre indication</li> </ul>		
Overview	 <p><u>Display at the level crossing:</u></p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>		
Zoom	 <p><u>Display at the level crossing:</u></p> <ul style="list-style-type: none"> <li>- Without special features</li> </ul>		

## 2.2 ETCS blockage

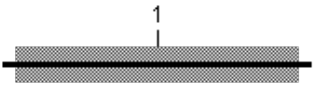
### 2.2.1.1 Indication

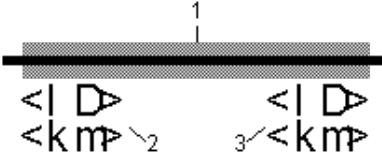
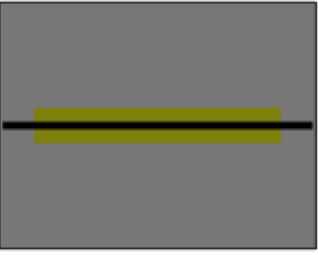
Sym bol Name	Symbol / description	Start Condit ion	End Condi tion
Over view	<p style="text-align: center;">1</p>  <p>Note: in the following chapters only the active restrictions are displayed, because there is no difference in showing active or non-active restrictions.</p>		
Zoom	<p style="text-align: center;">1</p>  <p>&lt;ID&gt;&lt;+&gt;      &lt;ID&gt;&lt;+&gt; &lt;km&gt;    2      3    &lt;km&gt;</p> <p><u>Display ETCS lock (ES) on the ETCS view magnifier:</u></p> <p>1, 2, 3    rt   active      - The display symbol [1] of the ES is a rectangle with fixed height and dynamic width           ge   not active    - The labels [2] &amp; [3] contain the ID, the optional overlay indicator "+" and the kilometre marking.</p>		
<p>Note: in the following chapters only the active restrictions are displayed, because there is no difference in showing active or non-active restrictions.</p> <p>Restrictions of type "ETCS blockage" follow the same rules than restrictions of type "TSR", therefore in the following only those indications are shown that deviate from the chapter "indication of TSR".</p>			

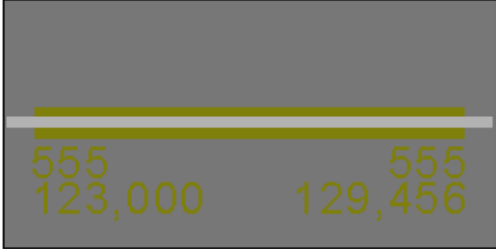
Sym bol Name	Symbol / description	Start Condit ion	End Condit ion
Zoom	 <p>Display in basic state, without special features:</p> <ul style="list-style-type: none"> <li>- Labelling on both sides and below</li> <li>- Two-line lettering</li> <li>- ID three digits in the first line</li> <li>- Kilometres before and after the decimal point, each with three digits in the second line</li> </ul>		

## 2.3 Area of disturbed radio

### 2.3.1.1 Indication

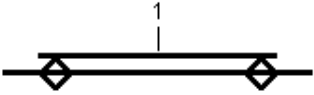
Symb ol Name	Symbol / description	Start Condit ion	End Condit ion								
Overvi ew	 <p>Display of the area of radio interference (BgF) on the overview:</p> <table> <tr> <td>1</td> <td>ge_bgf</td> <td>active</td> <td>- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.</td> </tr> <tr> <td></td> <td>ge</td> <td>inactive</td> <td>- The representation is made as an area under the tracks</td> </tr> </table>	1	ge_bgf	active	- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.		ge	inactive	- The representation is made as an area under the tracks		
1	ge_bgf	active	- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.								
	ge	inactive	- The representation is made as an area under the tracks								
<p>Note: in the following chapters only the active restrictions are displayed, because there is no difference in showing active or non-active restrictions.</p>											

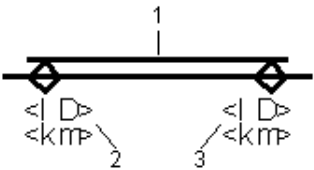
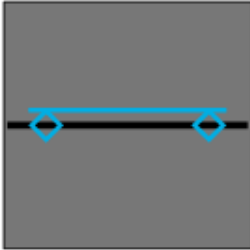
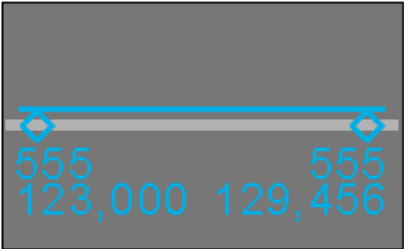
Symbol Name	Symbol / description	Start Condition	End Condition					
Zoom	 <p>Display area of disturbed radio (BgF) on the ETCS view magnifier:</p> <table border="0"> <tr> <td data-bbox="284 831 352 860">1, 2, 3</td> <td data-bbox="373 808 539 837">ge_bgf active</td> <td data-bbox="667 792 1155 846" rowspan="2"> <ul style="list-style-type: none"> <li>- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.</li> <li>- The representation is made as an area under the tracks.</li> <li>- The labels [2] &amp; [3] contain the ID and kilometres</li> </ul> </td> </tr> <tr> <td></td> <td data-bbox="373 860 576 889">ge not active</td> </tr> </table>	1, 2, 3	ge_bgf active	<ul style="list-style-type: none"> <li>- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.</li> <li>- The representation is made as an area under the tracks.</li> <li>- The labels [2] &amp; [3] contain the ID and kilometres</li> </ul>		ge not active		
1, 2, 3	ge_bgf active	<ul style="list-style-type: none"> <li>- The display symbol [1] of the BgF is a rectangle with fixed height and dynamic width.</li> <li>- The representation is made as an area under the tracks.</li> <li>- The labels [2] &amp; [3] contain the ID and kilometres</li> </ul>						
	ge not active							
<p>Note: in the following chapters only the active restrictions are displayed, because there is no difference in showing active or non-active restrictions.</p>								
Overview	 <p>Display in basic state, without special features:</p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>							

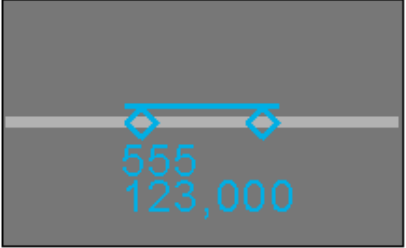

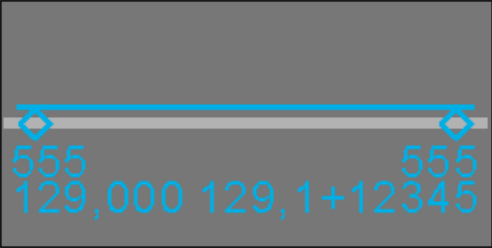
Symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p><u>Display in basic state, without special features:</u></p> <ul style="list-style-type: none"> <li>- Labelling on both sides and below</li> <li>- Two-line lettering</li> <li>- ID three digits in the first line</li> <li>- Kilometres before and after the decimal point, each with three digits in the second line</li> </ul>		

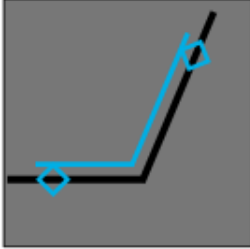
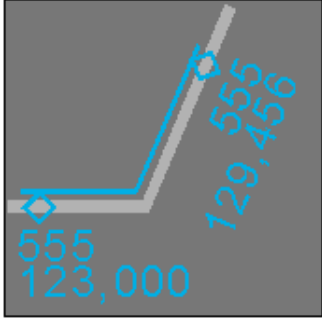
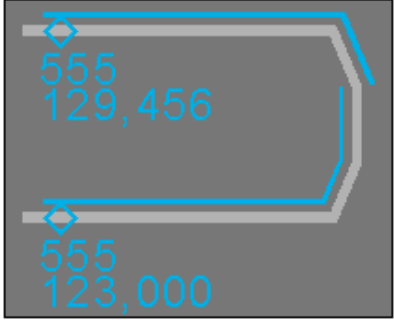
## 2.4 Pantograph down

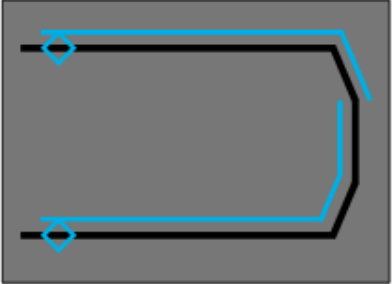
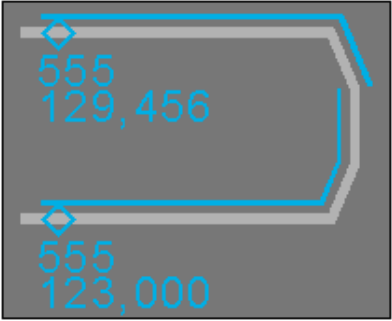
### 2.4.1.1 Indication

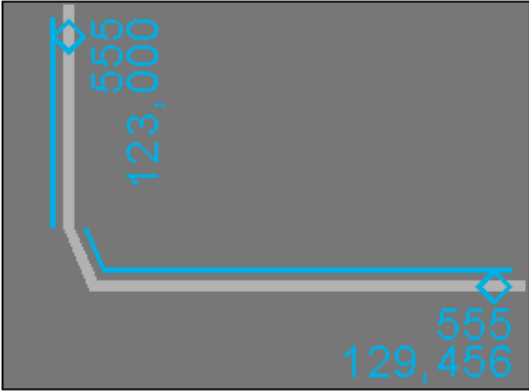
Symbol Name	Symbol / description	Start Condition	End Condition
overview	 <p><u>Display Pantograph down (BA) on the overview:</u></p> <p>bl active 1 ge not active</p> <p>- The display symbol [1] BA consists of two diamonds with an overlying horizontal bar covering the entire width of the diamonds</p>		

Symbol Name	Symbol / description	Start Condition	End Condition
zoom	 <p>Display Pantograph down (BA) on the ETCS view magnifier:</p> <p>1, 2, 3      bl active                   ge not active</p> <ul style="list-style-type: none"> <li>- The display symbol [1] BA consists of two diamonds with an overlying horizontal bar covering the entire width of the diamonds</li> <li>- The labels [2] &amp; [3] contain the ID and kilometres</li> </ul>		
<p>Note: in the following chapters only the active restrictions are displayed, because there is no difference in showing active or non-active restrictions.</p>			
Overview	 <p><u>Display in basic state, without special features:</u></p> <ul style="list-style-type: none"> <li>- No labelling available</li> </ul>		
Zoom	 <p><u>Display in basic state, without special features:</u></p> <ul style="list-style-type: none"> <li>- Labelling on both sides and below</li> <li>- Two-line lettering</li> <li>- ID three digits in the first line</li> <li>- Kilometres before and after the decimal point, each with three digits in the second line</li> </ul>		

Symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p><u>Display short restriction:</u></p> <ul style="list-style-type: none"> <li>- Labelling on left side only</li> </ul>		
<p>The rightbound text shall be suppressed if a minimum distance of two alphanumeric signs cannot be ensured.</p>			
Zoom	 <p><u>Display overlength:</u></p> <ul style="list-style-type: none"> <li>- In the case of overlength, the kilometre figure after the decimal point is shown as a one-digit figure with "+" and the indication of the overlength.</li> </ul>		
Zoom	 <p><u>Display overlength - maximum indication of overlength:</u></p> <ul style="list-style-type: none"> <li>- maximum permissible overlength is up to five numeric characters.</li> </ul>		

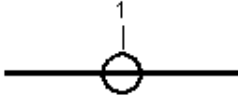
Symbol Name	Symbol / description	Start Condition	End Condition
Overview	 <p><u>Display on the sloping track:</u></p> <ul style="list-style-type: none"> <li>- Display symbol follows the angle of the track edge.</li> <li>- No labelling available</li> </ul>		
Zoom	 <p><u>Display on the sloping track:</u></p> <ul style="list-style-type: none"> <li>- Display symbol and labelling follow the angle of the track edge.</li> </ul>		
Zoom	 <p><u>Orientierungswechsel der Gleiskante – vollständige Drehung:</u></p> <ul style="list-style-type: none"> <li>- Gemäß der Orientierung der Gleiskante, bleibt der Querbalken des Anzeigesymbols über dem Gleis</li> <li>- Beide Teile der Beschriftung sind unterhalb der zugehörigen Enden der Restriktion angeordnet</li> </ul>		

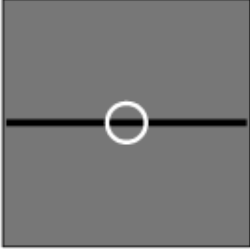
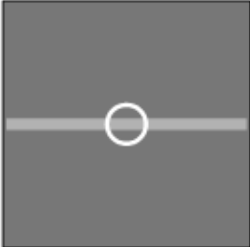
Symbol Name	Symbol / description	Start Condition	End Condition
Overview	 <p><u>Orientation change of the track edge - complete rotation:</u></p> <ul style="list-style-type: none"> <li>- According to the orientation of the track edge, the cross bar of the display symbol remains above the track.</li> <li>- No labelling available</li> </ul>		
Zoom	 <p>Note : Mind the direction of reading!</p> <p><u>Orientation change of the track edge - complete rotation:</u></p> <ul style="list-style-type: none"> <li>- According to the orientation of the track edge, the cross bar of the display symbol remains above the track.</li> <li>- Both parts of the caption are placed below the associated ends of the restriction</li> </ul>		

Symbol Name	Symbol / description	Start Condition	End Condition
Zoom	 <p>Note: Mind the direction of reading!</p> <p><u>Orientation change of the track edge - horizontal left side:</u></p> <ul style="list-style-type: none"> <li>- According to the orientation of the track edge, the cross bar of the display symbol remains above the track.</li> <li>- Left-hand labelling arranges itself on the right-hand side of the restriction course.</li> </ul>		

## 2.5 Change of lines

### 4.5.1 Indication

Symbol Name	Symbol / description	Start Condition	End Condition
Overview and zoom	 <p><u>Display route change on the Overview and ETCS view magnifying glass:</u></p> <p>1    <u>WS</u>    - The display symbol [1] of the route change is a circle without filling</p>		

Symbol Name	Symbol / description	Start Condition	End Condition
Overview	 <p><u>Display in basic state, without special features:</u> - No labelling available</p>		
Zoom	 <p><u>Display in basic state, without special features:</u> - No labelling available</p>		

## 2.6 Technical specifications

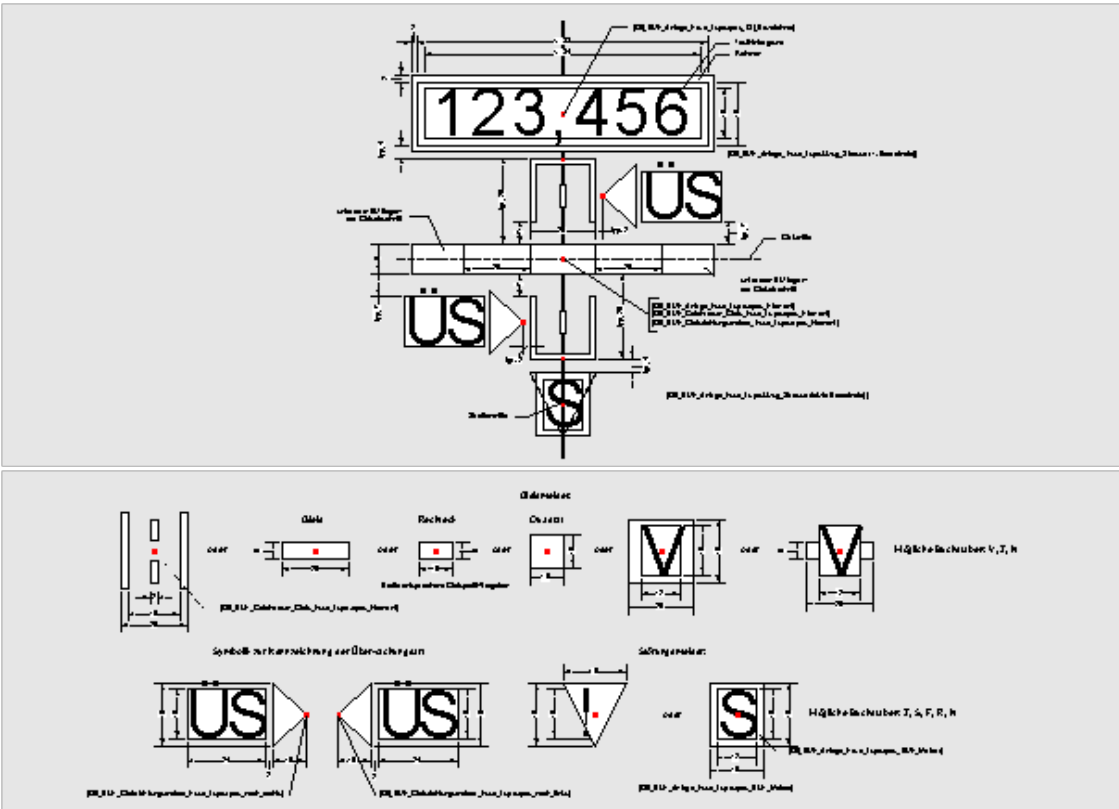
41 5. 90 70 A 03 -28	-	<b>2 Technical specifications</b>
41 5. 90 70 A0 3- 45	-	2.1 Technical boundary conditions

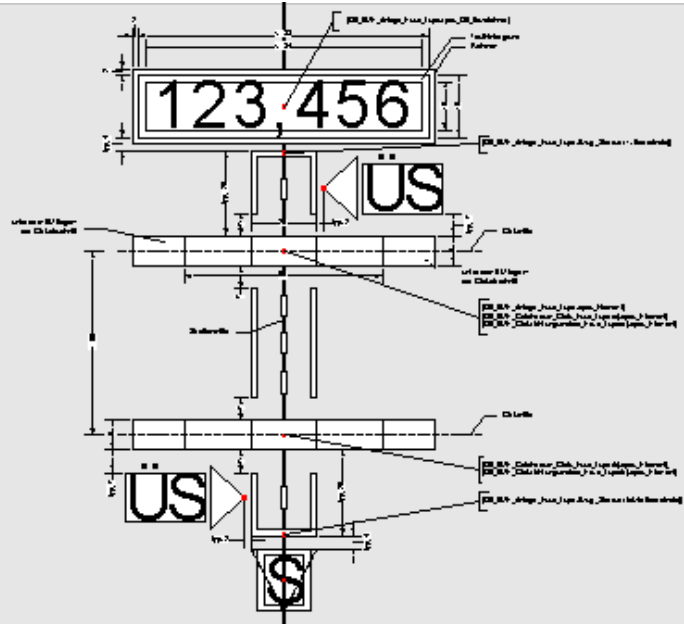
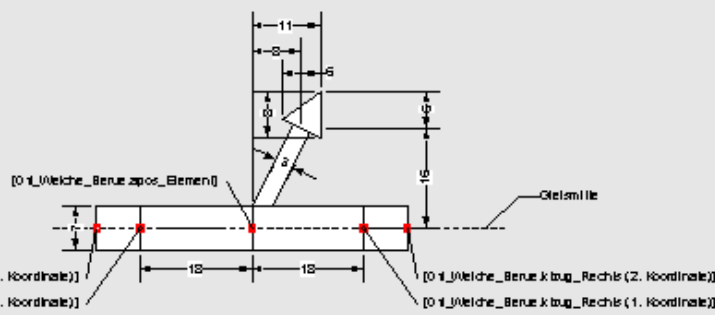
<p>41 5. 90 70 A 03 -28</p>	<p>-</p>	<p><b>2 Technical specifications</b></p>
<p>41 5. 90 70 A0 3- 47</p>	<p>M u st</p>	<p>All dimensions are shown in length units (LE). 1 LE corresponds to 1 atomic display unit (pixel) on the display medium.</p>
<p>41 5. 90 70 A0 3- 344</p>	<p>M u st</p>	<p>Similar element parts (such as locking indicators) must be displayed in the same way in all elements.</p>
<p>41 5. 90 70 A0 3- 55</p>	<p>-</p>	<p><b>2.3 Design conventions</b></p>
<p>41 5. 90 70 A0 3- 230</p>	<p>-</p>	<p><b>2.3.1 Track spacing</b></p>

41 5. 90 70 A 03 -28	-	<b>2 Technical specifications</b>
41 5. 90 70 A0 3- 56	M u st	The minimum track spacing is 32 LE.
41 5. 90 70 A0 3- 231	-	2.3.2 Angle
41 5. 90 70 A0 3- 58	M u st	The pitch ratio for branching strands is 1:2 in the x to y direction.
41 5. 90 70 A0 3- 232	-	2.3.3 Text

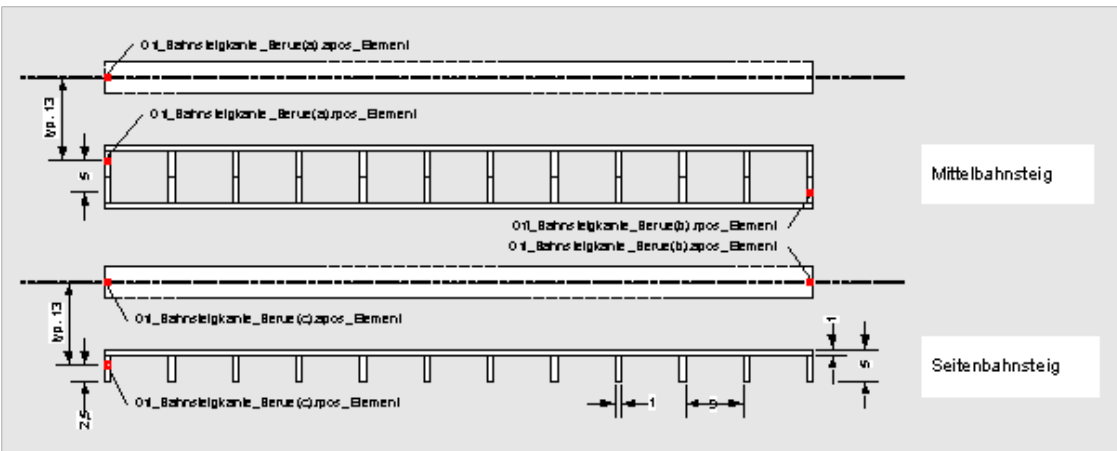
41 5. 90 70 A 03 -28	-	<b>2 Technical specifications</b>
41 5. 90 70 A0 3- 59	M u st	For each individual character of a text representation, an area of 12 LE x 15 LE (W*H) is provided.
41 5. 90 70 A0 3- 360	M u st	Unless otherwise defined for a specific element, the coordinates for text fields always describe the geometric centre of the text field. Unless otherwise defined for a specific element, texts are entered centred in the text fields.
41 5. 90 70 A0 3- 233	-	2.3.4 Line types
41 5. 90 70 A0 3- 102	M u st	Unless otherwise described in the element-specific geometries, the following line types are used: ·pulled through (standard): ·Line display without interruption ·dashed: ·The dash-dash line is designed in the division 8-4-8 LE (dash-dash-space-dash). ·dotted ·The dot-dot line is designed in a 2-2-2 LE (dot-space-dot) layout. ·semicolon ·The semicolon line is divided into 8-2-2-2-8 LE (dash-space-dot-space-dash).

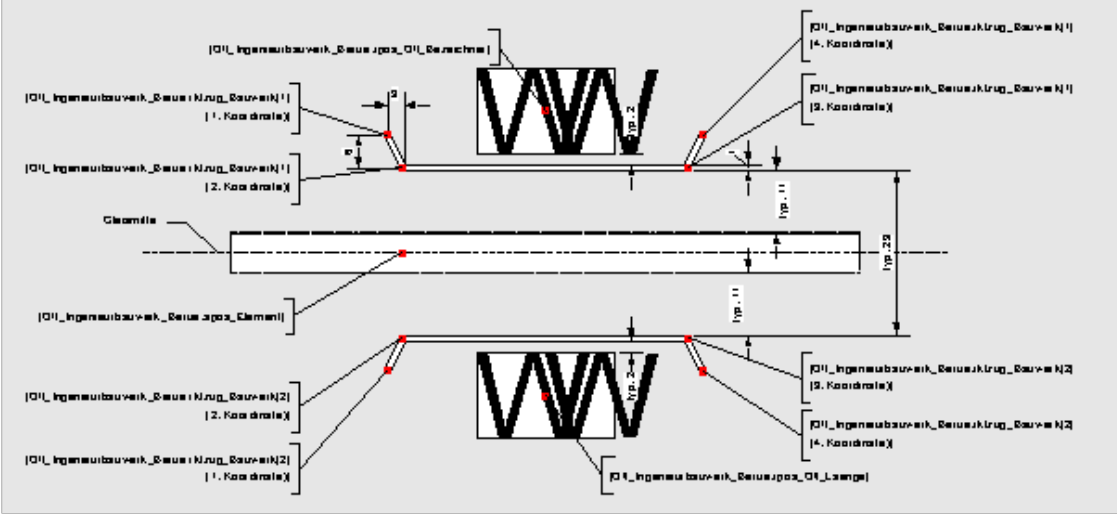
<p>41 5. 90 70 A 03 -28</p>	<p>- <b>2 Technical specifications</b></p>
<p>41 5. 90 70 A0 3- 44</p>	<p>- 3 element geometries ESTW, ZN and ZL</p>
<p>41 5. 90 70 A0 3- 74</p>	<p>- 3.4 Level crossing systems</p>
<p>41 5. 90 70 A0 3- 283</p>	<p>M The road symbol on the level crossing is shown and hidden depending on the configuration in the event of a u switch-on message. st</p>
<p>41 5. 90 70 A0 3- 116</p>	<p>- 3.4.1 Level crossing, single-track</p>

<p>41 - 5. 90 70 A 03 -28</p>	<p><b>2 Technical specifications</b></p>
<p>41 M 5 u 90 st 70 A0 3- 538</p>	 <p>This drawing shows a national solution, which needs to be adjusted for the final specification.</p>
<p>41 - 5. 90 70 A0 3- 279</p>	<p>3.4.3 Level crossing, multi-track</p>

<p>41 - 5. 90 70 A 03 -28</p>	<p><b>2 Technical specifications</b></p>
<p>41 M 5. u 90 st 70 A0 3- 321</p>	 <p>This drawing shows a national solution, which needs to be adjusted for the final specification.</p>
<p>41 - 5. 90 70 A0 3- 208</p>	<p>3.7.2 Derailer</p>
<p>41 M 5. u 90 st 70 A0 3- 209</p>	



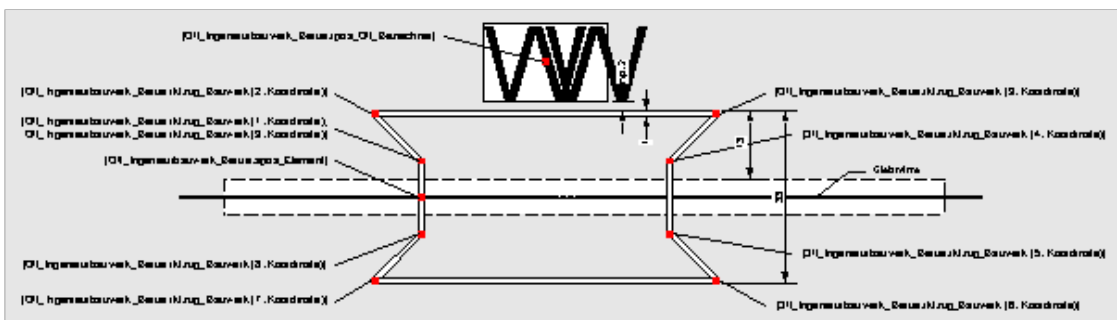
<p>41 - 5. 90 70 A 03 -28</p>	<p><b>2 Technical specifications</b></p>
<p>41 M 5 u 90 st 70 A0 3- 111</p>	
<p>41 - 5. 90 70 A0 3- 100</p>	<p>3.11.4 Bridge</p>
<p>41 M 5 u 90 st 70 A0 3- 103</p>	<p>The bridge is represented by two continuous lines. Note: The edge course of the can contain further coordinates to specify non-trivial edge courses.</p>

<p>41 - 5. 90 70 A 03 -28</p>	<p><b>2 Technical specifications</b></p>
<p>41 M 5 u 90 st 70 A0 3- 452</p>	 <p>If planned, the length must be specified in whole metres and supplemented with a space and the letter "m".</p>
<p>41 - 5. 90 70 A0 3- 98</p>	<p>3.11.5 Tunnel</p>
<p>41 M 5 u 90 st 70 A0 3- 101</p>	<p>The tunnel is represented by a dashed line (see ID 415.9070A03-102). The tunnel portal must be shown at both ends of the tunnel. Note: The edge course of the can contain further coordinates to specify non-trivial edge courses.</p>

41 - 2 Technical specifications

5.  
90  
70  
A  
03  
-28

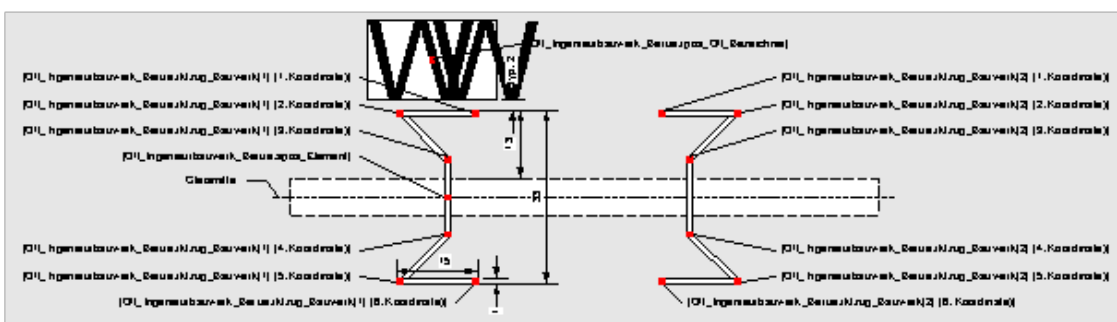
41 M  
5. u  
90 st  
70  
A0  
3-  
460



Tunnel

Note: The positioning of the identifier and, if applicable, the length specification is based on the respective local conditions and the project planning specifications. If planned, the length must be specified in whole metres and supplemented with a space and the letter "m".

41 M  
5. u  
90 st  
70  
A0  
3-  
470

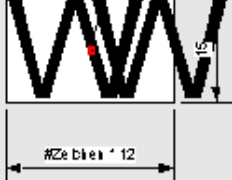


Tunnel portal

Note: The positioning of the identifier and, if applicable, the length specification is based on the respective local conditions and the project planning specifications. If planned, the length must be specified in whole metres and supplemented with a space and the letter "m".

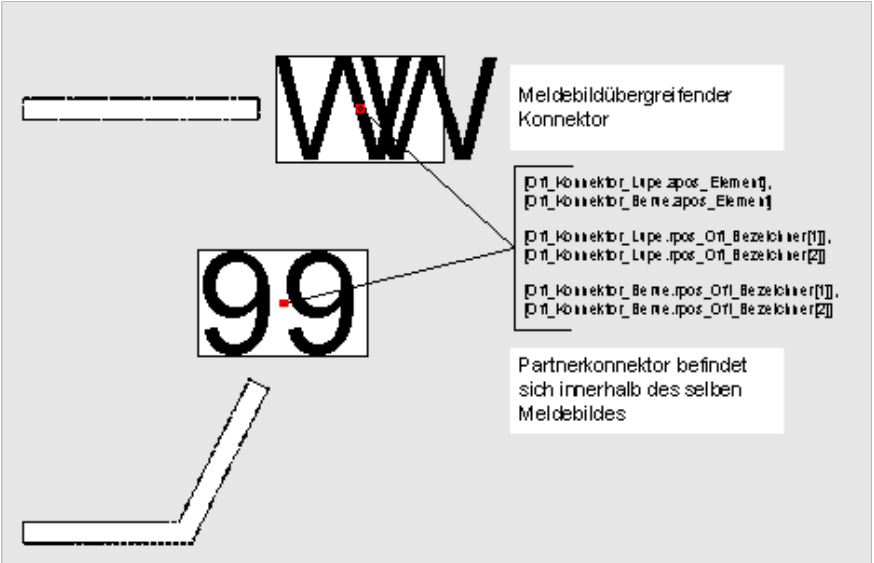
41 - 3.11.8 Static text

5.  
90  
70  
A0  
3-  
243

<p>41 - 5. 90 70 A 03 -28</p>	<p><b>2 Technical specifications</b></p>
<p>41 M 5. u 90 st 70 A0 3- 245</p>	<div style="display: flex; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; margin-right: 10px;"> <p>[01_Statistics_Element_Berle apos_Element] [01_Statistics_Element_Lipe apos_Element] [01_Statistics_Element_Berle statiscier_Text apos_Text] [01_Statistics_Element_Lipe statiscier_Text apos_Text]</p>  </div> <div> <p>Note: For multi-line text fields, only the first rpos_Text matches apos_Element.</p> </div> </div>
<p>41 - 5. 90 70 A0 3- 248</p>	<p>3.11.9 Connector</p>

41	-	<b>2</b>	<b>Technical specifications</b>
5.			
90			
70			
A			
03			
-28			

41	M		
5.	u		
90	st		
70			
A0			
3-			
250			



Meldebildübergreifender Konnektor

- [0]\_Konnektor\_Lupe.zpos\_Element
- [0]\_Konnektor\_Bene.zpos\_Element
- [0]\_Konnektor\_Lupe.pos\_Ort\_Bezeichnung[1]
- [0]\_Konnektor\_Lupe.pos\_Ort\_Bezeichnung[2]
- [0]\_Konnektor\_Bene.pos\_Ort\_Bezeichnung[1]
- [0]\_Konnektor\_Bene.pos\_Ort\_Bezeichnung[2]

Partnerkonnektor befindet sich innerhalb des selben Meldebildes

## 2.7 Ongoing - ETCS Driver Machine Interface (DMI)

## 2.7.1 Glossary

### 2.7.1.1 Subset 058 terminologies

Commands	Description
D_EST	Estimated value of a measured distance
D_ESTODO_BG	Estimated distance reference of the balise group
D_MAX	Upper bound of the confidence interval of a measured distance
D_MIN	Lower bound of the confidence interval of a measured distance
D_RES	Distance resolution
D_STMSYS	STM system distance
D_TARGET	Target distance
L_CAPTION	Length of caption text string in bytes for button, indicator and data.
L_MESSAGE	Message length
L_PACKET	Packet length
L_TEXT	Length of text string in bytes
L_VALUE	Length of text string in bytes for value used for data value, default value of data and for dedicated keyboard values.
M_BIEB_CMD	Emergency brake command
M_BIEB_STATUS	Emergency brake availability status
M_BISB_CMD	Service brake command
M_BISB_STATUS	Service brake availability status
M_BRAKE_PERCENTAGE_S TM	Brake percentage
M_BUT_ATTRIB	Attributes for buttons.
M_COLOUR_IS	Colour for intervention speed
M_COLOUR_PS	Colour for permitted speed
M_COLOUR_RS	Colour for release speed
M_COLOUR_SP	Colour for speed pointer

Commands	Description
M_COLOUR_TS	Colour for target speed
M_DATA	Data
M_DATAENTRYFLAG	Specific NTC Data Entry flag
M_FREQ	Sound segment frequency
M_IND_ATTRIB	Attributes for indicators
M_TESTOK	STM Test result
M_TICAB_STATUS	Cab status on Train Interface
M_TIDIR_STATUS	Direction handle train interface status
M_TIEDCBEB_CMD	Train interface for Eddy Current Brake for Emergency Brake command
M_TIEDCBSB_CMD	Train interface for Eddy Current Brake for Service Brake command
M_TIEDCBEB_CMD_AVAIL	Train interface for Eddy Current Brake for Emergency Brake command availability
M_TIEDCBSB_CMD_AVAIL	Train interface for Eddy Current Brake for Service Brake command availability
M_TIFLAP_CMD	Air tightness/Flap control train interface command
M_TIFLAP_CMD_AVAIL	Air tightness train interface command availability
M_TIMS_CMD	Main switch/Circuit breaker train interface command
M_TIMS_CMD_AVAIL	Main switch/Circuit breaker train interface command availability
M_TIMSH_CMD	Magnetic brake system train interface command
M_TIMSH_CMD_AVAIL	Magnetic shoe brake train interface command availability
M_TIPANTO_CMD	Pantograph train interface command
M_TIPANTO_CMD_AVAIL	Pantograph train interface command availability
M_TIRB_CMD	Regenerative brake train interface command
M_TIRB_CMD_AVAIL	Regenerative brake train interface command availability
M_TITR_C_CMD	Traction cut off train interface command
M_TITR_C_CMD_AVAIL	Traction cut-off train interface command availability
M_TITR_STATUS	Traction status on Train Interface
M_TRAINTYPE	Train type

Commands	Description
M_XATTRIBUTE	Text message attribute
N_VERMAJOR	FFFIS STM version major number X
N_VERMINOR	FFFIS STM version minor number Y
N_ADDR_BI	Address of BIU Function
N_ADDR_DMI_CHANNEL1	Address of DMI channel 1
N_ADDR_DMI_CHANNEL2	Address of DMI channel 2
N_ADDR_DMI_CHANNEL3	Address of DMI channel 3
N_ADDR_DMI_CHANNEL4	Address of DMI channel 4
N_ADDR_JD	Address of JD Function
N_ADDR_ODO	Address of the Odometer Function
N_ADDR_TI	Address of TIU Function
N_LITER	Number of iterations of a data set following this variable in a packet
NID_ANTENNA_BTM	Valid Antenna/BTM ID
NID_BUTTONPOS	Button Position Identifier
NID_BUTTON	Button Identifier
NID_DATA	Identifier of a Specific NTC Data
NID_DMICHANNEL	Button Position Identifier
NID_DRV_LANG	Driver language Identifier
NID_ICON	Icon Identifier
NID_INDICATOR	Indicator Identifier
NID_INDPOS	Indicator Position Identifier
NID_PACKET	Packet Identifier
NID_SOUND	Sound Identifier
NID_STM	STM identity
NID_STMSTATE	Current STM state
NID_STMSTATEORDER	DMI channel Identifier
NID_STMSTATEREQUEST	STM state request

Commands	Description
NID_TEST	STM Test Identity
NID_XMESSAGE	Text message Identifier
Q_ACK	Acknowledgement qualifier
Q_ADDR_BI	Safety level of Brake Interface connection
Q_ADDR_DMI_CHANNEL1	Safety level of DMI channel 1 connection
Q_ADDR_DMI_CHANNEL2	Safety level of DMI channel 2 connection
Q_ADDR_DMI_CHANNEL3	Safety level of DMI channel 3 connection
Q_ADDR_DMI_CHANNEL4	Safety level of DMI channel 4 connection
Q_ADDR_JD	Safety level/Availability of JD connection
Q_ADDR_ODO	Safety level of Odometer connection
Q_ADDR_TI	Safety level of Train Interface connection
Q_ANTN_BTMM_ACTIVE	Qualifier indicating if there is an active Antenna/BTM
Q_BMM_ANNOUNCED	Big Metal Mass announced
Q_BTMM_ALARM	BTM alarm
Q_BUTTON	Button Event
Q_CHECKNEEDED	Qualifier for need of checking the Interface 'K' Antenna/BTM ID
Q_DATAENTRY	Need for Specific NTC Data Entry
Q_DISPLAY_IS	Display mode for intervention speed
Q_DISPLAY_PS	Display mode for permitted speed
Q_DISPLAY_RS	Display mode for Release Speed
Q_DISPLAY_TD	Display mode for Target Distance
Q_DISPLAY_TS	Display mode for target speed
Q_FOLLOWING	Indicate a following request
Q_OVR_STATUS	ETCS Override status
Q_SOUND	Sound qualifier
T_BUTTONEVENT	Time stamping of a button event
T_EB_MAXDELAY	Brake interface maximum emergency brake command issue time

Commands	Description
T_JD	Time stamping of a JD message
T_ODO	Time stamping of an odometer measurement
T_ODOCYCLE	Typical cycle time of ERTMS/ETCS on-board Odometer Function
T_ODOMAXPROD	Maximum production delay time
T_SB_MAXDELAY	Brake interface maximum service brake command issue time
T_SOUND	Sound segment duratio
V_EST	Estimated value of a measured speed
V_INTERV	Intervention speed
V_MAX	Brake interface maximum service brake command issue time
V_MIN	Lower bound of the functional confidence interval of a measured speed
V_PERMIT	Permitted speed
V_RELEASE	Release speed
V_STMMAX	STM max speed
V_STMSYS	STM system speed
V_TARGET	Target speed
X_CAPTION	Caption text byte
X_TEXT	Text byte
X_VALUE	Value byte

Term	Description	Explanation
MSRP	Most Restrictive Speed Profile	
TI Command	Train Interface command	
CSM	Ceiling speed monitoring	the speed supervision in the area where the train can run without the need to brake to a target.

Term	Description	Explanation
TSM	Target speed monitoring	the speed and distance supervision in the area where the specific information related to a target is displayed to the driver and within which the train brakes to a target.
RSM	Release speed monitoring	the speed and distance supervision in the area close to the EOA where the train is allowed to run with release speed to approach the EOA.

## 2.7.2 Colours schema

Colour name	Red	Green	Blue
white	255	255	255
black	0	0	0
grey	195	195	195
medium grey	150	150	150
dark grey	85	85	85
dark blue (background)	3	17	34
shadow	8	24	57
yellow	223	223	0
orange	234	145	0
red	191	0	2
PASP dark	33	49	74
PASP light	41	74	107

### 2.7.3 Description

the on-board equipment generates braking commands, traction cut-off commands and relevant information to the driver. There are three types of monitoring :

- Ceiling speed monitoring (CSM)
- Target speed monitoring (TSM)
- Release speed monitoring (RSM)

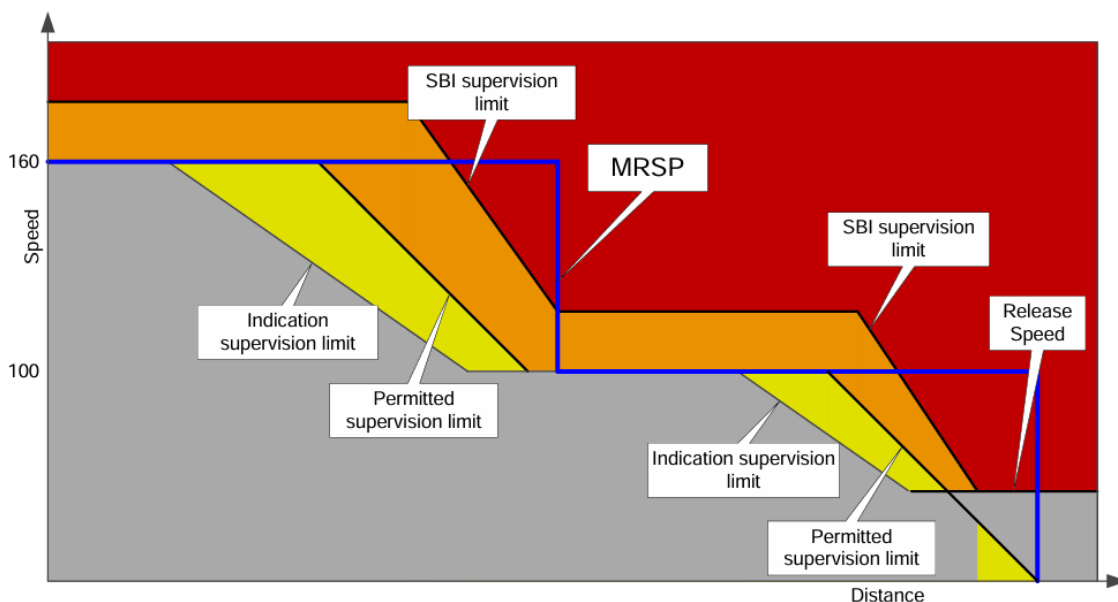





Figure 6 Colour philosophy depending on supervision status

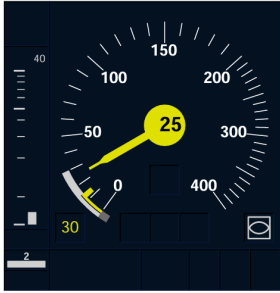


Figure 7 Overview of the main objects in the speed and supervision areas








### 2.7.4 Information activation








Information status	Data change	SCI-CMD Command	Sample view
Ceiling Speed Monitoring (CSM) - Normal Status information (NoS) - active	V <= Permitted supervision limit (P)		
Ceiling Speed Monitoring (CSM) - Over-speed Status information (OvS) - active	V > Permitted supervision limit (P)		
Ceiling Speed Monitoring (CSM) - Over-speed Status information (OvS) - deactive	V < Permitted supervision limit (P)		
Ceiling Speed Monitoring (CSM) - Warning Status information (WaS) - active	V > Warning supervision limit (W)		
Ceiling Speed Monitoring (CSM) - Warning Status information (WaS) - deactive	V < Permitted supervision limit (P)		
Ceiling Speed Monitoring (CSM) - Intervention Status information (IntS) - active	V > service brake intervention supervision limit (SBI)		
Ceiling Speed Monitoring (CSM) - Intervention Status information (IntS) - deactive	service == empty    !emergency brake command		








Information status	Data change	SCI-CMD Command	Sample view
Target Speed Monitoring (TSM) - Indication Status information (IndS) - active	V<= Permitted supervision limit (P)		
Target Speed Monitoring (TSM) -Over- speed Status information (OvS) -active	V> Permitted supervision limit (P)		
Target Speed Monitoring (TSM) -Over- speed Status information (OvS) - deactive	V<= Permitted supervision limit (P)		
Target Speed Monitoring (TSM) - Warning Status information (WaS) - active	V > Warning supervision limit (W)		
Target Speed Monitoring (TSM) - Warning Status information (WaS) - deactive	V <= Warning supervision limit (W)		
Target Speed Monitoring (TSM) - Intervention Status information (IntS) - active	V > service brake intervention supervision limit (SBI)		








Information status	Data change	SCI-CMD Command	Sample view
Target Speed Monitoring (TSM) - Intervention Status information (IntS) - deactive	Automatic Driving mode && V > service brake intervention supervision limit (SBI)		
Target Speed Monitoring (TSM) - Intervention Status information (IntS) - deactive	service == empty    !emergency brake command		
Release Speed Monitoring (RSM)-Indication Status information (IndS) -active	V < the Release Speed (Vrelease)		
Release Speed Monitoring (RSM)-Intervention Status information (IntS) - active	V > Release Speed (Vrelease)		
Release Speed Monitoring (RSM)-Intervention Status information (IntS) - deactive	service == empty    !emergency brake command		








## 2.7.5 Current speed pointer


Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == FS / SM/ OS && Supervision Status == CSM-NoS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == FS / SM/ OS && Supervision Status == CSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == FS / SM/ OS && Supervision Status == CSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == FS / SM/ OS && Supervision Status == CSM-IntS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == FS / SM/ OS && Supervision Status == CSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == FS / SM/ OS && Supervision Status == CSM (with target information)**-NoS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == FS / SM/ OS && Supervision Status == CSM (with target information)**-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes








Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == FS / SM/ OS && Supervision Status == CSM (with target information)**-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == FS / SM/ OS && Supervision Status == CSM (with target information)**-IntS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == FS / SM/ OS && Supervision Status == CSM (with target information)**-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == FS / SM/ OS && Supervision Status == TSM-IndS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = yellow		yes
Mode == FS / SM/ OS && Supervision Status == TSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == FS / SM/ OS && Supervision Status == TSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == FS / SM/ OS && Supervision Status == TSM-IntS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = yellow		yes








Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == FS / SM/ OS && Supervision Status == TSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == FS / SM/ OS && Supervision Status == RSM-IndS && 0 km/h ≤ Pointer ≤ Vrelease*(when Vrelease exists)	STM-43.m_colour_sp = yellow		yes
Mode == FS / SM/ OS && Supervision Status == RSM-IntS && 0 km/h ≤ Pointer ≤ Vrelease*(when Vrelease exists)	STM-43.m_colour_sp = yellow		yes
Mode == FS / SM/ OS && Supervision Status == RSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == AD && Supervision Status == CSM-NoS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == AD && Supervision Status == CSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = grey		yes
Mode == AD && Supervision Status == CSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = grey		yes








Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == AD && Supervision Status == CSM (with target information)**-NoS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == AD && Supervision Status == CSM (with target information)**-NoS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == AD && Supervision Status == CSM (with target information)**-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = white		yes
Mode == AD && Supervision Status == CSM (with target information)**-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = white		yes
Mode == AD && Supervision Status == TSM-IndS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == AD && Supervision Status == TSM-IndS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == AD && Supervision Status == TSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = white		yes








Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == AD && Supervision Status == TSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = white		yes
Mode == AD && Supervision Status == RSM-IndS && 0 km/h ≤ Pointer ≤ Vrelease*(when Vrelease exists)	STM-43.m_colour_sp = white		yes
Mode == LS && Supervision Status == CSM-NoS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == CSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == LS && Supervision Status == CSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == LS && Supervision Status == CSM-IntS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == CSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == LS && Supervision Status == TSM-IndS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == TSM-IndS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == TSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == LS && Supervision Status == TSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == LS && Supervision Status == TSM-IntS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == TSM-IntS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == LS && Supervision Status == TSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == LS && Supervision Status == RSM-IntS && 0 km/h ≤ Pointer ≤ Vrelease*(when Vrelease exists)	STM-43.m_colour_sp = yellow		yes
Mode == LS && Supervision Status == RSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == SR / UN && Supervision Status == CSM-NoS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp =grey		yes
Mode == SR / UN && Supervision Status == CSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == CSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == CSM-IntS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == SR / UN && Supervision Status == CSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == SR / UN && Supervision Status == CSM (with target information)**-NoS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-NoS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-IntS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-IntS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = white		yes
Mode == SR / UN && Supervision Status == CSM (with target information)**-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == SR / UN && Supervision Status == TSM-IndS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == SR / UN && Supervision Status == TSM-IndS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = yellow		yes
Mode == SR / UN && Supervision Status == TSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == TSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SR / UN && Supervision Status == TSM-IntS && 0 km/h ≤ Pointer < VTarget	STM-43.m_colour_sp = grey		yes
Mode == SR / UN && Supervision Status == TSM-IntS && VTarget ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = yellow		yes
Mode == SR / UN && Supervision Status == TSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

Data change	SCI-CMD Command (SUBSET-058)	Symbol	SVG
Mode == SH / RV && Supervision Status == CSM-NoS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == SH / RV && Supervision Status == CSM-OvS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SH / RV && Supervision Status == CSM-WaS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = orange		yes
Mode == SH / RV && Supervision Status == CSM-IntS && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == SH / RV && Supervision Status == CSM-IntS && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes
Mode == NL / SB/ PT && Supervision Status == CSM-- && 0 km/h ≤ Pointer ≤ VPerm	STM-43.m_colour_sp = grey		yes
Mode == TR && Supervision Status == CSM-- && Pointer >VPerm (in CSM or TSM) or > Vrelease (in RSM)	STM-43.m_colour_sp = red		yes

### 2.7.6 Circular speed gauge

Data change	SCI-CMD Command (SUBSET-058)	Color	SVG
Mode == FS && Supervision Status == CSM-NoS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == FS && Supervision Status == CSM-OvS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == FS && Supervision Status == CSM-OvS && Vperm < CSG ≤ VSBI		orange	no
Mode == FS && Supervision Status == CSM-WaS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == FS && Supervision Status == CSM-WaS && Vperm < CSG ≤ VSBI		orange	no
Mode == FS && Supervision Status == CSM-IntS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == FS && Supervision Status == CSM-IntS && Vperm < CSG ≤ VSBI		red	no
Mode == FS && Supervision Status == CSM (with target information)**-NoS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == CSM (with target information)**-NoS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == FS && Supervision Status == CSM (with target information)**-OvS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == CSM (with target information)**-OvS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == FS && Supervision Status == CSM (with target information)**-OvS && Vperm < CSG ≤ VSBI		orange	no

Data change	SCI-CMD Command (SUBSET-058)	Color	SVG
Mode == FS && Supervision Status == CSM (with target information)**-WaS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == CSM (with target information)**-WaS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == FS && Supervision Status == CSM (with target information)**-WaS && Vperm < CSG ≤ VSBI		orange	no
Mode == FS && Supervision Status == CSM (with target information)**-IntS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == CSM (with target information)**-IntS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == FS && Supervision Status == CSM (with target information)**-IntS && Vperm < CSG ≤ VSBI		red	no
Mode == FS && Supervision Status == TSM-IndS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == TSM-IndS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == TSM-IndS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == FS && Supervision Status == TSM-OvS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == TSM-OvS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == TSM-OvS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == FS && Supervision Status == TSM-OvS && Vperm < CSG ≤ VSBI		orange	no

Data change	SCI-CMD Command (SUBSET-058)	Color	SVG
Mode == FS && Supervision Status == TSM-WaS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == TSM-WaS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == TSM-WaS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == FS && Supervision Status == TSM-WaS && Vperm < CSG ≤ VSBI		orange	no
Mode == FS && Supervision Status == TSM-IntS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == TSM-IntS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == FS && Supervision Status == TSM-IntS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == FS && Supervision Status == TSM-IntS && Vperm < CSG ≤ VSBI		red	no
Mode == FS && Supervision Status == RSM-IndS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == RSM-IndS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == FS && Supervision Status == RSM-IntS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == FS && Supervision Status == RSM-IntS && Vtarget ≤ CSG ≤ Vperm		yellow	no
Mode == AD && Supervision Status == CSM-NoS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no

Data change	SCI-CMD Command (SUBSET-058)	Color	SVG
Mode == AD && Supervision Status == CSM-OvS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == AD && Supervision Status == CSM-OvS && Vperm < CSG ≤ VSBI		dark grey	no
Mode == AD && Supervision Status == CSM-WaS && 0 km/h ≤ CSG ≤ Vperm		dark grey	no
Mode == AD && Supervision Status == CSM-WaS && Vperm < CSG ≤ VSBI		dark grey	no
Mode == AD && Supervision Status == CSM (with target information)**-NoS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == CSM (with target information)**-NoS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == CSM (with target information)**-OvS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == CSM (with target information)**-OvS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == CSM (with target information)**-OvS && Vperm < CSG ≤ VSBI		white	no
Mode == AD && Supervision Status == CSM (with target information)**-WaS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == CSM (with target information)**-WaS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == CSM (with target information)**-WaS && Vperm < CSG ≤ VSBI		white	no
Mode == AD && Supervision Status == TSM-IndS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no

Data change	SCI-CMD Command (SUBSET-058)	Color	SVG
Mode == AD && Supervision Status == TSM-IndS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == TSM-IndS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == TSM-OvS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == AD && Supervision Status == TSM-OvS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == TSM-OvS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == TSM-OvS && Vperm < CSG ≤ VSBI		white	no
Mode == AD && Supervision Status == TSM-WaS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == AD && Supervision Status == TSM-WaS && 0 km/h ≤ CSG < Vtarget		dark grey	no
Mode == AD && Supervision Status == TSM-WaS && Vtarget ≤ CSG ≤ Vperm		white	no
Mode == AD && Supervision Status == TSM-WaS && Vperm < CSG ≤ VSBI		white	no
Mode == AD && Supervision Status == RSM-IndS && 0 km/h ≤ CSG ≤ Vrelease*(when Vrelease exists)		medium grey	no
Mode == AD && Supervision Status == RSM-IndS && Vtarget ≤ CSG ≤ Vperm		white	no

### 2.7.7 Basic Speed Hook(s)

Data change	Command (SUBSET-058)	Color	SVG
Mode == SM / OS* / SR* && Supervision Status == CSM-AIIS		hook at Vperm == white && hook at Vtarget == -	no
Mode == SM / OS* / SR* && Supervision Status == CSM (with target information)**-AIIS		hook at Vperm == white && hook at Vtarget == medium grey	no
Mode == SM / OS* / SR* && Supervision Status == TSM-AIIS		hook at Vperm == white && hook at Vtarget == medium grey	no
Mode == SM / OS* / SR* && Supervision Status == RSM (not applicable for SR)-AIIS		hook at Vperm == white && hook at Vtarget == medium grey	no
Mode == SH* && Supervision Status == CSM-AIIS		hook at Vperm == white && hook at Vtarget == -	no
Mode == RV && Supervision Status == CSM-AIIS		hook at Vperm == white && hook at Vtarget == -	no

### 2.7.8 Release speed digital

Data change	Command (SUBSET-058)	Color	SVG
Mode == FS / SM / OS* / LS && Supervision Status == CSM-AIIS		-	no
Mode == FS / SM / OS* / LS && Supervision Status == CSM (with target information)**-AIIS		-	no
Mode == FS / SM / OS* / LS && Supervision Status == TSM-AIIS		yellow	no
Mode == FS / SM / OS* / LS && Supervision Status == RSM-AIIS		yellow	no
Mode == AD && Supervision Status == CSM-AIIS		-	no
Mode == AD && Supervision Status == CSM (with target information)**-AIIS		-	no
Mode == AD && Supervision Status == TSM-AIIS		medium grey	no
Mode == AD && Supervision Status == RSM-AIIS		medium grey	no
Mode == SB / SH / UN / PT / TR / NL / SR / RV && Supervision Status == RSM-AIIS		-	no

### 2.7.9 1.7 ETCS INFORMATION SHOWN ON THE ETCS DEFAULT WINDOW

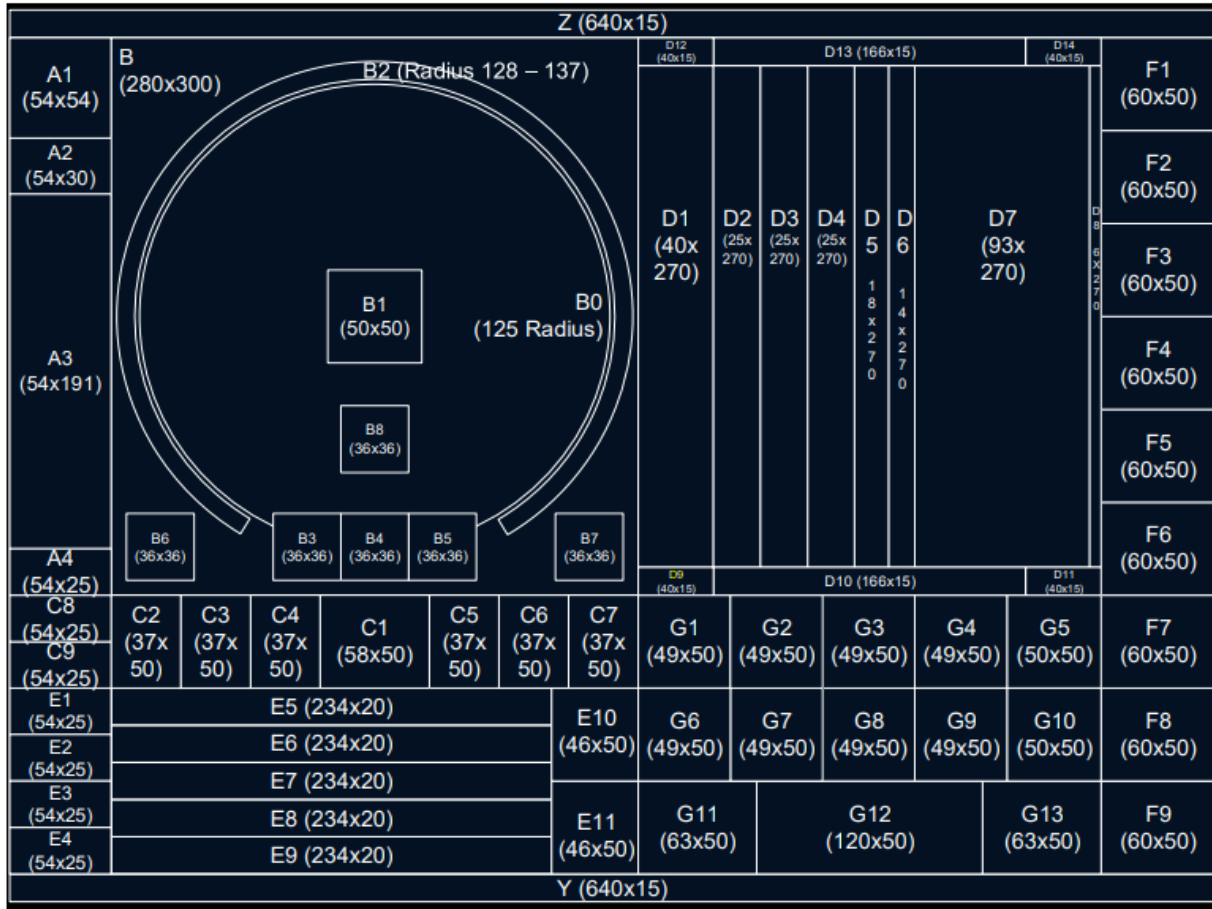


Figure 7 – The sub areas of the ETCS layout (touch screen technology)

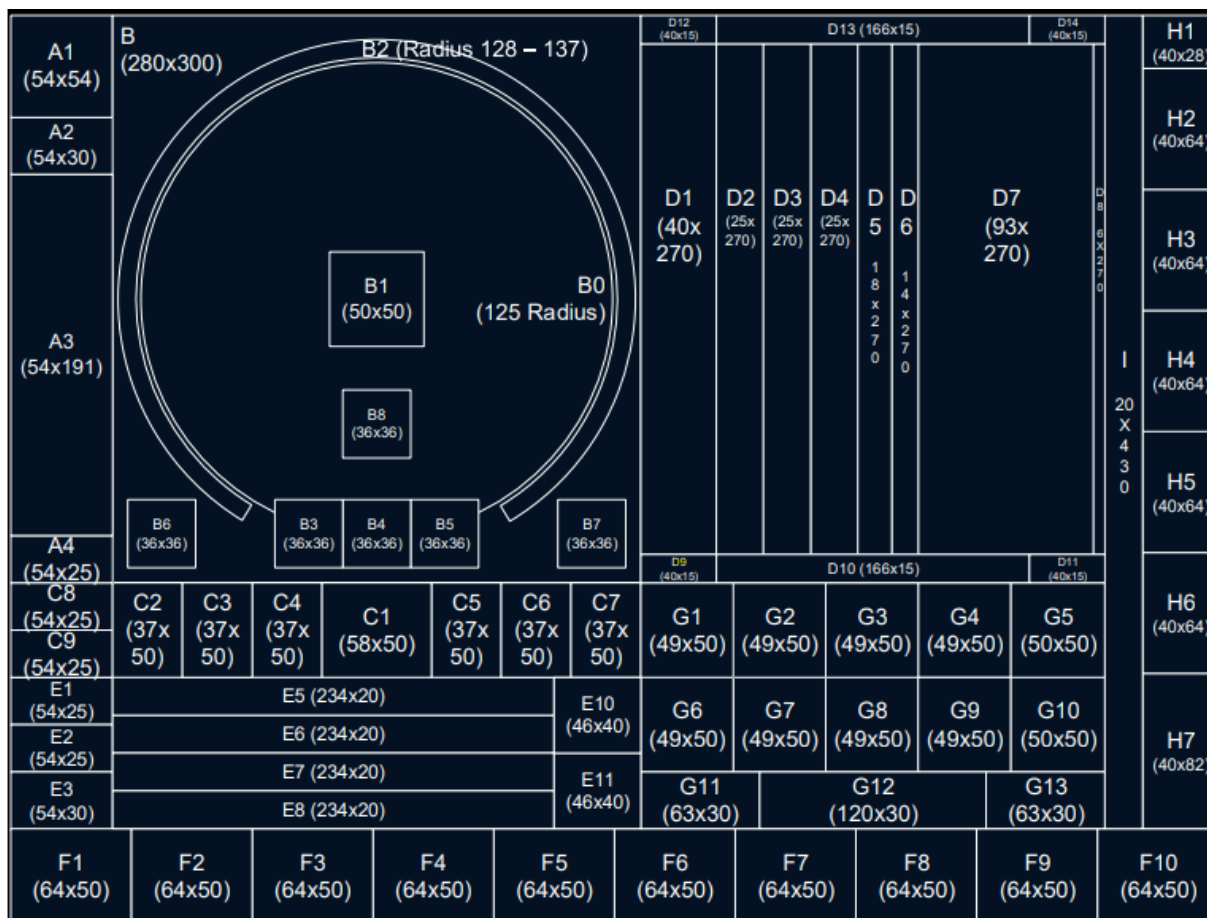
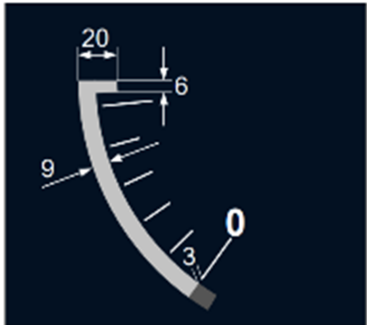

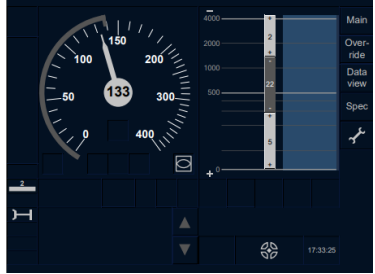
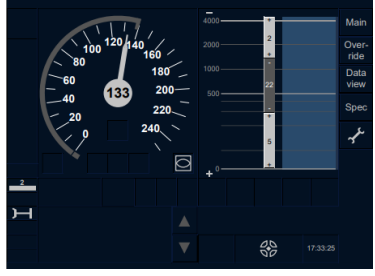


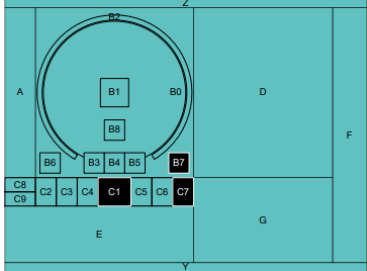

Figure 9 – The sub areas of the ETCS layout (soft key technology)

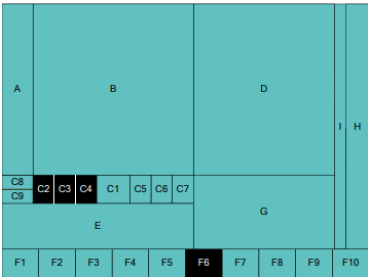
Data Change	Action	Command	New_commands	Sample View
L_VALUE_V > 3			DISPLAY_DIGITAL = V POSITION = I, H	Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
STM-43.M_COLOUR_SP == RED			M_COLOUR_DN = WHITE	
STM-43.M_COLOUR_SP != RED			M_COLOUR_DN = BLACK	




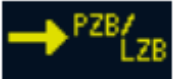
Data Change	Action	Command	New_commands	Sample View
SUPERVISION_STAT US = CSM    CSM_TARGET_INFO    TSM    RSM		STM-43.Q_DISP LAY_PS = 01 STM-43.Q_DISP LAY_TS = 01 STM:43.Q_DISP LAY_RS = 01	Q_DISPLAY_SBI = 01 POSITION = B2	
CSG_DISPLAY != EMPTY			DISPLAY = CSG START_POSITION = 0 END_POSITION = HOOK_POSITION WIDTH = 9	 <p>Figure 37 - Size in cells of the Circular Speed Gauge (CSG)</p>
STM-43.V_PERMIT == TRUE			DISPLAY = HOOK_V_PERMIT POSITION = B2 TYPE = BORDER WIDTH =6 HEIGHT = 20	
STATUS_INFORMAT ION == OVS    WAS    INTS			DISPLAY = CSG START_POSITION = STM-43.V_PERMIT END_POSITION = V_SBI WIDTH = HOOK_WIDTH HEIGHT = HOOK_HEIGHT	 <p>Figure 39 - Circular Speed Gauge (CSG), in FS mode and TSM with OvS status</p>
SUPERVISION_STATU S == CSM    TSM    RSM    CSM_TARGET_INFO			DISPLAY = HOOK POSITION = B2	Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)



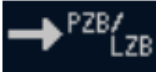

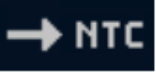




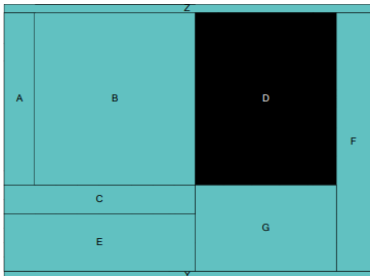
Data Change	Action	Command	New_commands	Sample View
STM-43.V_PERMIT == TRUE			DISPLAY = HOOK_V_PERMIT POSITION = B2 TYPE = BORDER WIDTH =10 HEIGHT = 20 END_POSITION = STM-43.V_PERMIT	 <p>Figure 42 - Basic Speed Hook(s) Area B2 - Refer figure 40 - Area of the Basic Speed Hook(s)</p>
STM-43.V_TARGET == TRUE			DISPLAY = HOOK_V_TARGET POSITION = B2 TYPE = BORDER WIDTH =10 HEIGHT = 20 UPPER_LIMIT = STM-43.V_TARGET	 <p>Figure 54b- Time to Indication (TTI) Area B2 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
HOOKS_OVERLAP == TRUE HOOK_V_PERMIT = STM-43.V_PERMIT HOOK_V_TARGET = STM-43.V_TARGET			DISPLAY =HOOK_V_PERMIT OVERLAY = HOOK_V_TARGET	
STM-43.V_RELEASE > 0		STM-43.Q_DISP LAY_RS = 01	TYPE = TABLE_9	

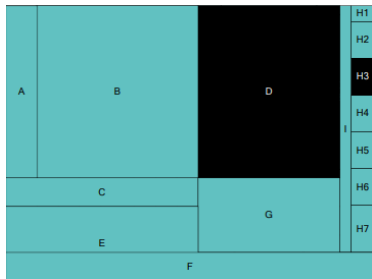
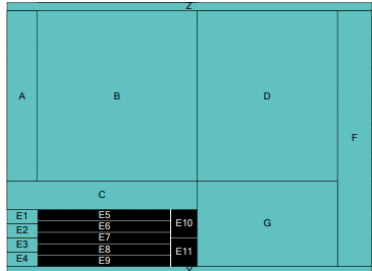

Data Change	Action	Command	New_commands	Sample View
STM-43.V_RELEASE > 0 STM-43.V_RELEASE < STM-43.V_PERMIT			DISPLAY=CSG END_POSITION = STM-43.V_RELEASE TYPE = BORDER WIDTH = 6	 <p>Figure 47 - Release speed, when Vperm</p> <p>&gt; Vrelease</p>
STM-43.V_RELEASE > 0 STM-43.V_RELEASE > STM-43.V_PERMIT			DISPLAY=CSG END_POSITION = STM-43.V_RELEASE TYPE = BORDER WIDTH = 6	 <p>Figure 48 - Release speed, when Vperm</p> <p>&lt; Vrelease</p>
LSSMA_CONDITION == TRUE			DISPLAY_DIGITAL = LSSMA_NUMBER POSITION = A1 COLOUR = BACKGROUND_COLOUR DISPLAY_DIGITAL= "LS01", POSITION = A1	 <p>Figure LS01</p>
DRIVER_ACKNOWLEDGEMENT_REQUIRED_BRAKE_RELEASE == TRUE BRAKE_RELEASE_CONDITIONS == TRUE			DISPLAY_DIGITAL= "ST01", TYPE = document 5.4	 <p>Figure ST01</p>

Data Change	Action	Command	New_commands	Sample View
SCREEN_TECHNOLOGY == TOUCH_SCREEN_TECHNOLOGY			ENABLE_SENSITIVITY = C9, C8, E1 DISPLAY_FRAME = C9	 <p>Area C9, C8, E1 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY == TOUCH_SCREEN_TECHNOLOGY			ENABLE_SENSITIVITY = A, B	<p>Area A, B - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY == SOFT_KEY_TECHNOLOGY ONBOARD_MODE== TRUE	enable(F7)		DISPLAY_DIGITAL=DR01 POSITION = F7 TYPE = "UP"	 <p>Figure DR01</p>
SCREEN_TECHNOLOGY == TOUCH_SCREEN_TECHNOLOGY ONBOARD_MODE == FALSE	disable(F7)		DISABLE_SENSITIVITY = A, B	<p>Area A,B- Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>


Data Change	Action	Command	New_commands	Sample View
SCREEN_TECHNOLOGY == SOFT_KEY_TECHNOLOGY ONBOARD_MODE== TRUE	enable(F7)		DISPLAY_DIGITAL ="DR01" POSITION = F7 TYPE = "UP"	Refer to Figure DR01  Area F7 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOLOGY == TOUCH_SCREEN_TECHNOLOGY ONBOARD_MODE == FALSE	disable(F7)		DISABLE_SENSITIVITY = A, B	Area A,B - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
MO18_DISPLAYED = FALSE			INDICATE=SF_MODE	
IS_MODE == TRUE			INDICATE=IS_MODE	
ERTMS_ETCS_LEVEL_ANNOUNCEMENT_DISPLAY == TRUE ACKNOWLEDGEMENT_ERTMS_ETCS_LEVEL_ANNOUNCEMENT == FALSE			DIGITAL_DISPLAY=MODE_ACKNOWLEDGEMENT POSITION = C1	Area C1- Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
ACKNOWLEDGEMENT_ERTMS_ETCS_LEVEL_ANNOUNCEMENT == TRUE			DIGITAL_DIGITAL=ERTMS_ETCS_LEVEL_ANNOUNCEMENT POSITION=C1	Area C1- Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)

Data Change	Action	Command	New_commands	Sample View
<pre> OVERRIDE_FUNCTION_ACTIVE==TRUE </pre>			<pre> DISPLAY_DIGITAL="MO03" </pre>	 <p>Figure - MO03</p>
<pre> VAILD_ERTMS_LEVEL== TRUE CURRENT_ERTMS_LEVEL==0    NTC    1    2 </pre>			<pre> DISPLAY_DIGITAL=CURRENT_ERTMS_LEVEL POSITION=C8 </pre>	<p>Area C8- Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
<pre> VAILD_ERTMS_LEVEL==FALSE CURRENT_ERTMS_LEVEL==UNKNOWN </pre>			<pre> DIGITAL_DISPLAY="NONE" POSITION=C8 </pre>	<p>Area C8- Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
<pre> MODE_ACKNOWLEDGEMENT==ACTIVE </pre>	<pre> wait(MODE_ACKNOWLEDGEMENT="ACTIVE) </pre>		<pre> DISPLAY_DIGITAL=MODE_ACKNOWLEDGEMENT POSITION=C1 DISPLAY = ERTMS_ETCS_LEVEL_ANNOUNCEMENT </pre>	<p>Area C1- Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
<pre> ERTMS_ETCS_LEVEL_ANNOUNCEMENT == TRUE ACKNOWLEDGEMENT_ERTMS_ETCS_LEVEL_ANNOUNCEMENT == FALSE </pre>			<pre> DISPLAY_DIGITAL=LE07    LE09 </pre>	 <p>Figure LE09</p>  <p>example:</p>  <p>Figure LE09</p>

Data Change	Action	Command	New_commands	Sample View
ERTMS_ETCS_LEVEL_ANNOUNCEMENT == FALSE ACKNOWLEDGEMENT_ERTMS_ETCS_LEVEL_ANNOUNCEMENT == TRUE			DISPLAY_DIGITAL=LE06    LE08	 Figure LE06  Figure LE08 <p>example:</p> 
CURRENT_ERTMS_LEVEL == NTC_level			DISPLAY_DIGITAL=LE02    LE08    LE09	 Figure LE02 <p>example:</p>  Figure LE08  <p>example:</p>  Figure LE09  <p>example:</p> 
SCREEN_TECHNOLOGY == TOUCH_SCREEN_TECHNOLOGY			DISPLAY=QUESTION_BOX POSITION_BOX = (0,50))	 <p>Question_box- Figure 59 – Area for track ahead free information</p>
SCREEN_TECHNOLOGY == SOFT_KEY_TECHNOLOGY			DISPLAY=QUESTION_BOX POSITION_BOX = (0,100)	<p>Question_box- Figure 59 – Area for track ahead free information</p>

Data Change	Action	Command	New_commands	Sample View
SCREEN_TECHNOLOGY== SOFT_KEY_TECHNOLOGY			DISPLAY_DIGITAL="YES" POSITION=H3 TYPE= ANSWER_PART	 <p>Answer_Part- Figure 59 – Area for track ahead free information</p>
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY			DISPLAY_DIGITAL=TEXT_MESSAGES POSITION= E5, E6, E7, E8, E9	 <p>Area E5, E6, E7, E8, E9 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY TUNNEL_STOPPING_AREA = TOGGLED_OFF			DISPLAY_DIGITAL=DR05 POSITION = C2    C3    C4	 <p>Figure DR05 Area C2, C3, C4 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
B3 == EMPTY			DISPLAY_DIGITAL=OBJECT POSITION=B3	<p>Area B3 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
B4 == EMPTY			DISPLAY_DIGITAL=OBJECT POSITION=B4	<p>Area B4 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>

Data Change	Action	Command	New_commands	Sample View
B5 == EMPTY	wait (B3 == EMPTY    B4 == EMPTY    B5 == EMPTY)		DISPLAY_DIGITAL=OBJECT POSITION = B5 DISPLAY_DIGITAL=OBJECT POSITION = FIRST_AVAILABLE_AREA	Area B5 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
PLANNING_INFORMATION == FALSE	disable(ZOOM_AREA)		DISABLE_SENSITIVITY=ZOOM_AREA	 <p>ZOOM_AREA - Figure 73 – Main objects of the planning information</p>
LENGTH_GRADIENT_ELEMENT >= MIN_LENGTH_FOR_GRADIENT_DIRECTION GRADIENT_DIRECTION == UPHILL			DISPLAY_DIGITAL="+" POSITION=GRADIENT_ELEMENT ALIGNMENT=ABOVE	 <p>GRADIENT_ELEMENT - Figure 73 – Main objects of the planning information</p>
GRADIENT_DIRECTION == DOWNHILL			DISPLAY_DIGITAL="-" POSITION = GRADIENT_ELEMENT ALIGNMENT = BELOW	GRADIENT_ELEMENT - Figure 73 – Main objects of the planning information
LENGTH_GRADIENT_ELEMENT >= MIN_LENGTH_FOR_GRADIENT_NUMBER			DISPLAY = GRADIENT_NUMBER POSITION=GRADIENT_ELEMENT ALIGNMENT = CENTER	GRADIENT_ELEMENT - Figure 73 – Main objects of the planning information

Data Change	Action	Command	New_commands	Sample View
AUTOMATIC_DRIVING_MODE == TRUE			DISPLAY_DIGITAL = PL23 POSITION = PL37	  <p>Figure PL23</p>
AUTOMATED_DRIVING_MODE == TRUE		STM-43.Q_DISPLAY_TS = 01 STM-43.M_COLOUR_TS = 0		
AUTOMATIC_DRIVING_MODE == TRUE			DISPLAY_DIGITAL=INDICATION_MARKER COLOUR = WHITE	
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY			ENABLE_SENSITIVITY = D9 WIDTH = 40 HEIGHT = 30 ALIGNMENT= ABOVE	<p>Area D9 - Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY			ENABLE_SENSITIVITY =D12 WIDTH= 40 HEIGHT =30 ALIGNMENT = BELOW	<p>Area D12 - Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SAFE_RADIO_CONNECTION_STATUS == CONNECTION_UP			DISPLAY_DIGITAL=ST03 POSITION = E1	 <p>Figure ST03</p>
SAFE_RADIO_CONNECTION_STATUS == NO_CONNECTION			DISPLAY_DIGITAL=EMPTY POSITION =E1	<p>Area E1 - Figure 7 – The sub areas of the ETCS layout (touch screen technology)</p> <p>Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>

Data Change	Action	Command	New_commands	Sample View
SAFE_RADIO_CONNECTION_STATUS == CONNECTION_LOST    SAFE_RADIO_CONNECTION_STATUS == SETUP_FAILED			DISPLAY_DIGITAL=ST04 POSITION = E1	 <p>Figure ST04 Area E1- Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
TRAIN_STATUS == STANDSTILL REVERSING_AREA=TRUE			DISPLAY_DIGITAL=ST06 POSITION= C6	 <p>Figure ST06 Area C6 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY GEO_POSITION_STATUS == "DISABLED"			DISPLAY_DIGITAL="DR03" POSITION=G12	 <p>Figure DR03 Area G12 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
SCREEN_TECHNOLOGY== SOFT_KEY_TECHNOLOGY GEO_POSITION_STATUS == "DISABLED"			DISPLAY_DIGITAL="DR03" POSITION=F8	<p>Refer to Figure DR03 Area F8 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>
GEO_POSITION_STATUS=="ENABLED"			DISPLAY=G12 BACKGROUND_COLOUR = "GREY" DISPLAY_DIGITAL = GEO_POSITION POSITION=G12 COLOUR="BLACK"	<p>Area G12 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)</p>

Data Change	Action	Command	New_commands	Sample View
ATO_SELECTOR == "ENABLED"			DISPLAY_DIGITAL=AT O_INFORMATION POSITION=B0, B8, D2, D3, D4, D7, G1, G2, G3, G4, G5	Area B0, B8, D2, D3, D4, D7, G1, G2, G3, G4, G5 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOL OGY== TOUCH_SCREEN_T ECHNOLOGY ATO17_DISPLAY==T RUE    ATO19_DISPLAY ==TRUE	enable(G1)	STM-32.NID_BU TPOS = G1	DISPLAY_DIGITAL=G1 TYPE = "UP"	Area G1 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOL OGY== TOUCH_SCREEN_T ECHNOLOGY ATO17_DISPLAY==T RUE    ATO19_DISPLAY ==TRUE	enable(G1)	STM-32.NID_BU TPOS = G1	DISPLAY_DIGITAL=G1 TYPE = "UP"	Area G1 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOL OGY== SOFT_KEY_TECHN OLOGY ATO17_DISPLAY==T RUE    ATO19_DISPLAY==T RUE	enable(F9)	STM-32.NID_BU TPOS = F9	TYPE="UP" BUTTON_LABEL=G1	Area F9 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOL OGY== SOFT_KEY_TECHN OLOGY ATO03_DISPLAY==T RUE    ATO04_DISPLAY==T RUE	enable(F9)	STM-32.NID_BU TPOS = F9	TYPE="UP" BUTTON_LABEL = G1	Area F9 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)

Data Change	Action	Command	New_commands	Sample View
IF(REMAINING_TIME <= 59			DISPLAY_DIGITAL = REMAINING_TIME TYPE =[s]s ALIGNMENT=RIGHT INDENT= 18 POSITION = G3	Area G3 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
REMAINING_TIME > 59			DISPLAY_DIGITAL = REMAINING_TIME TYPE =[m]m:ss ALIGNMENT=RIGHT INDENT= 11 POSITION = G3	Area G3 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
ERTMS_ATO_REQU EST_TRAIN_HOLD= =TRUE			DISPLAY_DIGITAL = ATO09	 Figure ATO09
SCREEN_TECHNOLOGY== TOUCH_SCREEN_TECHNOLOGY ATO17_DISPLAY==TRUE    ATO19_DISPLAY==TRUE	enable(G5)	STM-32.NID_BUT TPOS = G5	TYPE="DELAY"	
SCREEN_TECHNOLOGY== SOFT_KEY_TECHNOLOGY ATO17_DISPLAY==TRUE    ATO19_DISPLAY==TRUE	enable(F9)	STM-32.NID_BUT TPOS = F9	BUTTON_LABEL =G5 TYPE="DELAY")	Area G5 - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)

### 2.8 1.6.9.1.8 ETCS AND NTC INFORMATION SHOWN ON A NTC DEFAULT WINDOW

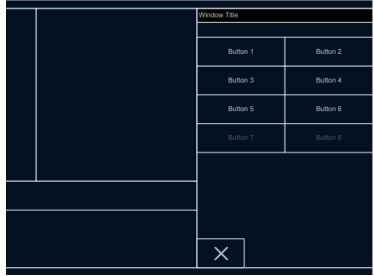
Data Change	Action	Command	New_commands	Sample View
FLASHING_STYLE== YELLOW_FRAME		STM-35.M_IND_ATTR IB = 10xxxxxxx    STM-32.M_BUT_ATT RIB = 10xxxxxxx	COLOUR = YELLOW WIDTH = 2	
FLASHING_STYLE== WHOLE_AREA		STM-35.M_IND_ATTR IB = 11xxxxxxx    STM-32.M_BUT_ATT RIB = 11xxxxxxx	COLOUR = DARK_BLUE WIDTH = 2	
STM_REQUEST_ICO N == EMPTY			DISPLAY_DIGITAL=CAP TION_TEXT	
STM_CUSTOM_DMI == TRUE ICON_TEXT_DISPLA YED== TRUE			DISPLAY_DIGITAL=CAP TION_TEXT DISPLAY_DIGITAL=ICON	
STM_CUSTOMISABL E_DMI== FALSE    ICON_TEXT_DISPLA YED == FALSE			DISPLAY_DIGITAL=ICON	
CAPTION_TEXT_DIS PLAYED == TRUE ICON_DISPLA YED= FALSE			DISPLAY_DIGITAL=CAP TION_TEXT POSITION = FOREGROUND DISPLAY=ICON POSITION = MIDDLE DISPLAY=BACKGROUN D_COLOUR POSITION = BACKGROUND	
STM-179.L_CAPTION > 6			DISPLAY_DIGITAL=CAP TION_TEXT POSITION = NEXT_LINE	

Data Change	Action	Command	New_commands	Sample View
STM_CUSTOM_DMI == TRUE    STM_UNIFIED_DMI == TRUE		STM-43.M_COLOUR_SP = COLOUR_TARGET	DISPLAY=M_SP TYPE=8.2.1.2 DISPLAY(V)	
STM_REQUEST_DISPLAY_MODE == BAR			DISPLAY=DISTANCE_TARGET_BAR TYPE=8.2.2.1 DISPLAY_DIGITAL = REMAINING_DISTANCE_TO_TARGET_DIGITAL TYPE=8.2.2.2	
STM_REQUEST_DISPLAY_MODE == BAR			DISPLAY=DISTANCE_TARGET_BAR TYPE=8.2.2.1 DISPLAY_DIGITAL = REMAINING_DISTANCE_TO_TARGET_DIGITAL TYPE=8.2.2.2	
STM_V_SUPERVISION_DISPLAY == BAR  STM-43.V_PERMIT < STM-43.V_RELEASE  STM-43.V_RELEASE			DISPLAY = V_SUPERVISION STYLE="BAR" WIDTH = 9	
STM-43.Q_DISPLAY_IS = "10"				
V_RELEASE_STYLE = "BAR"		STM-43.Q_DISPLAY_RS = 10		
V_INTERV_STYLE == "wide bar width"		STM-43.Q_DISPLAY_IS = 10	WIDTH = 20	

Data Change	Action	Command	New_commands	Sample View
V_STYLE = "BAR"			DISPLAY=BAR START_POSITION = -149 END_POSITION = -144 COLOUR ="DARK GREY"	
STM-43.V_PERMIT < STM-43.V_TARGET && STM-43.V_PERMIT == TRUE		STM-43.Q_DISPLAY_ TS = 10 STM-43.Q_DISPLAY_ TS = 10	START_POSITION = STM-43.V_PERMIT END_POSITION = STM-43.V_TARGET COLOUR = COLOUR_TARGET START_POSITION = 0 END_POSITION = STM-43.V_TARGET COLOUR = COLOUR_TARGET	
STM-43.V_TARGET, STYLE="HOOK_ONL Y"		STM-43.Q_DISPLAY_ TS = 01	COLOUR = COLOUR_TARGET	
STM-43.V_TARGET, STYLE= "HOOK_AND_BAR"		STM-43.Q_DISPLAY_ TS = 11	COLOUR = COLOUR_TARGET	
STM-43.V_TARGET < STM-43.V_PERMIT S TM-43.V_TARGET== TRUE		Q_DISPLAY_TS.Q_DI SPLAY_PS = 10 Q_DISPLAY_TS.Q_DI SPLAY_TS = 10	DISPLAY=BAR START_POSITION =STM-43. V_TARGET END_POSITION = STM-43.V_PERMIT COLOUR = COLOUR_TARGET DISPLAY=BAR START_POSITION = 0 END_POSITION = STM-43.V_TARGET COLOUR = COLOUR_TARGET	

Data Change	Action	Command	New_commands	Sample View
STM-43.V_PERMIT, STYLE=HOOK_ONLY		Q_DISPLAY_TS.Q_DI SPLAY_PS = 01		
STM-43.V_PERMIT, STYLE= HOOK_AND_BAR		Q_DISPLAY_TS.Q_DI SPLAY_PS = 11	COLOUR = COLOUR_TARGET	
STM_INFO == EMPTY		STM-43.M_COLOUR_ SP= "GREY"		

### 2.9 1.6.7.1.9 SUB-LEVEL WINDOWS – GENERAL REQUIREMENTS

Data Change	Action	Command	New_commands	Sample View
MENU_SELECTIONS > 10	press(MO RE_BUTT ON)	STM-32.NID_BUTT ON = F10	BUTTON_LABEL = "MORE" TYPE = CIRCULAR_SELECTI ON	 <p>Figure 95 – Menu window (touch screen technology)</p>
SCREEN_TECHNOL OGY = TOUCHSCREEN_TE CHNOLOGY			DISPLAY= INPUT_FIELD WIDTH = 306 POSITION = D    F    G	Area D, F, G- Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
SCREEN_TECHNOL OGY = SOFT_KEY_TECHNO LOGY			DISPLAY = INPUT_FIELD WIDTH = 266 POSITION = D    G    I	Area D, G, I - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)

Data Change	Action	Command	New_commands	Sample View
INPUT_FIELD_STATE = NOT_SELECTED INPUT_FIELD_VALUE_ACCEPTED = FALSE		STM-184.M_DATAENTRYFLAG = 0	DISPLAY = INPUT_FIELD M_COLOUR_BACKGROUND = DARK_GREY M_COLOUR_DATA = GREY	
INPUT_FIELD_STATE = SELECTED		STM-184.M_DATAENTRYFLAG = 1	DISPLAY = INPUT_FIELD M_COLOUR_BACKGROUND = MEDIUM_GREY M_COLOUR_DATA = BLACK	
INPUT_FIELD_STATE = SELECTED		STM-184.M_DATAENTRYFLAG = 1	DISPLAY = KEYBOARD POSITION = BELOW_INPUT_FIELD	
INPUT_FIELD_STATE = SELECTED	press(INITIAL_KEY)		DISPLAY_DIGITAL = PRESSED_KEY POSITION = INPUT_FIELD	
INPUT_FIELD_STATE = NOT_SELECTED INPUT_FIELD_VALUE_ACCEPTED = FALSE		STM-184.M_DATAENTRYFLAG = 0	CLEAR = CURRENT_INPUT_FIELD_VALUE	
SCREEN_TECHNOLOGY = TOUCHSCREEN	press(INPUT_FIELD)	STM-32.NID_BUTTON_ON = ENTER STM-184.M_DATAENTRYFLAG = 1	TYPE = DATA_FIELD	

Data Change	Action	Command	New_commands	Sample View
INPUT_FIELD_STATE = SELECTED VALIDATION_PROCESS_DATA == ACTIVE	Deselect(OTHER_INPUT_FIELD)	STM-184.M_DATAENTRYFLAG = 1	DISPLAY = INPUT_FIELD M_COLOUR_BACKGROUND = MEDIUM_GREY M_COLOUR_DATA = BLACK DISPLAY = OTHER_INPUT_FIELDS M_COLOUR_BACKGROUND = GREY M_COLOUR_DATA = GREY	
ENTER_KEY = ACTIVE INPUT_FIELD_STATE = ACCEPTED	select(NEXT_INPUT_FIELD)	STM-184.M_DATAENTRYFLAG = 1	DISPLAY = NEXT_INPUT_FIELD M_COLOUR_BACKGROUND = MEDIUM_GREY M_COLOUR_DATA = BLACK	
SCREEN_TECHNOLOGY = TOUCHSCREEN_TECHNOLOGY INPUT_FIELD_STATE = SELECTED	activate(INPUT_FIELD)	STM-184.M_DATAENTRYFLAG = 1	DISPLAY = INPUT_FIELD TYPE = UP_BUTTON	
INPUT_FIELD_STATE = SELECTED	show(KEYBOARD) press(ANY_KEY)	STM-184.M_DATAENTRYFLAG = 1	DISPLAY_DIGITAL = PRESSED_KEY DISPLAY = CURSOR POSITION = NEXT	
INPUT_FIELD_STATE = SELECTED SAME_KEY_PRESSED_IN_2_S == TRUE	show(KEYBOARD) press(ANY_KEY)	STM-184.M_DATAENTRYFLAG = 1	DISPLAY_DIGITAL = PRESSED_KEY DISPLAY = CURSOR POSITION = NEXT DELAY = 2	

Data Change	Action	Command	New_commands	Sample View
DATA_VALUE= NOT_CONSISTANT			DISPLAY_DIGITAL = TYPE_OF_INCONSIS TANCY	
INPUT_FIELD_STAT E = ACCEPTED VALIDATION_PROC ESS_DATA == ACTIVE			DISPLAY_DIGITAL = ENTERED_VALUE M_COLOUR_DATA = WHITE	
INPUT_FIELD_STAT E = ACCEPTED		STM-184.M_DATAE NTRYFLAG = 1	DISPLAY_DIGITAL = ENTERED_VALUE M_COLOUR_DATA = WHITE POSITION = A    B   C    E	Area A, B, C, E - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
INPUT_FIELD_STAT E = ACCEPTED	permitted_ range_che ck(DATA)	STM-184.M_DATAE NTRYFLAG = 1		
INPUT_FILED_STAT E = ACCEPTED PERMITTED_RANGE _CHECK == FAILED		STM-38.STM-38.M_ XATTRIBUTE = xxxxxxx010	DISPLAY_DIGITAL = "++++"	
INPUT_FIELD_STAT E != SELECTED_IF_VALU E_OF_PRESSED_KEY	disable(UP _BUTTON) disable(DO WN_BUTT ON) disable(NE XT_BUTT ON) disable(EN TER) disable(PR EVIOUS)			

Data Change	Action	Command	New_commands	Sample View
INPUT_FIELD_STATE = ACCEPTED TECHNICAL_RESOLUTION_CHECK== FAILED		STM-38.M_XATTRIBUTE = xxxxxxx010	DISPLAY_DIGITAL = "++++"	
INPUT_FIELD_STATE = SELECTED_IF_VALUE_OF_PRESSED_KEY			DISPLAY_DIGITAL = ENTERED_VALUE	
CROSS_CHECK_RULE == FAILED		STM-38.M_XATTRIBUTE = xxxxxxx010	DISPLAY_DIGITAL = "????"	
CROSS_CHECK_RULE == FAILED			DISPLAY_DIGITAL = ENTERED_VALUE	
INPUT_FIELD_STATE != NOT_SELECTED/ACCEPTED_DATA_VALUE	disable(YES_BUTTON)		DISPLAY_DIGITAL = "[Window Title] entry complete?"	
OPERATIONAL_PERMITTED_RANGE_CHECK==FAILED		STM-38.M_XATTRIBUTE = xxxxxxx101	DISPLAY_DIGITAL = "++++"	
OPERATIONAL_PERMITTED_RANGE_CHECK==FAILED INPUT_FIELD_STATE = SELECTED_IF_VALUE_DATA			DISPLAY_DIGITAL = ENTERED_VALUE	

Data Change	Action	Command	New_commands	Sample View
INPUT_FIELD_STATE != SELECTED_IF_VALUE_OF_PRESSED_KEY	disable(UP_BUTTON) disable(DOWN_BUTTON) disable(NEXT_BUTTON) disable(PREVIOUS_BUTTON)			
OPERATIONAL_PERMITTED_RANGE_CHECK == OVERRULE		STM-32.NID_BUTTON = ENTER	TYPE = DELAY	
OPERATIONAL_PERMITTED_RANGE_CHECK == OVERRULE	INPUT_FIELD_STATE = "Not Selected IF/Accepted Data value"		DISPLAY_DIGITAL = ENTERED_VALUE	
CROSS_CHECK_RULE == FAILED		STM-38.M_XATTRIBUTE = xxxxxxx101	DISPLAY_DIGITAL = "???"	
CROSS_CHECK_RULE == FAILED			DISPLAY_DIGITAL = ENTERED_VALUE	
VALID_BUTTON_ACTIVATION == TRUE			DISPLAY_DIGITAL = ENTERED_VALUE	

Data Change	Action	Command	New_commands	Sample View
input_field_state = accepted modified_input_field_data_status = accepted next_input_field_data_status = accepted technical_range_check == FAILED resolution_check == FALSE	disable(enter) disable(up_button) disable(down_button) disable(next_button) disable(previous_button)	STM-38.M_XATTRIBUTE = xxxxxxx010	DISPLAY_DIGITAL = "++++"	
operational_range_check == FAILED	enable(enter) disable(up_button) disable(down_button) disable(next_button) disable(previous_button)	STM-38.M_XATTRIBUTE = xxxxxxx101	DISPLAY_DIGITAL = "++++"	
all_input_fields_have_data = FALSE	press(enter)		DISPLAY = INPUT_FIELD POSITION = NEXT	
technical_cross_check == FAILED	disable(Yes_button)	STM-38.M_XATTRIBUTE = xxxxxxx010	DISPLAY_DIGITAL = "????" DISPLAY_DIGITAL = cross_check_rule	
operational_cross_check_rule == FAILED		STM-38.M_XATTRIBUTE = xxxxxxx101	DISPLAY = yes_button TYPE = DELAY DISPLAY_DIGITAL = "????" DISPLAY_DIGITAL = cross_check_rule	

Data Change	Action	Command	New_commands	Sample View
window_grid_areas = D&&F&&G			DISPLAY_DIGITAL = OBJECTS_EXCLUDI NG_KEYBOARD POSITION = TABLE_22_SPECIFIC ATION	
window_grid_areas = A  B  C  D  E  F  G			DISPLAY_DIGITAL = OBJECTS_2 POSITION=TABLE_2 3_SPECIFICATION	
window_grid_areas = A  B  C  D  E  F  G			DISPLAY = WINDOW_TITLE ALIGNMENT= RIGHT	
window_grid_areas = A  B  C  D  E  F  G			DISPLAY = INPUT_FIELD POSITION = A  B  C  E	Area A, B, C, E - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)
window_grid_areas = A  B  C  D  E  F  G			DISPLAY_DIGITAL = OBJECTS_3	
input_field_selection = selection_type			DISPLAY_DIGITAL= KEYBOARD_TYPE	

Data Change	Action	Command	New_commands	Sample View
KEYBOARD_TYPE = NUMERIC	disable(Keyboard_key_12)		KEYBOARD_KEY_1="1" KEYBOARD_KEY_2="2" KEYBOARD_KEY_3="3" KEYBOARD_KEY_4="4" KEYBOARD_KEY_5="5" KEYBOARD_KEY_6="6" KEYBOARD_KEY_7="7" KEYBOARD_KEY_8="8" KEYBOARD_KEY_9="9" KEYBOARD_KEY_10="DELETE" KEYBOARD_KEY_11="0"	
keyboard_type_selections > 12	press(MORE_BUTTON)		KEYBOARD_KEY_12="MORE" TYPE = CIRCULAR_SELECTION	
window_grid_areas = A  B  C  D  E   G			DISPLAY = window_text_label ALIGNMENT = right	
previous_related_input_fields= NONE		STM-32.NID_BUTTON = H3	DISPLAY = close_button	
previous_related_input_fields= YES		STM-32.NID_BUTTON = H3	DISPLAY = previous_button	
next_related_input_field = YES		STM-32.NID_BUTTON = H4	DISPLAY = next_button	

Data Change	Action	Command	New_commands	Sample View
active_input_field > 1	enable(yes_button)    enable(switche_button)	STM-32.NID_BUTTON ON = H5 STM-32.NID_BUTTON ON = H6	DISPLAY = up_button DISPLAY = down_button	
window_grid_areas = A  B  C  D  E   G			DISPLAY_DIGITAL = INPUT_FIELD TYPE = STANDARD_10.3.3	
window_grid_areas = A  B  C  D  E   G			DISPLAY = yes_button DISPLAY = entry_complete_check_window	
yes_button == ACTIVE yes_button = INACTIVE			M_COLOUR_LABEL = BLACK M_COLOUR_BACKGROUND = DARK_GREY M_COLOUR_BACKGROUND = MEDIUM_GREY	
yes_button == ACTIVE		STM-32.NID_BUTTON ON = F3	BUTTON_LABEL = "YES"	
KEYBOARD_TYPE == NUMERIC    KEYBOARD_TYPE == ENHANCED_NUMERIC    KEYBOARD_TYPE == ALPHA_NUMERIC    KEYBOARD_TYPE == PREDEFINED			DISPLAY = window POSITION = F    H	Area F, H - Figure 7 – The sub areas of the ETCS layout (touch screen technology) Figure 9 – The sub areas of the ETCS layout (soft key technology)

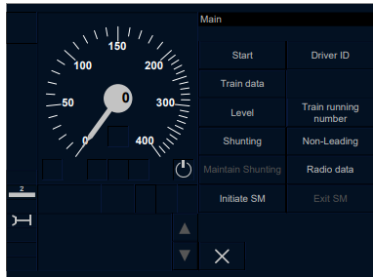
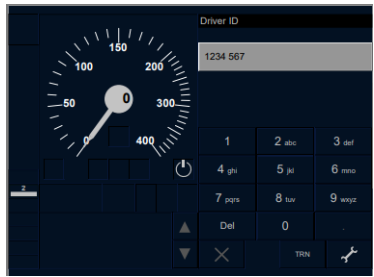
Data Change	Action	Command	New_commands	Sample View
KEYBOARD_TYPE == NUMERIC		STM-32.NID_BUTT ON = F1	BUTTON_LABEL = "1",	
		STM-32.NID_BUTT ON = F2	BUTTON_LABEL = "2",	
		STM-32.NID_BUTT ON = F3	BUTTON_LABEL = "3",	
		STM-32.NID_BUTT ON = F4	BUTTON_LABEL = "4",	
		STM-32.NID_BUTT ON = F5	BUTTON_LABEL = "5",	
		STM-32.NID_BUTT ON = F6	BUTTON_LABEL = "6",	
		STM-32.NID_BUTT ON = F7	BUTTON_LABEL = "7",	
		STM-32.NID_BUTT ON = F8	BUTTON_LABEL = "8",	
		STM-32.NID_BUTT ON = F9	BUTTON_LABEL = "9",	
		STM-32.NID_BUTT ON = F10	BUTTON_LABEL = "0",	

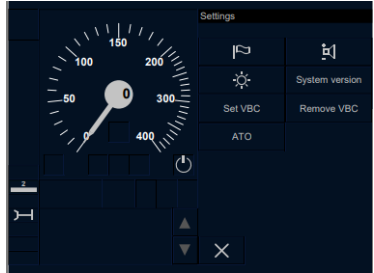
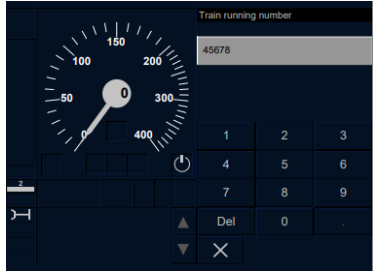
Data Change	Action	Command	New_commands	Sample View
KEYBOARD_TYPE == ENHANCED_NUMER IC		STM-32.NID_BUTT ON = F1	BUTTON_LABEL = "1",	
		STM-32.NID_BUTT ON = F2	BUTTON_LABEL = "2",	
		STM-32.NID_BUTT ON = F3	BUTTON_LABEL = "3",	
		STM-32.NID_BUTT ON = F4	BUTTON_LABEL = "4",	
		STM-32.NID_BUTT ON = F5	BUTTON_LABEL = "5",	
		STM-32.NID_BUTT ON = F6	BUTTON_LABEL = "6",	
		STM-32.NID_BUTT ON = F7	BUTTON_LABEL = "7",	
		STM-32.NID_BUTT ON = F8	BUTTON_LABEL = "8",	
		STM-32.NID_BUTT ON = F9	BUTTON_LABEL = "9",	
		STM-32.NID_BUTT ON = F10	BUTTON_LABEL = "0",	

Data Change	Action	Command	New_commands	Sample View
KEYBOARD_TYPE == ALPHA_NUMERIC		STM-32.NID_BUTT ON = F1 STM-32.NID_BUTT ON = F2 STM-32.NID_BUTT ON = F3 STM-32.NID_BUTT ON = F4 STM-32.NID_BUTT ON = F5 STM-32.NID_BUTT ON = F6 STM-32.NID_BUTT ON = F7 STM-32.NID_BUTT ON = F8 STM-32.NID_BUTT ON = F9 STM-32.NID_BUTT ON = F10	BUTTON_LABEL = "1", BUTTON_LABEL = "2 abc", BUTTON_LABEL = "3 def", BUTTON_LABEL = "4 ghi", BUTTON_LABEL = "5 jkl", BUTTON_LABEL = "6 mno", BUTTON_LABEL = "7 pqrs", BUTTON_LABEL = "8 tuv", BUTTON_LABEL = "9 wxyz", BUTTON_LABEL = "0"	
KEYBOARD_TYPE == NUMERIC    KEYBOARD_TYPE == ENHANCED_NUMER IC    KEYBOARD_TYPE == ALPHA_NUMERIC		STM-32.NID_BUTT ON = H2	DISPLAY = delete_button	

Data Change	Action	Command	New_commands	Sample View
KEYBOARD_TYPE = PREDEFINED			DISPLAY = selected_text POSITION = D  G    I DISPLAY = selction_list POSITION = D  G   I INDENT_LEFT = 15 DISPLAY = first_selection_list POSITION = below_input_filed_3   below_input_filed_4 INDENT = 15	Area D, G, I - Figure 7 – The sub areas of the ETCS layout (touch screen technology)  Figure 9 – The sub areas of the ETCS layout (soft key technology)
keyboard_limit = yes_no_choice		STM-32.NID_BUTT ON = F7 STM-32.NID_BUTT ON = F8	BUTTON_LABEL = "no" BUTTON_LABEL = "yes"	
predifined_choices > 10	press(MO RE_BUTT ON	STM-32.NID_BUTT ON = F10	BUTTON_LABEL = "MORE" TYPE = CIRCULAR_SELECTI ON	
previous_related_inpu t_field = NONE		STM-32.NID_BUTT ON = H3	DISPLAY = close_button	
previous_related_inpu t_field = YES		STM-32.NID_BUTT ON = H3	DISPLAY = previous_button	
next_related_input_fie ld = YES		STM-32.NID_BUTT ON = H4	DISPLAY = next_button	

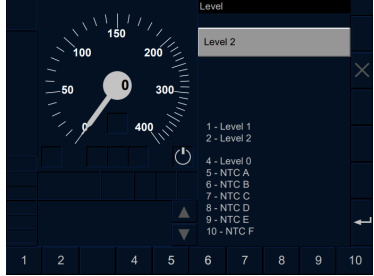
## 2.10 Steps of Start Up dialogue - Table 49

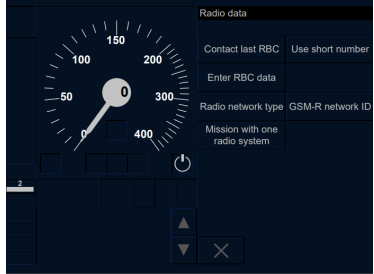
	Start Condition	Action	command	New_commands	Sample View
START_UP_S0	CAB_ACTIVE == YES MODE == SB && RBC_SESSION == ACTIVE    RBC_SESSION == CONNECTING START_OF_MISSION_INITIATION_CONDITIONS == COMPLETE	disable(ALL_BUTTONS)		DISPLAY_FRAME = MAIN_WINDOW DISPLAY = ST05 SET_PROCEDURE = S1	 <p>Figure 109 - Main Window</p>
START_UP_S1	DRIVER_ID_WINDOW == ACTIVE DRIVER_ID_VALID == UNKNOWN    NO			DISPLAY_DIGITAL = "Enter Driver ID" DISPLAY_DIGITAL = "Revalidate Driver ID"	 <p>Figure 116 - Driver ID window</p>
	DRIVER_ID_VALID == YES			SET_PROCEDURE = START_UP_D2	
	SETTINGS_BUTTON_PRESSED == YES			SET_PROCEDURE = START_UP_S1-1	
	TRAIN_RUNNING_NUMBER_PRESSED == YES			SET_PROCEDURE = START_UP_S1-2	


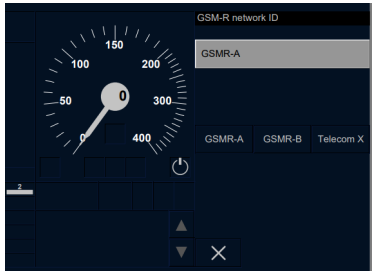
	Start Condition	Action	command	New_commands	Sample View
START_UP_S1-1	SETTINGS_WINDOW_STATUS == ACTIVE	close(SETTINGS_WINDOW)		SET_PROCEDURE = START_UP_S1	 <p>Figure 112- Settings window</p>
START_UP_S2-1	TRAIN_RUNNING_NUMBER_WINDOW == ACTIVE	revalidate(TRAIN_NUMBER)		DISPLAY_DIGITAL = "Enter Train Running Number" SET_PROCEDURE = START_UP_S1	 <p>Figure 114 - Train running number window</p>
START_UP_D2	TRAIN_POSITION_VALID == YES && CURRENT_ERROR_TMS_LEVEL_VALID == YES			SET_PROCEDURE = START_UP_D3	
	TRAIN_POSITION_VALID == NO && CURRENT_ERROR_TMS_LEVEL_VALID == NO			SET_PROCEDURE = START_UP_S2	
START_UP_D3	CURRENT_ERROR_TMS_LEVEL == 2			SET_PROCEDURE = START_UP_D7	
	CURRENT_ERROR_TMS_LEVEL == 0    1    NTC			SET_PROCEDURE = START_UP_S10	
START_UP_D7	RADIO_NETWORK_TYPE == FRMCS			SET_PROCEDURE = START_UP_A31	

```

FRMCS_GSM_
R &&
ONBOARD_RA
DIO_SYSTEM
== FRMCS &&
FRMCS_REGI
STERED_RADI
O_NETWORK
==
FRMCS_NETW
ORK
||
RADIO_NETW
OK_TYPE ==
FRMCS +
GSMR &&
ONBOARD_RA
DIO_SYSTEM
== FRMCS +
GSMR &&
FRMCS_REGI
STERED_RADI
O_NETWORK
==
FRMCS_NETW
ORK &&
GSMR_TERMI
NAL_1_REGIS
TERATION/GS
MR_TERMINAL
_2_REGISTER
ATION==
GSMR_NETW
ORK &&
GSMR_TERMI
NALS_REGIST
ERED >= 1
||
RADIO_NETW
OK_TYPE ==
GSM_R ||
FRMCS +
  
```

	<p>GSMR &amp;&amp; ONBOARD_RA DIO_SYSTEM == GSMR== TRUE &amp;&amp; GSMR_TERMI NAL_1_REGIS TERATION/GS MR_TERMINAL _2_REGISTER ATION== GSMR_NETW ORK GSMR_TERMI NALS_REGIST ERED &gt;= 1</p>				
	<p>D7_RADIO_CO NDITIONS_FU LFILLED == NO</p>			<p>SET_PROCEDUR E = START_UP_S4</p>	
<p>START_U P_S2</p>	<p>CURRENT_ER TMS_LEVEL_V ALID == UNKNOWN    NO</p>			<p>DISPLAY_DIGITAL = "Enter Level Data" DISPLAY_DIGITAL = "Revalidate Level Data"</p>	 <p>Figure 115 - ERTMS/ETCS Level Window</p>
	<p>NEW_ERTMS_ LEVEL == 2</p>			<p>SET_PROCEDUR E = START_UP_S3-1</p>	
	<p>NEW_ERTMS_ LEVEL == 0    1    NTC</p>			<p>SET_PROCEDUR E = START_UP_S10</p>	

	Start Condition	Action	command	New_commands	Sample View
START_UP_S3-1	DISPLAY_FRA ME == RADIO_DATA_WINDOW			BUTTON_LABEL = "Contact last RBC" BUTTON_LABEL = "Use short number" BUTTON_LABEL = "Enter RBC data" BUTTON_LABEL = "Radio network type" BUTTON_LABEL = "GSM-R network ID" BUTTON_LABEL = "Mission with one radio system"	 <p>Figure 113 – Radio data window</p>
		press(CONTACT_LAST_RBC)		SET_PROCEDURE = START_UP_A31	Refer to Figure 113 – Radio data window
		press(ENTER_RBC_DATA)		SET_PROCEDURE = START_UP_S3-3	Refer to Figure 113 – Radio data window
		press(RADIO_NETWORK_TYPE)		SET_PROCEDURE = START_UP_S3-4	Refer to Figure 113 – Radio data window
		press(GSM-R Network ID)		SET_PROCEDURE = START_UP_S3-2-1	Refer to Figure 113 – Radio data window
		press(MISSION_WITH_ONE_RADIO_SYSTEM)		SET_PROCEDURE = START_UP_A43	Refer to Figure 113 – Radio data window

	Start Condition	Action	command	New_commands	Sample View
START_UP_S3-2-1	DISPLAY_FRAME == RADIO_DATA_WINDOW AVAILABLE_GSMR_NETWORK_LIST != EMPTY	disable(ALL_BUTTONS) wait(GSMR_NETWORK_LIST == AVAILABLE)		DISPLAY_DIGITAL == ST05 SET_PROCEDURE = START_UP_S3-2-2	Refer to Figure 113 – Radio data window  Figure - ST05
	AVAILABLE_GSMR_NETWORK_LIST == EMPTY			SET_PROCEDURE = START_UP_A29	
START_UP_S3-2-2	DISPLAY_FRAME == GSMR_NETWORK_ID_WINDOW GSMR_NETWORK_ID_ENTERED == YES			SET_PROCEDURE = START_UP_S3-2-3	 Figure 117 – GSM-R network ID window
START_UP_S3-2-3	DISPLAY_FRAME == RADIO_DATA_WINDOW	disable (ALL_BUTTONS)		DISPLAY_DIGITAL == ST05	Refer to Figure - ST05 Refer to Figure 113 - Radio data Window
	GSMR_TERMINAL_1_REGISTRATION/GSMR_TERMINAL_2_REGISTRATION== GSMR_NETWORK && GSMR_TERMINALS_REGISTERED >= 1			SET_PROCEDURE = START_UP_S3-1	
START_UP	DISPLAY_FRAME	disable(ALL_BUTTONS)		DISPLAY_DIGITAL	Refer to Figure - ST05

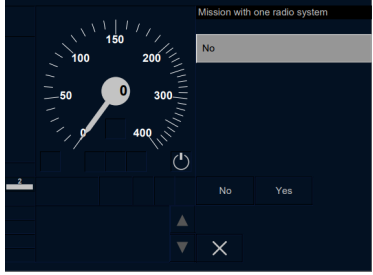
<p>P_S4</p> <p>ME == MAIN_WINDOW</p> <p>RADIO_NETWORK_TYPE == FRMCS    FRMCS_GSM_RADIO_SYSTEM == FRMCS_REGISTERED_RADIO_NETWORK == FRMCS_NETWORK    RADIO_NETWORK_TYPE == FRMCS + GSMR &amp;&amp; ONBOARD_RADIO_SYSTEM == FRMCS + GSMR &amp;&amp; FRMCS_REGISTERED_RADIO_NETWORK == FRMCS_NETWORK &amp;&amp; GSMR_TERMINAL_1_REGISTRATION/GSMR_TERMINAL_2_REGISTRATION== GSMR_NETWORK &amp;&amp; GSMR_TERMINALS_REGISTERED &gt;= 1</p>	<p>TTONS)</p>			<p>== ST05</p> <p>SET_PROCEDURE = START_UP_A31</p>	 <p>Figure 109 – Main window</p>
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 RADIO_NETW ROK_TYPE == GSM_R    FRMCS + GSMR && ONBOARD_RA DIO_SYSTEM == GSMR== TRUE && GSMR_TERMI NAL_1_REGIS TERATION/GS MR_TERMINAL _2_REGISTER ATION== GSMR_NETW ORK GSMR_TERMI NALS_REGIST ERED >= 1				
--	--	--	--	--

	Start Condition	Action	command	New_commands	Sample View
	RADIO_NETW ORK_TYPE == FRMCS    FRMCS_GSM_ R && ONBOARD_RA DIO_SYSTEM == FRMCS && FRMCS_CONN ECTION_TIME _ELAPSED == YES    RADIO_NETW OK_TYPE == FRMCS + GSMR && ONBOARD_RA DIO_SYSTEM == FRMCS + GSMR && GSMR_CONNE CTION_TIME_ ELAPSED == YES    RADIO_NETW ROK_TYPE == GSM_R    FRMCS + GSMR && ONBOARD_RA DIO_SYSTEM == GSMR== TRUE && GSMR_CONNE CTION_TIME_ ELAPSED == YES			SET_PROCEDUR E = START_UP_A42	

START_UP_A42	RADIO_NETWORK_TYPE == FRMCS    FRMCS_GSM_RADIO_SYSTEM == FRMCS && FRMCS_NETWORK_REGISTRATION == FAILED			DISPLAY_DIGITAL = "FRMCS network registration failed" SET_PROCEDURE = START_UP_D9	
	RADIO_NETWORK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS + GSMR && FRMCS_NETWORK_REGISTRATION == FAILED    GSMR_NETWORK_REGISTRATION == FAILED			DISPLAY_DIGITAL = "FRMCS network registration failed"  DISPLAY_DIGITAL = "GSM-R network registration failed"  SET_PROCEDURE = START_UP_D9	
	RADIO_NETWORK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == GSMR && GSMR_NETWORK_REGISTRATION == FAILED			DISPLAY_DIGITAL = "GSM-R network registration failed"  SET_PROCEDURE = START_UP_D9	

	Start Condition	Action	command	New_commands	Sample View
START_UP_D9	RADIO_NETWORK_OK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS + GSMR && FRMCS_REGISTERED_RADIO_NETWORK == FRMCS_NETWORK    GSMR_TERMINAL_1_REGISTRATION/GSMR_TERMINAL_2_REGISTRATION == GSMR_NETWORK && GSMR_TERMINALS_REGISTERED >= 1			SET_PROCEDURE = S5	
	CURRENT_PROCEDURE = D9 RADIO_CONDITIONS_FULFILLED == NO			SET_PROCEDURE = S10	

	Start Condition	Action	command	New_commands	Sample View
START_UP_S5	DISPLAY_FRA ME == MISSION_WIT H_ONE_RADIO _WINDOW				 <p>Figure 129c –Mission with one radio system window</p>
	RBC_CONTACT_INFO_VALID == YES	Press(YES_BUTTON)		SET_PROCEDURE = A31	
	RBC_CONTACT_INFO_VALID == NO	Press(YES_BUTTON)		SET_PROCEDURE = S3-1	
Press(NO_BUTTON)			SET_PROCEDURE = S10		
START_UP_A29	DISPLAY_DIGITAL = "GSM-R network registration failed"			SET_PROCEDURE = D10	

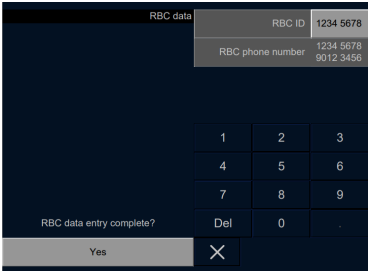
	Start Condition	Action	command	New_commands	Sample View
START_UP_D10	RADIO_NETWORK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS + GSMR			SET_PROCEDURE = S3-1	
	RADIO_NETWORK_TYPE != FRMCS + GSMR && ONBOARD_RADIO_SYSTEM != FRMCS + GSMR			SET_PROCEDURE = S10	
START_UP_S3-3	RBC_DATA_ENTRY_COMPLETED == TRUE	Press(YES_BUTTON)		SET_PROCEDURE = A31	
	RBC_CONTACT_INFO == UNKNOWN    INVALID	enable(YES_BUTTON) Press(YES_BUTTON)		DISPLAY_FRAME == RADIO_DATA_WINDOW	

Figure 118 – RBC data window

	Start Condition	Action	command	New_commands	Sample View
START_UP_S3-4	DISPLAY_FRA ME == RBC_NETWORK K_TYPE_WINDOW				 <p>Figure 129b – Radio network type window</p>
	DRIVER_ENTERED_NETWORK K_TYPE == FRMCS    FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS FRMCS_NETWORK_REGISTRATION == NOT REGISTERED			SET_PROCEDURE = A41	
	DRIVER_ENTERED_NETWORK K_TYPE == FRMCS    FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS FRMCS_REGISTERED_RADIO_NETWORK == FRMCS_NETWORK			SET_PROCEDURE = S3-1	

	Start Condition	Action	command	New_commands	Sample View
START_UP_A41	DISPLAY_DIGITAL = "FRMCS network registration failed"			SET_PROCEDURE = D10	
START_UP_A43	FRMCS_NETWORK_REGISTRATION == FAILED A41_PROCEDURE == FAILED			DISPLAY_DIGITAL = "FRMCS network registration failed" SET_PROCEDURE = S5	
	GSMR_NETWORK_REGISTRATION == FAILED A29_PROCEDURE == FAILED			DISPLAY_DIGITAL = "GSM-R network registration failed" SET_PROCEDURE = S5	
START_UP_S10	CURRENT_PROCEDURE == S10			SET_PROCEDURE = S1	
START_UP_A31	DISPLAY_FRAME == MAIN_WINDOW	disable(ALL_BUTTONS)		DISPLAY_DIGITAL == ST05	Refer to Figure 109 – Main window
START_UP_D31	SESSION_OPENING_STATUS == SUCCESS			SET_PROCEDURE = D32	
	SESSION_OPENING_STATUS == FAILED			SET_PROCEDURE = A32	

	<b>Start Condition</b>	<b>Action</b>	<b>command</b>	<b>New_commands</b>	<b>Sample View</b>
START_UP_A32	COMMUNICATION_SESSION == TERMINATED_NO_COMPATIBLE_VERSION			DISPLAY_DIGITAL = "Trackside not compatible" SET_PROCEDURE = S10	
START_UP_A33	SAFE_CONSIST_LENGTH_INFORM == AVAILABLE_TRAIN_DATA_AVAILABLE == NO	send(SOM_POSITION_REPORT)		SET_PROCEDURE = S10	

	<b>Start Condition</b>	<b>Action</b>	<b>command</b>	<b>New_commands</b>	<b>Sample View</b>
START_UP_A34	TRAIN_DATA_AVAILABLE == YES TRAIN_POSITION_DATA_STATUS == INVALID	send(SOM_POSITION_INVALID_POSITION)		SET_PROCEDURE = D33	
	TRAIN_DATA_AVAILABLE == YES TRAIN_POSITION_DATA_STATUS == UNKNOWN	send(SoM_position_report_unknown_position)			
	TRAIN_DATA_AVAILABLE == NO	send(SoM_position_report_safe_consist_length)			

	Start Condition	Action	command	New_commands	Sample View
START_UP_D33	TRAIN_POSITION_LRBG_DATA == INVALID && RBC_TRAIN_POSITION_VALIDATION = ACCEPTED			SET_PROCEDURE = A35	
	TRAIN_POSITION_LRBG_DATA == INVALID && RBC_TRAIN_POSITION_VALIDATION = REJECTED			SET_PROCEDURE = D22	
START_UP_A35	RBC_TRAIN_POSITION_VALIDATION_RECEIVED == YES			TRAIN_POSITION_LRBG_DATA_VALID == YES SET_PROCEDURE = S10	
START_UP_D22	TRAIN_ACCEPTED == YES			SET_PROCEDURE = A23	
	TRAIN_ACCEPTED == NO			SET_PROCEDURE = A38	
START_UP_A23	TRAIN_ACCEPTED == YES				

	Start Condition	Action	command	New_commands	Sample View
START_UP_D34	TRAIN_POSITION_LRBG_DATA == UNLINKED_BASIS_GROUP			SET_PROCEDURE = S10	
	TRAIN_POSITION_LRBG_DATA == INVALID    UNKNOWN			SET_PROCEDURE = A24	
START_UP_A24	CURRENT_PROCEDURE == A24	delete(Train_position_data)		TRAIN_POSITION_DATA_STATUS == UNKNOWN SET_PROCEDURE = S10	
START_UP_A38	TRAIN_ACCEPTED == NO				
START_UP_D35	TRAIN_POSITION_VALID == YES TRAIN_POSITION_LRBG_DATA == UNLINKED_BASIS_GROUP			SET_PROCEDURE = A40-1	
	TRAIN_POSITION_LRBG_DATA == INVALID    UNKNOWN			SET_PROCEDURE = A39	
START_UP_A39	CURRENT_PROCEDURE == A39	delete(Train_position_data)		TRAIN_POSITION_DATA_STATUS == UNKNOWN SET_PROCEDURE = A40	

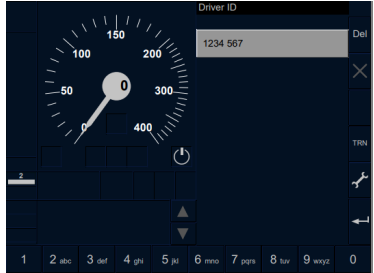
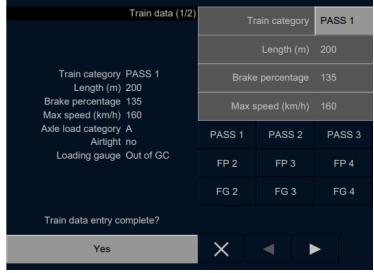
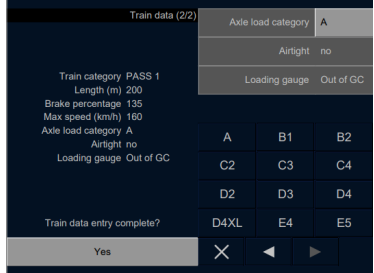
	<b>Start Condition</b>	<b>Action</b>	<b>command</b>	<b>New_commands</b>	<b>Sample View</b>
START_UP_A40-1	CURRENT_PROCEDURE == A40-1	terminate(RBC_session)		SET_PROCEDURE = A40 -2	
START_UP_A40_2	CURRENT_PROCEDURE == A40-2			DISPLAY_DIGITAL = "Train is rejected" SET_PROCEDURE = S10	

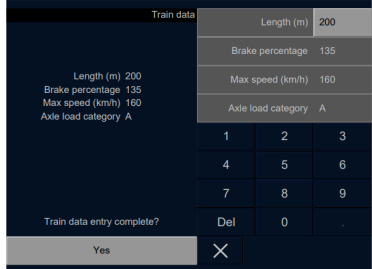
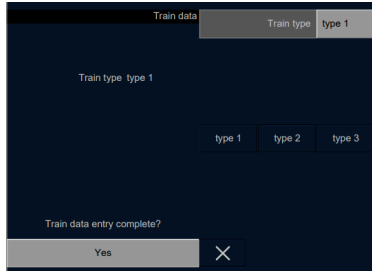
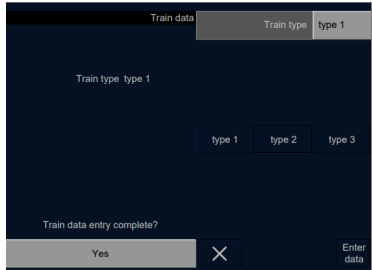
## 2.11 The steps of the “Main window”

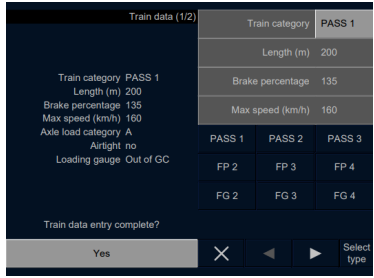
	<b>Start Condition</b>	<b>Action</b>	<b>command</b>	<b>New_commands</b>	<b>Sample View</b>
MAIN_WINDOW_S1	DISPLAY_FRAME == MAIN_WINDOW				Refer to Figure 109 – Main window
	DRIVER_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S2	
	INITIATE_SM_BUTTON_PRESSED == YES			SET_PROCEDURE = SM_DIALOGUE_SEQUENCE	
	SHUNTING_BUTTON_PRESSED == YES			SET_PROCEDURE = SHUNTING_DIALOGUE_SEQUENCE	

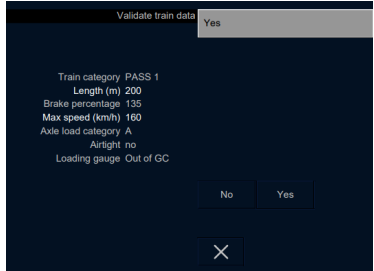
	Start Condition	Action	command	New_commands	Sample View
	NON_LEADING_BUTTON_PRESSED == YES MAINTAIN_SHUNTING_BUTTON_PRESSED == YES			SET_PROCEDURE = DEFAULT_WINDOW	
	EXIT_SHUNTING_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S0	
	EXIT_SM_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S0	
	TRAIN_DATA_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S3 -1	
	LEVEL_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S4	
	TRAIN_RUNNING_NUMBER_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S6	

	Start Condition	Action	command	New_commands	Sample View
	START_BUTTON_PRESSED == YES CURRENT_LEVEL == 0    CURRENT_LEVEL == 1    CURRENT_LEVEL == NTC	Press(Start_Button)		SET_PROCEDURE = DEFAULT_WINDOW	
	START_BUTTON_PRESSED == YES CURRENT_LEVEL == 2	Press(Start_Button)		SET_PROCEDURE = MAIN_WINDOW_D7	
	RADIO_DATA_BUTTON_PRESSED == YES			SET_PROCEDURE = MAIN_WINDOW_S5-1	
	DISPLAY_FRAME == DRIVER_ID_WINDOW DRIVER_ID_STATUS == REVALIDATED    ENTERED			SET_PROCEDURE = MAIN_WINDOW_S1	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WINDOW_S2	DISPLAY_FRAME = DRIVER_ID_WINDOW DRIVER_ID_STATUS = REVALIDATED    ENTERED			SET_PROCEDURE = S1	 <p>Figure 116 - Driver ID window</p>
MAIN_WINDOW_S3-1	PREVIOUS_PROCEDURE == S1 DISPLAY_FRAME == TRAIN_DATA_WINDOW TRAIN_DATA_BUTTON_PRESSED = YES			DISPLAY = FIXED_TRAIN_DATA_ENTRY DISPLAY = FLEXIBLE_TRAIN_DATA_ENTRY DISPLAY = SWITCHABLE_TRAIN_DATA_ENTRY	 <p>Figure 120 – Train data window for a variable train formation with all train data modifiable by the driver (1st window)</p>
	PREVIOUS_PROCEDURE == S1 TRAIN_DATA_STATUS_VALID == YES	start(train_data_validation_process)		EACH_INPUT_FIELD = TRAIN_DATA_VALID_ONBOARD	 <p>Figure 121 – Train data window for a variable train formation with all train data modifiable by the driver (2nd window)</p>

	Start Condition	Action	command	New_commands	Sample View
	TRAIN_DATA_STATUS_VALID == NO	start(train_data_validation_process)		EACH_INPUT_FIELD = TRAIN_DATA_VALUE_ONBOARD    TRAIN_DATA_VALUE_PRECONFIGURED    TRAIN_DATA_VALUE_EXTERNAL	 <p>Figure 122 – Train data window for a variable train formation with the train category, the airtight and the loading gauge pre-configured onboard or received from other ERTMS/ETCS external sources and not modifiable by the driver</p>
	TRAIN_DATA_STATUS_VALID == UNKNOWN	start(train_data_validation_process)		EACH_INPUT_FIELD = TRAIN_DATA_VALUE_PRECONFIGURED    TRAIN_DATA_VALUE_EXTERNAL	 <p>Figure 123 – Train data window for a fixed train formation</p>
	PREVIOUS_PROCEDURE == SRS_5.17.2.S6 TRAIN_DATA_STATUS_VALID == YES	start(train_data_validation_process)		EACH_INPUT_FIELD = TRAIN_DATA_VALUE_ONBOARD	 <p>Figure 124 – Train data window allowing to switch from fixed to variable train formations</p>

	Start Condition	Action	command	New_commands	Sample View
	<pre>PREVIOUS_PROCEDURE == SRS_5.17.2.SX INPUT_FIELD_CHANGED_BY_EXTERNAL_INTERFACE == YES VALUE_PROPOSED == YES</pre>	<pre>start(train_data_validation_process)</pre>		<pre>EACH_INPUT_FIELD = TRAIN_DATA_VALUE_PRECONFIGURED    TRAIN_DATA_VALUE_EXTERNAL</pre>	 <p>Figure 125 – Train data window allowing to switch from variable to fixed train formations</p>
	<pre>PREVIOUS_PROCEDURE == S3-2</pre>	<pre>ongoing(train_data_validation_process)</pre>		<pre>EACH_INPUT_FIELD = VALUE_FROM_PREVIOUS_S3_1</pre>	
	<pre>PREVIOUS_PROCEDURE == S3-2 SWITCH_BUTTON_PRESSED == YES</pre>	<pre>ongoing(train_data_validation_process)</pre>		<pre>EACH_INPUT_FIELD = TRAIN_DATA_VALUE_PRECONFIGURED    TRAIN_DATA_VALUE_EXTERNAL</pre>	
	<pre>TRAIN_DATA_ENTRY_COMPLETED == TRUE</pre>	<pre>Press(Yes_Button)</pre>		<pre>SET_PROCEDURE = S3-2</pre>	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WINDOW_S3-2	DISPLAY_FRAME == TRAIN_DATA_VALIDATION_WINDOW	start(train_data_validation_process)		DISPLAY = TRAIN_DATA_INPUT_FIELD DISPLAY	 <p>Figure 130 – Train data validation window</p>
	TRAIN_DATA_VALIDATION_ENTERED_REVALIDATED == NO			SET_PROCEDURE = S3-1	
	TRAIN_DATA_VALIDATION_ENTERED_REVALIDATED == YES			SET_PROCEDURE = D6	
MAIN_WINDOW_D6	TRAIN_RUNNING_NUMBER_VALID == YES			SET_PROCEDURE = D1	
	TRAIN_RUNNING_NUMBER_VALID == INVALID    UNKNOWN			SET_PROCEDURE = S3-3	
MAIN_WINDOW_S3-3	DISPLAY_FRAME == TRAIN_RUNNING_NUMBER_WINDOW TRAIN_RUNNING_NUMBER_VALID == INVALID    UNKNOWN			DISPLAY_DIGITAL = "ENTER TRAIN RUNNING NUMBER" SET_PROCEDURE = D1	Refer to Figure 114 - Train running number window

	Start Condition	Action	command	New_commands	Sample View
MAIN_WIN DOW_D1	VALIDATED_L EVEL == 2			SET_PROCEDURE = D2	
	VALIDATED_L EVEL == 0    1    NTC			SET_PROCEDURE = S1	
MAIN_WIN DOW_D2	RBC_SESSIO N == ACTIVE			SET_PROCEDURE = D8	
	RBC_SESSIO N == INACTIVE			SET_PROCEDURE = S1	
MAIN_WIN DOW_D8	TRAIN_DATA_ ACK_RECIEV ED == YES			SET_PROCEDURE = S1	
	TRAIN_DATA_ ACK_RECIEV ED == NO			SET_PROCEDURE = S9	
MAIN_WIN DOW_S9	DISPLAY_FRA ME == MAIN_WINDOW	disable(all_but tons)		DISPLAY= ST05 SET_PROCEDURE = S1	Refer to Figure 109 - Main Window
MAIN_WIN DOW_S4	DISPLAY_FRA ME = ERTMS/ETCS _LEVEL_WIND OW			DISPLAY_DIGITAL == "revalidate or re- enter the Level data."	Refer to Figure 115 - ERTMS/ETCS Level Window
	VALIDATED_L EVEL == 2			SET_PROCEDURE = D5	
	VALIDATED_L EVEL == 0    1    NTC			SET_PROCEDURE = S1	
MAIN_WIN DOW_D5	RBC Contac T_INFO == VAILD RADIO_NETW ORK_TYPE ==			SET_PROCEDURE = S8	

FRMCS				
FRMCS_GSM_				
R &&				
ONBOARD_R				
ADIO_SYSTE				
M == FRMCS				
&&				
FRMCS_REGI				
STERED_RAD				
IO_NETWORK				
==				
FRMCS_NET				
WORK				
RADIO_NETW				
OK_TYPE ==				
FRMCS +				
GSMR &&				
ONBOARD_R				
ADIO_SYSTE				
M == FRMCS				
+ GSMR &&				
FRMCS_REGI				
STERED_RAD				
IO_NETWORK				
==				
FRMCS_NET				
WORK &&				
GSMR_TERMI				
NAL_1_REGIS				
TERATION/GS				
MR_TERMINA				
L_2_REGISTE				
RATION==				
GSMR_NETW				
ORK &&				
GSMR_TERMI				
NALS_REGIST				
ERED >= 1				
RADIO_NETW				
ROK_TYPE ==				

	GSM_R    FRMCS + GSMR && ONBOARD_R ADIO_SYSTE M == GSMR== TRUE && GSMR_TERM I NAL_1_REGIS T ERATION/GS MR_TERMINA L_2_REGISTE RATION== GSMR_NETW ORK GSMR_TERM I NALS_REGIST ERED >= 1				
	RBC_CONTACT_INFO == INVALID			SET_PROCEDURE = S5-1	
	LEVEL_ENTRY_VALIDATION == TRUE && PREVIOUS_LEVEL == 0    NTC && CURRENT_ERTMS_LEVEL == 2 && MODE_SWITCH == TR	acknowledge(MO05)		DISPLAY_FRAME = DEFAULT_WINDOW DISPLAY = MO05 SET_PROCEDURE = S5-1	
MAIN_WINDOW_S5-1	DISPLAY_FRAME = RADIO_DATA_WINDOW			BUTTON_LABEL = "Contact last RBC" BUTTON_LABEL = "Use short number" BUTTON_LABEL = "Enter RBC data" BUTTON_LABEL = "Radio network"	Refer to Figure 113 - Radio data window

			type" BUTTON_LABEL = "GSM-R network ID" BUTTON_LABEL = "Mission with one radio system"	
	CONTACT_LA ST_RBC_PRE SSED == YES     USE_SHORT_ NUMBER_BUT TON_PRESSE D == YES		SET_PROCEDURE = S8	
	ENTER_RBC_ DATA_BUTTO N_PRESSED == YES		SET_PROCEDURE = S5-3	
	RADIO_NETW ORK_TYPE_B UTTON_PRES SED == YES		SET_PROCEDURE = S5-4	
	RADIO_NETW ORK_ID_BUTT ON_PRESSED == YES		SET_PROCEDURE = S5-2-1	
	MISSION_WIT H_ONE_RADI O_SYSTEM_B UTTON_PRES SED == YES		SET_PROCEDURE = A7	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WIN DOW_S5-2 -1	DISPLAY_FRA ME = RADIO_DATA_ WINDOW	disable(all_but tons)		DISPLAY = "ST05"	Refer to Figure 113 - Radio data window
	GSMR_NETW ORK_LIST != EMPTY			SET_PROCEDURE = S5-2-2	
	GSMR_NETW ORK_LIST == EMPTY			SET_PROCEDURE = A5	
MAIN_WIN DOW_S5-2 -2	DISPLAY_FRA ME = GSMR_NETW ORK_ID_WIND OW			DISPLAY_DIGITAL = "Enter the GSM-R network ID" SET_PROCEDURE = S5-2-3	Refer to Figure 117 – GSM-R network ID window
MAIN_WIN DOW_S5-2 -3	DISPLAY_FRA ME = RADIO_DATA_ WINDOW GSMR_TERMI NAL_1_REGIS TERATION/GS MR_TERMINA L_2_REGISTE RATION== GSMR_NETW ORK && GSMR_TERMI NALS_REGIST ERED >= 1	disable(all_but tons)		DISPLAY = "ST05" SET_PROCEDURE = S5-1	Refer to Figure 113 - Radio data window
	MAIN_WIN DOW_A5	DISPLAY_DIGI TAL = "GSM-R Network Registration failed"		SET_PROCEDURE = D9	

	<b>Start Condition</b>	<b>Action</b>	<b>command</b>	<b>New_commands</b>	<b>Sample View</b>
MAIN_WIN DOW_D9	RADIO_NETWORK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS + GSMR			SET_PROCEDURE = S5-1	
	D9_RADIO_CONDITIONS_FULFILLED == NO			SET_PROCEDURE = S1	
MAIN_WIN DOW_S5-3	DISPLAY_FRAME == RBC_DATA_WINDOW RBC_CONTACT_INFO_STATUS == UNKNOWN    INVALID    VALID			DISPLAY_DIGITAL = "Enter the RBC Contact Information"	Refer to Figure 118 - RBC data Window
	RBC_DATA_ENTRY_COMPLETED == TRUE	Press(Yes_Button)		SET_PROCEDURE = S8	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WIN DOW_S5-4	DISPLAY_FRA ME == RADIO_NETWORK_TYPE_WINDOW RADIO_NETWORK_OK_TYPE == FRMCS + GSMR && ONBOARD_RADIO_SYSTEM == FRMCS FRMCS_REGISTERED_RADIO_NETWORK == NOT_REGISTERED			DISPLAY_DIGITAL = "Enter Radio Network Type" SET_PROCEDURE = A6	Refer to Figure 129b – Radio network type window
	S5-4_RADIO_CONDITIONS_FULFILLED == NO			SET_PROCEDURE = S5-1	
MAIN_WIN DOW_A6	PREVIOUS_PROCEDURE == S5-4			DISPLAY_DIGITAL = "FRMCS network registration failed" SET_PROCEDURE = D9	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WIN DOW_A7	FRMCS_NET WORK_REGIS TERATION_ST ATUS == FAILED A6_PROCEDU RE_FALIURE == YES			DISPLAY_DIGITAL = "FRMCS network registration failed" SET_PROCEDURE = S10	
	FRMCS_NET WORK_REGIS TERATION_ST ATUS == FAILED A5_PROCEDU RE_FALIURE == YES			DISPLAY_DIGITAL = "GSM-R network registration failed" SET_PROCEDURE = S10	
MAIN_WIN DOW_S10	DISPLAY_FRA ME == MISSION_WIT H_ONLY_ONE _RADIO_SYST EM_WINDOW	choose(Radio system) Press(Yes_bu tton)		SET_PROCEDURE = S5-1	Refer to Figure 129c –Mission with one radio system window
		Press (No_button)		SET_PROCEDURE = S1	
MAIN_WIN DOW_S8	DISPLAY_FRA ME == MAIN_WINDOW	disable(all_but tons)		DISPLAY = ST05	Refer to Figure 109- Main Window
MAIN_WIN DOW_D3	RBC_SESSIO N == ACTIVE			SET_PROCEDURE = D4	
	RBC_SESSIO N == FAILED    TERMINATED TERMINATION _REASON == NO_COMPATI BLE_VERSION			SET_PROCEDURE = S1 DISPLAY_DIGITAL = "Trackside not compatible"	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WIN DOW_D4	START_OF_MISSION == ACTIVE			SET_PROCEDURE = D32	
	START_OF_MISSION == INACTIVE			SET_PROCEDURE = S1	
MAIN_WIN DOW_S6	DISPLAY_FRAME == TRAIN_RUNNING_NUMBER_WINDOW TRAIN_RUNNING_NUMBER_STATUS == UNKNOWN    VALID    INVALID			DISPLAY_DIGITAL = "Enter Train Running Number"    "Revalidate Train Running Number"	Refer to Figure 114 - Train running number window
	TRAIN_RUNNING_NUMBER_STATUS == VALIDATED			SET_PROCEDURE = S1	
MAIN_WIN DOW_D7	RBC_SESSION == ACTIVE			SET_PROCEDURE = S7	
	RBC_SESSION == INACTIVE			SET_PROCEDURE = DEFAULT_WINDOW	

	Start Condition	Action	command	New_commands	Sample View
MAIN_WINDOW_S7	DISPLAY_FRA ME == MAIN_WINDOW	disable(all_buttons)			Refer to Figure 109 - Main window
	RBC_MESSAGE_RECEIVED == RBC_MESSAGE_RECEIVED    RBC_SR_AUTH_RECEIVED			SET_PROCEDURE = DEFAULT_WINDOW	
	RBC_SESSION == TERMINATED_TERMINATION_REASON == NO_RESPONSE_FROM_RBC			SET_PROCEDURE = S1	

## 2.12 The steps of the “Shunting” dialogue sequence

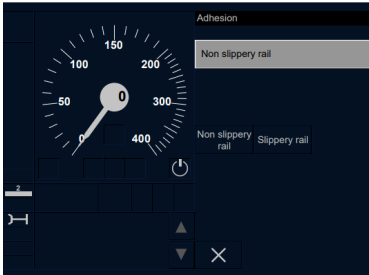
Procedure	Start Condition	Action	command	New_commands	Sample View
SHUNTING_S0	PREVIOUS_PROCEDURE == MAIN_WINDOW_S1	Press(Shunting_Button)		SET_PROCEDURE = D1	
SHUNTING_D1	CURRENT_ERTMS_LEVEL == 0    1			DISPLAY = MO01 SET_PROCEDURE = DEFAULT_WINDOW	
	CURRENT_ERTMS_LEVEL == 2			SET_PROCEDURE = S1	
	CURRENT_ERTMS_LEVEL == NTC			SET_PROCEDURE = D2	


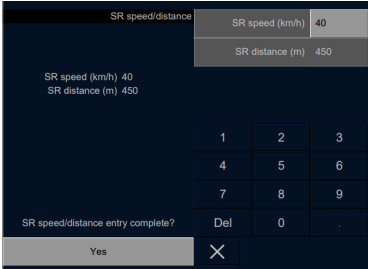
Procedure	Start Condition	Action	command	New commands	Sample View
SHUNTING_ D2	STM_NATIONAL_TRIP == ACTIVE			DISPLAY = TR_MO04 DISPLAY_DIGITAL = "SH refused" SET_PROCEDURE = DEFAULT_WINDOW	
	STM_NATIONAL_TRIP == INACTIVE			DISPLAY = SH_MO01 SET_PROCEDURE = DEFAULT_WINDOW	
SHUNTING_ S1	DISPLAY_FRAME == MAIN_WINDOW	disable(all_bu ttons)		DISPLAY = ST05	Refer to Figure 109 - Main window
	RBC_MESSAGE_REC EIVED = RBC_SH_REFUSED			DISPLAY_DIGITAL = "SH refused" SET_PROCEDURE = S0	
	RBC_REQUEST_WAIT _TIMEOUT == TRUE			DISPLAY_DIGITAL = "Shunting request failed" SET_PROCEDURE = S0	
	RBC_MESSAGE_REC EIVED==RBC_SR_AUT H_RECEIVED			DISPLAY = MO01 SET_PROCEDURE = DEFAULT_WINDOW	

### 2.13 The steps of the “Override window” dialogue sequence

Procedure	Start Condition	Action	command	New commands	Sample View
OVERRIDE_ WINDOW_S0	DISPLAY_FRAME = OVERRIDE_WINDOW	Press(Overrid e_button)		SET_PROCEDURE = S1	
OVERRIDE_ WINDOW_S1	DISPLAY_FRAME = OVERRIDE_WINDOW	Press(EOA_b utton)		DISPLAY = MO03 SET_PROCEDURE = DEFAULT_WINDOW	Refer to Figure 110 - Override window

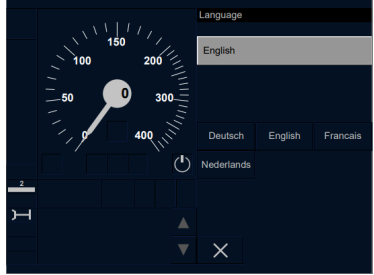
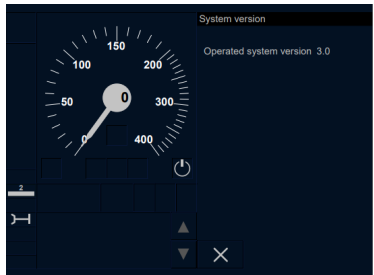
## 2.14 The steps of the “Special window” dialogue sequence

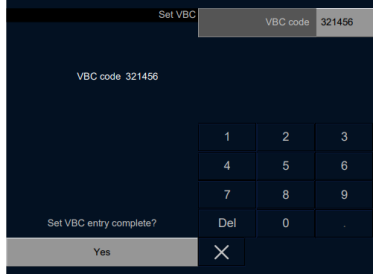
Procedure	Start Condition	Action	command	New commands	Sample View
SPECIAL_WINDOW_S0	DISPLAY_FRAME == DEFAULT_WINDOW	Press(Special_button)		SET_PROCEDURE = S1	
SPECIAL_WINDOW_S1	DISPLAY_FRAME == SPECIAL_WINDOW ADHESION_BUTTON_PRESSED == YES			SET_PROCEDURE = S2	Refer to Figure 111 - Special window
	TRAIN_INTEGRITY_BUTTON_PRESSED == YES			SET_PROCEDURE = DEFAULT_WINDOW	
	SR_SPEED_DISTANCE_BUTTON_PRESSED == YES			SET_PROCEDURE = S3	
	BMM_INHIBITION_BUTTON_PRESSED == YES			DISPLAY = ST07 SET_PROCEDURE = DEFAULT_WINDOW	 Figure -ST07
	REVOKE_BMM_BUTTON_PRESSED == YES			REMOVE = ST07 SET_PROCEDURE = DEFAULT_WINDOW	
SPECIAL_WINDOW_S2	DISPLAY_FRAME = ADHESION_WINDOW			DISPLAY_DIGITAL = "Revalidate/Enter Adhesion"	
	ADHESION_ENTRY_COMPLETE == TRUE			SET_PROCEDURE = D1	

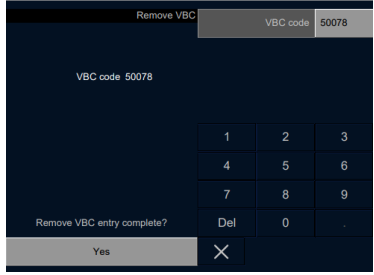
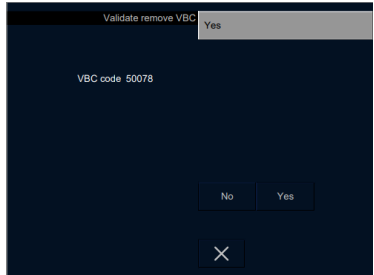
Procedure	Start Condition	Action	command	New commands	Sample View
SPECIAL_WINDOW_D1	ADHESION_STAT US == SLIPPERY_RAIL			DISPLAY = ST02 SET_PROCEDURE = S1	 Figure - ST02
	ADHESION_STAT US == NON_SLIPPERY_RAIL			SET_PROCEDURE = S1	
SPECIAL_WINDOW_S3	DISPLAY_FRAME = SR_SPEED_DISTANCE_WINDOW			DISPLAY_DIGITAL = "Revalidate SR Speed and/or distance"    "Enter SR Speed or distance"	 Figure 126 - SR speed / distance window
	SR_DISTANCE_ONBOARD > MAX_SR_DISTANCE    SR_DISTANCE_ONBOARD == INFINITE			DISPLAY_DIGITAL = MAX_SR_DISTANCE	
		enable(Yes_Button)			
	SR_SPEED_VALUE != EMPTY && SR_DISTANCE_VALUE != EMPTY	Press(Yes_Button)		SET_PROCEDURE = S1	

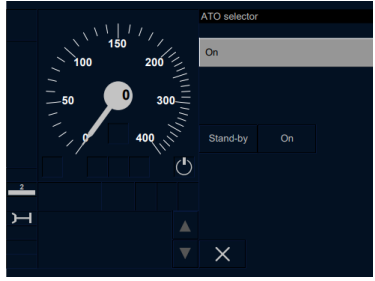
## 2.15 The steps of the “Settings window” dialogue sequence

Procedure	Start Condition	Action	command	New commands	Sample View
SETTINGS_WINDOW_S0	DISPLAY_FRAME = DEFAULT_WINDOW    CURRENT_PROCEDURE == START_UP_S1-1	Press(Settings_Button)		SET_PROCEDURE = S1	
SETTINGS_WINDOW_S1	DISPLAY_FRAME == SETTINGS_WINDOW_BUTTON_SELECTION == LANGUAGE_BUTTON			SET_PROCEDURE = S2	Refer to Figure 112- Settings window
	BUTTON_SELECTION == VOLUME_BUTTON			SET_PROCEDURE = S3	
	BUTTON_SELECTION == BRIGHTNESS_BUTTON			SET_PROCEDURE = S4	
	BUTTON_SELECTION == SYSTEM_VERSION_BUTTON			SET_PROCEDURE = S5	
	BUTTON_SELECTION == SET_VB_BUTTON			SET_PROCEDURE = S6-1	
	BUTTON_SELECTION == REMOVE_VB_BUTTON			SET_PROCEDURE = S7-1	
	BUTTON_SELECTION == ATO_BUTTON			SET_PROCEDURE = S8	

Procedure	Start Condition	Action	command	New commands	Sample View
SETTINGS_WINDOW_S2	DISPLAY_FRAME = LANGUAGE_WINDOW			DISPLAY_DIGITAL = "Revalidate Language"    "Select Language" SET_PROCEDURE = S1	 <p>Figure 119 - Language window</p>
SETTINGS_WINDOW_S3	DISPLAY_FRAME = VOLUME_WINDOW			DISPLAY_DIGITAL = "Revalidate Volume"    "Enter Volume" SET_PROCEDURE = S1	
SETTINGS_WINDOW_S4	DISPLAY_FRAME = BRIGHTNESS_WINDOW			DISPLAY_DIGITAL = "Revalidate Brightness"    "Enter Brightness" SET_PROCEDURE = S1	
SETTINGS_WINDOW_S5	DISPLAY_FRAME == SYSTEM_VERSION_WINDOW	Press(close_button)		SET_PROCEDURE = S1	 <p>Figure 135 - System version window</p>

Procedure	Start Condition	Action	command	New commands	Sample View
SETTINGS _WINDOW _S6-1	DISPLAY_FRAME == SET_VBC_WINDOW				 <p>Figure 128 - Set VBC window</p>
	PREVIOUS PROCEDURE == S1 VALUE_PROPOSE D == NO	enable(Yes _Button)		DISPLAY_DIGITA L = "Enter Value"	
	PREVIOUS PROCEDURE == S6-2 VALUE_PROPOSE D == YES	enable(Yes _Button)		DISPLAY_DIGITA L = "Accept Value"    "Re-enter value" VBC_SET_CODE == value_from_previo us_S6-1	
	VBC_SET_CODE != EMPTY DISPLAY_DIGITAL == "Set VBC entry complete?"	Press(Yes_ Button)		SET_PROCEDUR E = S6-2	
SETTINGS _WINDOW _S6-2	DISPLAY_FRAME = SET_VBC_VALIDAT ION_WINDOW VBC_VALIDATE_V ALUE=="No"			SET_PROCEDUR E = S6-1	 <p>Figure 131 – Set VBC validation window</p>
	VBC_VALIDATE_V ALUE == "Yes"			SET_PROCEDUR E = S1	

Procedure	Start Condition	Action	command	New commands	Sample View
SETTINGS_WINDOW_S7-1	DISPLAY_FRAME = REMOVE_VBC_VALIDATION_WINDOW				 <p>Figure 129 – Remove VBC window</p>
	PREVIOUS_PROCEDURE == S1 VALUE_PROPOSED == NO			DISPLAY_DIGITAL = "Enter the VBC remove code"	
	PREVIOUS_PROCEDURE == S7-2 VALUE_PROPOSED == YES	ongoing(validation_process)		DISPLAY_DIGITAL = "Validate the VBC remove code" VBC_REMOVE_CODE == value_from_previous_S7-1	
	VBC_REMOVE_CODE != EMPTY DISPLAY_DIGITAL == "Remove VBC entry complete?"	Press(Yes_Button)		SET_PROCEDURE = S7-2	
SETTINGS_WINDOW_S7-2	DISPLAY_FRAME = REMOVE_VBC_VALIDATION_WINDOW VBC_REMOVE_VALUE == "No"			SET_PROCEDURE = S7-1	 <p>Figure 132 – Remove VBC validation window</p>
	VBC_REMOVE_VALUE == "Yes"			SET_PROCEDURE = S1	

Procedure	Start Condition	Action	command	New commands	Sample View
SETTINGS_WINDOW_S8	DISPLAY_FRAME == ATO_SELECTOR_WINDOW	OPEN(ATO_WINDOW)		DISPLAY_DIGITAL = "Revalidate ATO selector Position"    "Enter ATO selector position" SET_PROCEDURE = S1	 <p>Figure 129a – ATO selector window</p>

### 2.16 The steps of the “Supervised Manoeuvre” dialogue sequence

Procedure	Start Condition	Action	command	New commands	Sample View
SUPERVISED_MANOEUVER_S0	DISPLAY_FRAME = MAIN_WINDOW	Press(Initiate_SM_Button)    Press(CONTINUE_IN_SM_BUTTON)		SET_PROCEDURE = S1	

Procedure	Start Condition	Action	command	New commands	Sample View
SUPERVISED MANOEUVRE_S1	DISPLAY_FRAME = MAIN_WINDOW	disable(ALL_BUTTONS)		DISPLAY = ST05	Refer to Figure 109 - Main window
	RBC_MESSAGE_RECEIVED = RBC_SM_REFUSED			DISPLAY_DIGITAL = "SM refused" SET_PROCEDURE = S0	
	RBC_REQUEST_WAIT_TIMEOUT == TRUE			DISPLAY_DIGITAL = "Supervised Manoeuver request failed" SET_PROCEDURE = S0	
	RBC_MESSAGE == RBC_SM_AUTH_RECEIVED			DISPLAY = SM_MO24 DISPLAY = SM01    SM02 SET_PROCEDURE = DEFAULT_WINDOW	

## 2.17 ERTMS/ETCS SUB-LEVEL WINDOWS

Start Condition	Action	command	New commands	Sample View
RBC_SESSION = ACTIVE	disable(all buttons) ongoing(MESSAGE_EXCHANGE)		DISPLAY_DIGITAL == ST05 DISPLAY_FRAME = MAIN_WINDOW ALIGNMENT = VERTICAL_CENTER POSITION = 42, 68, 94, 120, 146, RESET DELAY = 1	

Start Condition	Action	command	New commands	Sample View
<pre> TRAIN_STATUS == STANDSTILL &amp;&amp; MODE == SB &amp;&amp; DRIVER_ID_STATUS == YES &amp;&amp; TRAIN_DATA_VALID == YES &amp;&amp; CURRENT_ERTMS_LEVEL _VALID == YES &amp;&amp; TRAIN_NUMBER_VAILD== YES &amp;&amp; CURRENT_ERTMS_LEVEL ==( 0    NTC    1    2) &amp;&amp; RBC_SESSION == ACTIVE &amp;&amp; TRAIN_DATA_ACK == TRUE)    CURRENT_ERTMS_LEVEL == 2 &amp;&amp; RBC_SESSION == INACTIVE    (TRAIN_STATUS== STANDSTILL &amp;&amp; MODE == PT &amp;&amp; TRAIN_DATA_VALID == YES &amp;&amp; CURRENT_ERTMS_LEVEL ==( 1    2) &amp;&amp; RBC_SESSION == ACTIVE &amp;&amp; ONBOARD_EMERGENCY_ STOP == NONE)    (MODE == SR &amp;&amp; CURRENT_ERTMS_LEVEL == 2 &amp;&amp; RBC_SESSION == ACTIVE </pre>	enable(Start)	<pre> STM-32.NI D_BUTTO N = 1 </pre>	<pre> BUTTON_LABEL = "Start" </pre>	 <p>Figure 109 - Main Window</p>

Start Condition	Action	command	New commands	Sample View
<pre>(TRAIN_STATUS== STANDSTILL &amp;&amp; MODE == SB &amp;&amp; DRIVER_ID_STATUS == VALID &amp;&amp; CURRENT_ERTMS_LEVEL _VALID == TRUE)    (DRIVER_ID_MODIFICATI ON_RUNNING == PERMITTED)    DRIVER_ID_MODIFICATIO N_RUNNING == NOT PERMITTED&amp;&amp; TRAIN_STATUS==STAND STILL &amp;&amp; MODE == (SH    FS    AD    SM    LS    SR    OS    NL    UN    SN))</pre>	enable(Driver ID)	STM-32.NI D_BUTTO N = 2	BUTTON_LABEL = "Driver ID"	Refer to Figure 109 - Main Window
<pre>TRAIN_STATUS == STANDSTILL &amp;&amp; DRIVER_ID_VALID == YES &amp;&amp; CURRENT_ ERTMS_LEVEL_VALID == YES &amp;&amp; MODE == (SB    FS    AD    LS    SR    OS    UN    SN) &amp;&amp; SAFE_CONSIST_LENGTH _INFO == NOT AVAILABLE   SAFE_CONSIST_LENGTH _INFO == AVAILABLE &amp; SAFE_CONSIST_LENGTH _INFO == 0</pre>	enable(Train Data)	STM-32.NI D_BUTTO N = 3	BUTTON_LABEL = "Train Data"	Refer to Figure 109 - Main Window


Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS = STANDSTILL && DRIVER_ID_STATUS = VALID && MODE == ( SB    FS    AD    LS    SR    OS    NL    UN    SN)	enable(LEVEL_BUTTON)	STM-32.NID_BUTTON N = 5	BUTTON_LABEL = "Level"	Refer to Figure 109 - Main Window
TRAIN_STATUS = STANDSTILL && MODE == SB && DRIVER_ID_STATUS = VALID && CURRENT_ERTMS_LEVEL_VALID == YES    MODE == (FS    AD    SM    LS    SR    OS    NL    UN    SN)	enable(TRAIN_RUNNING_NUMBER_BUTTON)	STM-32.NID_BUTTON N = 6	BUTTON_LABEL = "Train Running Number"	Refer to Figure 109 - Main Window

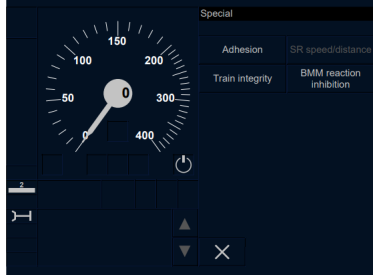
Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS = STANDSTILL && DRIVER_ID_STATUS = VALID && MODE ==( SB    FS    AD    SM    LS    SR    OS    UN    SN) && CURRENT_ ERTMS_LEVEL_VALID == YES && (CURRENT_ERTMS_LEVE L == (0    1    NTC))    (CURRENT_ERTMS_LEVE L == 2 ) && RBC_SESSION == exists    TRAIN_STATUS = STANDSTILL && MODE == PT && CURRENT_ERTMS_LEVEL == 1    CURRENT_ERTMS_LEVEL == 2 && RBC_SESSION == exists && ONBOARD_EMERGENCY_ STOP == NONE	enable(SHUNTIN G_BUTTON)	STM-32.NI D_BUTTO N = 7	BUTTON_LABEL = "Shunting"	Refer to Figure 109 - Main Window
TRAIN_STATUS == STANDSTILL && MODE == SH	exit(SHUNTING)			Refer to Figure 109 - Main Window

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS = STANDSTILL && DRIVER_ID_STATUS = VALID && CURRENT_ ERTMS_LEVEL_VALID == YES && MODE == (SB    SH    FS    AD    SM    LS    SR    OS) && NON_LEADING_SIGNAL == RECIEVED	enable(Non Leading)	STM-32.NI D_BUTTO N = 8	BUTTON_LABEL = "Non Leading"	Refer to Figure 109 - Main Window
MODE == SH && PASSIVE_SHUNTING_SIG NAL == RECIEVED	enable(MAINTAI N_SHUNTING_B UTTON)	STM-32.NI D_BUTTO N = 9	BUTTON_LABEL ="Maintain Shunting"	Refer to Figure 109 - Main Window
TRAIN_STATUS = STANDSTILL && DRIVER_ID_STATUS = VALID && CURRENT_ ERTMS_LEVEL_VALID == YES && MODE == (SB    FS    AD    SM    LS    SR    OS    NL    PT    UN    SN)	enable(RADIO_D ATA_BUTTON)	STM-32.NI D_BUTTO N = 10	BUTTON_LABEL ="Radio Data"	Refer to Figure 109 - Main Window
TRAIN_STATUS== STANDSTILL && MODE == SB && DRIVER_ID_STATUS = VALID && SAFE_CONSIST_LENGTH _INFO== AVAILABLE && CURRENT_ERTMS_LEVEL == 2 && RBC_TRANSITION_ORDE R_ONBOARD == NONE && VALID_COMM_RBC_SESS ION_VERSION_GT_2_2 == TRUE &&	enable(INITIATE _SM_BUTTON)	STM-32.NI D_BUTTO N = 11	BUTTON_LABEL ="Initiate SM"	Refer to Figure 109 - Main Window

<p> TRAIN_POSITION_VALID  == YES  TRAIN_POSITION_LRBG  == TRUE      TRAIN_STATUS ==  STANDSTILL &amp;&amp; MODE ==  PT &amp;&amp;  TRAIN_DATA_VALID ==  YES &amp;&amp;  SAFE_CONSIST_LENGTH  _INFO == AVAILABLE &amp;&amp;  CURRENT_ERTMS_LEVEL  == 2 &amp;&amp;  RBC_TRANSITION_ORDE  R_ONBOARD == NONE &amp;&amp;  VALID_COMM_RBC_SESS  ION_VERSION_GT_2_2 ==  TRUE &amp;&amp;  TRAIN_POSITION_VAILD  == YES  TRAIN_POSITION_LRBG  == TRUE &amp;&amp;  ONBOARD_EMERGENCY_  STOP == NONE      TRAIN_STATUS==  STANDSTILL &amp;&amp;  MODE == (FS    AD    LS     OS    SR) &amp;&amp;  SAFE_CONSIST_LENGTH  _INFO== AVAILABLE &amp;&amp;  CURRENT_ERTMS_LEVEL  == 2 &amp;&amp;  RBC_TRANSITION_ORDE  R_ONBOARD == NONE &amp;&amp;  VALID_COMM_RBC_SESS  ION_VERSION_GT_2_2 ==  TRUE </p>				
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Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS = STANDSTILL && MODE == SM && SAFE_CONSIST_LENGTH _INFO == AVAILABLE && VALID_COMM_RBC_SESS ION_VERSION_GT_2_2 == TRUE    TRAIN_STATUS == STANDSTILL && MODE == PT && TRAIN_DATA_VALID == NO && SAFE_CONSIST_LENGTH _INFO == AVAILABLE && CURRENT_ERTMS_LEVEL == 2 && VALID_COMM_RBC_SESS ION_VERSION_GT_2_2 == TRUE && ONBOARD_EMERGENCY_ STOP == NONE	enable(CONTINUE_IN_SM_BUTTON)	STM-32.NID_BUTTON_N = 12	BUTTON_LABEL = "Continue in SM"	Refer to Figure 109 - Main Window
TRAIN_STATUS == STANDSTILL && MODE == SM	exit(SM)			Refer to Figure 109 - Main Window

Start Condition	Action	command	New commands	Sample View
<pre> V &lt;= OVERRIDE_TRRIGER_SP EED_LIMIT &amp;&amp; MODE == FS    AD    LS    SR    OS    UN    SN    SH    V &lt;= OVERRIDE_TRRIGER_SP EED_LIMIT &amp;&amp; MODE == SB &amp;&amp; DRIVER_ID == VALID &amp;&amp; TRAIN_DATA_VALID == YES &amp;&amp; TRAIN_NUMBER_VALID== YES &amp;&amp; CURRENT_ERTMS_LEVEL _VALID= YES &amp;&amp; CURRENT_ERTMS_LEVEL == 2    V &lt;= OVERRIDE_TRRIGER_ SPEED_LIMIT &amp;&amp; MODE == PT &amp;&amp; TRAIN_DATA_VALID == YES &amp;&amp; TRAIN_NUMBER_VALID = YES </pre>	enable(EOA)	STM-32.NI D_BUTTO N = 1	BUTTON_LABEL ="EOA"	 <p>Figure 110 - Override window</p>

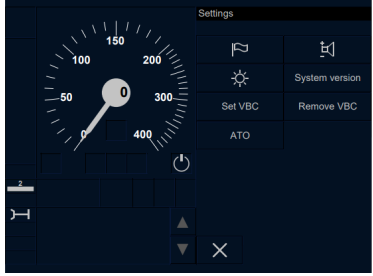



Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && MODE == SB && ADHESION_MODIFICATIO N_PERMISSION == PERMITTED && DRIVER_ID_STATUS = VALID && TRAIN_DATA_VALID== YES && CURRENT_ERTMS_LEVEL _VALID== YES)    ADHESION_MODIFICATIO N_PERMISSION == PERMITTED && MODE == FS    AD    SM    LS    SR    OS    UN    SN	enable(Adhesion)	STM-32.NI D_BUTTO N = 1	BUTTON_LABEL ="Adhesion"	 <p>Figure 111 - Special window</p>
TRAIN_STATUS == STANDSTILL && MODE == SR	enable(SR_Spee d_Distance)	STM-32.NI D_BUTTO N = 2	BUTTON_LABEL ="SR Speed / Distance"	Refer to Figure 111 - Special window
TRAIN_STATUS == STANDSTILL && MODE == (SB    FS    AD    LS    SR    OS    UN    PT   SN )&& DRIVER_ID_STATUS = VALID && TRAIN_DATA_VALID == YES && RBC_SESSION == ACTIVE && TRAIN_DATA_ACKNOWLE DGED == YES && CURRENT_ERTMS_LEVEL _VALID == YES && TRAIN_POSITION_VALID == YES && TRAIN_POSITION_LRBG	enable(Train Integrity)	STM-32.NI D_BUTTO N = 3	BUTTON_LABEL ="Train Integrity" TYPE = DELAY	Refer to Figure 111 - Special window

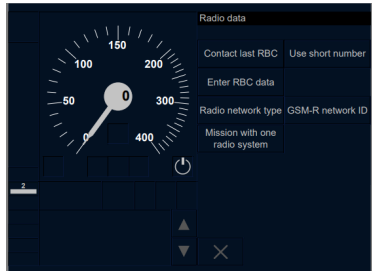
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== YES &&
CURRENT_TRAIN_LEN<
H <=
CONFIRMED_TRAIN_LEN<
GTH_INFO
||
TRAIN_STATUS ==
STANDSTILL &&
MODE == SM &&
RBC_SESSION == ACTIVE
SAFE_CONSIST_LENGTH<
_INFO_STATUS ==
ACCEPTED
CURRENT_TRAIN_LEN<
H <=
CONFIRMED_TRAIN_LEN<
GTH_INFO
||
TRAIN_STATUS ==
STANDSTILL &&
MODE == SM &&
DRIVER_ID_STATUS =
VALID &&
CURRENT_ERTMS_LEVEL<
_VALID == YES &&
TRAIN_DATA_VALID ==
NO
RBC_SESSION ==
ACCEPTED
SAFE_CONSIST_LENGTH<
_INFO_STATUS ==
ACCEPTED
TRAIN_POSITION_VALID
== YES
TRAIN_POSITION_LRBG
== YES &&
CURRENT_TRAIN_LEN<
H <=
CONFIRMED_TRAIN_LEN<
GTH_INFO

```

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && MODE == SB && DRIVER_ID_STATUS = VALID && CURRENT_ERTMS_LEVEL _VALID == YES && CURRENT_ERTMS_LEVEL == (1    2) && BTM_ALARM_REACTION_I NIHIBITION == INACTIVE    TRAIN_STATUS == STANDSTILL && MODE == (SR    SH) && CURRENT_ERTMS_LEVEL == (1    2) && BTM_ALARM_REACTION_I NIHIBITION == INACTIVE	enable(BMM Reaction Inhibition)	STM-32.NI D_BUTTO N = 4	BUTTON_LABEL ="BMM Reaction Inhibition"	Refer to Figure 111 - Special window
TRAIN_STATUS == STANDSTILL && MODE == SB && DRIVER_ID_STATUS = VALID && CURRENT_ERTMS_LEVEL _VALID == YES && CURRENT_ERTMS_LEVEL == (1    2) && BTM_ALARM_REACTION_I NIHIBITION == ACTIVE    TRAIN_STATUS == STANDSTILL && MODE == (SR    SH) && CURRENT_ERTMS_LEVEL == (1    2) && BTM_ALARM_REACTION_I NIHIBITION == ACTIVE	disable(BMM Reaction Inhibition)			

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && MODE == SB    MODE ==( SH    FS    AD    SM    LS    SR    OS    NL    UN    TR    PT    SN    RV ) SCREEN_TECHNOLOGY = TOUCH_SCREEN_TECHN OLOGY	enable(SE03)	STM-32.NI D_BUTTO N = 1	DISPLAY= SE03	 <p>Figure 112 - Settings Window</p>  <p>Figure-SE01</p>
	enable(SE02)	STM-32.NI D_BUTTO N = 2	DISPLAY= SE02	Refer to Figure 112 - Settings Window  <p>Figure -SE02</p>
	enable(SE01)	STM-32.NI D_BUTTO N = 3	DISPLAY= SE01	Refer to Figure 112 - Settings Window  <p>Figure- SE01</p>
	enable(SYSTEM_VERSION)	STM-32.NI D_BUTTO N = 4	BUTTON_LABEL ="System Version"	Refer to Figure 112 - Settings Window
TRAIN_STATUS == STANDSTILL && MODE == SB    MODE ==( SH    FS    AD    SM    LS    SR    OS    NL    UN    TR    PT    SN    RV ) SCREEN_TECHNOLOGY = SOFT_KEY_TECHNOLOGY	enable(LANGUAGE)	STM-32.NI D_BUTTO N = 1	BUTTON_LABEL ="Language"	Refer to Figure 112 - Settings Window
	enable(VOLUME)	STM-32.NI D_BUTTO N = 2	BUTTON_LABEL ="Volume"	Refer to Figure 112 - Settings Window
	enable(BRIGHTNESS_BUTTON)	STM-32.NI D_BUTTO N = 3	BUTTON_LABEL ="Brightness"	Refer to Figure 112 - Settings Window
	enable(SYSTEM_VERSION)	STM-32.NI D_BUTTO N = 4	BUTTON_LABEL ="System Version"	Refer to Figure 112 - Settings Window

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && MODE == SB && DRIVER_SET_VBC_CAPACITY == ! FULL	enable(Set VBC)	STM-32.NI D_BUTTON N = 5	BUTTON_LABEL ="Set VBC"	Refer to Figure 112 - Settings Window
TRAIN_STATUS == STANDSTILL && MODE == SB && ONBOARD_VBC >= 1	enable(Remove VBC)	STM-32.NI D_BUTTON N = 6	BUTTON_LABEL ="Remove VBC"	Refer to Figure 112 - Settings Window
TRAIN_STATUS == STANDSTILL && MODE == SB    MODE == SH    FS    AD    SM    LS    SR    OS    NL    UN    TR    PT    SN    RV	enable(ATO)	STM-32.NI D_BUTTON N = 7	BUTTON_LABEL ="ATO"	Refer to Figure 112 - Settings Window
TRAIN_STATUS == STANDSTILL && DRIVER_ID_STATUS = VALID && MODE == SB    FS    AD    SM    LS    SR    OS    NL    PT && CURRENT_ERTMS_LEVEL _VALID == YES && CURRENT_ERTMS_LEVEL == 2 && RBC_CONTACT_INFO_STATUS == VALID    INVALID && (RADIO_NETWORK_TYPE == FRMCS    FRMCS + GSMR ONBOARD_RADIO_SYSTEM == FRMCS FRMCS_REGISTERED_RADIO_NETWORK == FRMCS_NETWORK	enable(Contact Last RBC)	STM-32.NI D_BUTTON N = 1	BUTTON_LABEL ="Contact Last RBC"	 <p>Figure 113 - Radio data window</p>

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||
RADIO_NETWORK_TYPE
== FRMCS + GSMR
ONBOARD_RADIO_SYSTE
M == FRMCS + GSMR
FRMCS_REGISTERED_RA
DIO_NETWORK ==
FRMCS_NETWORK &&
GSMR_TERMINAL_1_REG
ISTRATION/GSMR_TERM
INAL_2_REGISTRATION=
= GSMR_NETWORK
GSMR_TERMINALS_REGI
STERED >= 1
||
RADIO_NETWORK_TYPE
== FRMCS + GSMR
ONBOARD_RADIO_SYSTE
M == FRMCS + GSMR
ONLY_ONE_RADIO_MISSI
ON == ACTIVE
FRMCS_REGISTERED_RA
DIO_NETWORK ==
FRMCS_NETWORK ||
GSMR_TERMINAL_1_REG
ISTRATION/GSMR_TERM
INAL_2_REGISTRATION=
= GSMR_NETWORK
GSMR_TERMINALS_REGI
STERED >= 1
||
RADIO_NETWORK_TYPE
== GSMR || FRMCS +
GSMR
ONBOARD_RADIO_SYSTE
M == GSMR
GSMR_TERMINAL_1_REG
ISTRATION/GSMR_TERM
INAL_2_REGISTRATION=
= GSMR_NETWORK
GSMR_TERMINALS_REGI
STERED >= 1)

```

<pre> TRAIN_STATUS == STANDSTILL &amp;&amp; DRIVER_ID_STATUS = VALID &amp;&amp; MODE == SB    FS    AD    SM    LS    SR    OS    NL    PT &amp;&amp; CURRENT_ERTMS_LEVEL _VALID == YES &amp;&amp; CURRENT_ERTMS_LEVEL == 2 &amp;&amp; (RADIO_NETWORK_TYPE == FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS + GSMR FRMCS_REGISTERED_RA DIO_NETWORK == FRMCS_NETWORK &amp;&amp; GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1    RADIO_NETWORK_TYPE == FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS + GSMR ONLY_ONE_RADIO_MISSI ON == ACTIVE &amp;&amp; GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1    RADIO_NETWORK_TYPE == GSMR    FRMCS + GSMR </pre>	<pre> enable(Use Short Number) </pre>	<pre> STM-32.NI D_BUTTO N = 2 </pre>	<pre> BUTTON_LABEL ="Use Short Number" </pre>	<p>Figure 113 - Radio data window</p>
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<p>ONBOARD_RADIO_SYSTE M == GSMR GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1)</p>				
<p>TRAIN_STATUS == STANDSTILL &amp;&amp; DRIVER_ID_STATUS = VALID &amp;&amp; MODE == SB    FS    AD    SM    LS    SR    OS    NL    PT &amp;&amp; CURRENT_ERTMS_LEVEL _VALID == YES &amp;&amp; CURRENT_ERTMS_LEVEL == 2 &amp;&amp; (RADIO_NETWORK_TYPE == FRMCS    FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS FRMCS_REGISTERED_RA DIO_NETWORK == FRMCS_NETWORK    RADIO_NETWORK_TYPE == FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS + GSMR FRMCS_REGISTERED_RA DIO_NETWORK == FRMCS_NETWORK &amp;&amp; GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1</p>	<p>enable(Enter RBC Data)</p>	<p>STM-32.NI D_BUTTO N = 3</p>	<p>BUTTON_LABEL ="Enter RBC Data"</p>	<p>Figure 113 - Radio data window</p>

<pre>    RADIO_NETWORK_TYPE == FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS + GSMR ONLY_ONE_RADIO_MISSI ON == ACTIVE &amp;&amp; GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1    RADIO_NETWORK_TYPE == GSMR    FRMCS + GSMR ONBOARD_RADIO_SYSTE M == GSMR GSMR_TERMINAL_1_REG ISTRATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED &gt;= 1) </pre>				
<pre> TRAIN_STATUS == STANDSTILL &amp;&amp; DRIVER_ID_STATUS = VALID &amp;&amp; MODE ==(SB    FS    LS    SR    OS    NL    PT    UN    SN) &amp;&amp; CURRENT_ERTMS_LEVEL _VALID == YES </pre>	<pre> enable(Radio Network Type) </pre>	<pre> STM-32.NI D_BUTTO N = 5 </pre>	<pre> BUTTON_LABEL ="Radio Network Type" </pre>	<pre> Figure 113 - Radio data window </pre>

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && DRIVER_ID_STATUS = VALID && MODE ==(SB    FS    AD    LS    SR    OS    NL    PT    UN    SN) && CURRENT_ERTMS_LEVEL _VALID == YES && RADIO_NETWORK_TYPE == GSMR    FRMCS + GSMR	enable(GSMR Network ID)	STM-32.NI D_BUTTO N = 6	BUTTON_LABEL ="GSMR Network ID"	Figure 113 - Radio data window

Start Condition	Action	command	New commands	Sample View
TRAIN_STATUS == STANDSTILL && DRIVER_ID_STATUS = VALID && MODE ==(SB    FS    LS    SR    OS    NL    PT    UN    SN) && CURRENT_ERTMS_LEVEL _VALID == YES && CURRENT_ERTMS_LEVEL == 2    3 RADIO_NETWORK_TYPE == FRMCS + GSMR ONBOARD_RADIO_SYSTE M == FRMCS + GSMR && FRMCS_REGISTERED_RA DIO_NETWORK == FRMCS_NETWORK && GSMR_TERMINAL_1_REG ISTERATION/GSMR_TERM INAL_2_REGISTRATION= = GSMR_NETWORK GSMR_TERMINALS_REGI STERED >= 1    FRMCS_REGISTERED_RA DIO_NETWORK == FRMCS_NETWORK && GSMR_TERMINAL_1_REG ISTERATION/GSMR_TERM INAL_2_REGISTRATION = NOT_REGISTERED GSMR_TERMINALS_REGI STERED == 0	enable(Mission with one radio system)	STM-32.NI D_BUTTO N = 7	BUTTON_LABEL ="Mission with one radio system"	Figure 113 - Radio data window

Start Condition	Action	command	New commands	Sample View
TRACKSIDE_LEVELS_PRIORITY_TABLE = AVAILABLE	enable(level_priority_table_buttons)			
TRACKSIDE_LEVELS_PRIORITY_TABLE = NOT AVAILABLE	enable(onboard_default_level_buttons)			
ONBOARD_RADIO_SYSTEM == FRMCS + GSMR ONBOARD_RADIO_SYSTEM == GSMR	enable(second_input_field)			
BUTTON_SELECTION == SWITCH_BUTTON			DISPLAY_LAYOUT = REQUESTED	
CURRENT_WINDOWS_LAYOUT == FLEXIBLE_TRAIN_DATA_ENTRY			BUTTON_LABEL = "SELECT TYPE"	
CURRENT_WINDOWS_LAYOUT == FIXED_TRAIN_DATA_ENTRY			BUTTON_LABEL = "ENTER DATA"	
DRIVER_ACKNOWLEDGEMENT_REQUIRED == TRUE			wait(START_UP_DIALOGUE_SEQUENCE) DELAY = 1 DISPLAY = DRIVER_ACKNOWLEDGEMENT_REQUIRED	

Start Condition	Action	command	New commands	Sample View
DRIVER_ACKNOWLEDGE MENT == TRUE && DISPLAY == DATA_ENTRY    VALIDATION_WINDOW	stop(data_entry_ process    validation_proces s)		DISPLAY = PARENT_WINDOW DELAY = 1 DISPLAY = DRIVER_ACKNO WLEDGEMENT_R EQUIRED	

## 2.18 2.10

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