BANEDANMARK

ORF

Operational Rules for fjernbane

ORF-24-1 valid from 16.06.2024

Changes since previous version

IN.59

Change per 2024-06-16:

Roles
The role description of “Dispatcher” is updated.

The role description of “Person responsible for operational rules” is updated.

Definitions
”Electrical powered unit” is changed to “electrical rolling stock”.

The definition for “Electrical unit stop marker” has a responsibility for the Shunter added.

Banedanmark response services is removed from the definition of “Emergency services”.

"Backwards movement authorisation" is added to the definition of “Authority to move”.

It is added that a permanent shunting area can limit a temporary shunting area or a possession.

The definition of the marker board “Staying on the side of trains and vehicles prohibited” is added.

In the definition for “Front end indication” requirements have been introduced to always use the strongest possible front end indication, as well as a requirement to dim when passing oncoming trains or vehicles and when performing shunting movements.

Procedures
”Electrical powered unit” is changed to “electrical rolling stock”.

The procedure “Operating a bascule bridge” has added a description of how to behave when there is a possession on a bascule bridge.

In the procedures “End possession with handheld terminal” and “End possession without handheld terminal” it’s added that the track is not necessarily free when the possession is ended.

In the procedure “Shunting movement” control tone functionality is removed and verbal control tone is changed to be done every fifth second.

In the procedure “Prepare shunting movement” control tone functionality is removed, and mobile phone is added as a mean of communication.

The procedure “Reporting incident” is updated in wording and the sequence of actions.

The procedures “Handling of TR-mode” and “Awakening with invalid or unknown position” is updated to have the same content as the procedure “Authorised passing of the end of authority”.

Procedure "Supervised driving into a possession or shunting area" is updated to better fit the functionality of the signalling systems. In addition, the rule for resuming driving after coming to an unintentional stop during driving to the area, after changing to SH-mode, has been changed - It is now the Signaller who gives this permission.

In addition, general language updates as well as updates in the use of terms.

Roles

RF.119

Dispatcher

RF.120 DEFINITION

The Dispatcher is responsible for ensuring that railway traffic within the allocated area is disposed of correctly in accordance with current service agreements in the event of deviations from the production plan, and in the event of major irregularities coordinate with Signaller, the O&M coordinator, the Network manager and relevant Railway undertakings.

The Dispatcher is responsible for ensuring that timetables are updated and available in the signaling system at all times.

Change per 2024-06-16:

The Dispatcher is responsible for ensuring that railway traffic within the allocated area is disposed of correctly in accordance with current service agreements in the event of deviations from the production plan, and in the event of major irregularities coordinate with Signaller, the O&M coordinator, the Network manager and relevant Railway undertakings.

The Dispatcher is responsible for ensuring that timetables~~, possessions, temporary~~ ~~shunting~~are ~~areas~~updated and ~~speed reductions are~~ available in the signaling system at all times.

RF.117

Person responsible for operational rules

RF.118

The Person responsible for operational rules has the responsibility of ORF and additional instructions in connection with these. The Person responsible for operational rules has the right to interpret ORF as well as the additional provisions in connection with these.

The Person responsible for operational rules ensures that new or updated rules and derogations for existing rules are processed and approved.

Change per 2024-06-16:

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The Person responsible for operational rules ensures that new or updated rules and derogations for existing rules are processed and ~~submitted to the Danish Civil Aviation and Railway Authority with a request for approval~~approved.

Definitions

OR.DEF.683

DMI symbols and marker boards

OR.DEF.18

FS-mode

OR.DEF.19 DEFINITION

FS-mode (Full Supervision mode) is a fully supervised driving mode offered to the onboard by the signalling system. FS-mode cannot be selected by the Driver.

FS-mode allows movements on a FS MA with the signalling system ensuring that the technical conditions for issuing a movement authority are met.

The train is supervised to the most restrictive speed profile. This takes into account the allowed speed of train consist, line speed, speed restrictions, level crossing restrictions and an end of authority.

The supervision is based on the speed and location of the train to ensure that the train remains within the speed and distance limits.

Responsibilities

OR.DEF.20 Driver

You must control the train within the permitted speed indicated on the DMI as long as the symbol for FS-mode is shown on the DMI.

As long as the text message "Entering FS" is displayed on your DMI you must observe any speed restriction related to the part of your train not yet covered by the FS MA. The speed must not exceed 25 km/h when the message is indicated while driving from a possession or shunting area and 40 km/h when the message is indicated while driving in an interlocked area.

Change per 2024-06-16:

You must control the train within the permitted speed indicated on the DMI as long as the symbol for FS-mode is shown on the DMI.

~~If~~As long as the text message "Entering FS" is displayed on your DMI you must observe any speed restriction related to the part of your train not yet covered by the FS MA. The speed must not exceed 25 km/h when the message is indicated while driving from a possession or shunting area and 40 km/h when the message is indicated while driving in an interlocked area.

OR.DEF.72

Close main circuit breaker

OR.DEF.73 DEFINITION Close main circuit breaker marks the end of a neutral section and will be indicated on the DMI when the front of the train has passed the neutral section.

Responsibilities

OR.DEF.74 Driver You may close the main circuit breaker when the electrical rolling stock has passed the close main circuit breaker marker.

Change per 2024-06-16:

You may close the main circuit breaker when the ~~pantograph(s)~~electrical rolling stock has passed the close main circuit breaker marker.

OR.DEF.75 Driver When the symbol for close main circuit breaker is displayed on the DMI it indicates that the front of the train has passed the neutral section. You may close the main circuit breaker when the electrical rolling stock has passed the neutral section.

The DMI will indicate the symbol in grey if closing the main circuit breaker happens automatically.

Change per 2024-06-16:

When the symbol for close main circuit breaker is displayed on the DMI it indicates that the front of the train has passed the neutral section. You may close the main circuit breaker when the ~~pantograph(s)~~electrical rolling stock has passed the neutral section.-

The DMI will indicate the symbol in grey if closing the main circuit breaker happens automatically.

OR.DEF.43

Raise pantograph

OR.DEF.44 DEFINITION Raise pantograph marks the end of a lowered pantograph area. The pantograph(s) on an electric traction unit can be raised once the electrical rolling stock has passed out of the lowered pantograph area.

Change per 2024-06-16:

Raise pantograph marks the end of a lowered pantograph area. The pantograph(s) on an electric traction unit can be raised once the ~~pantograph(s)~~ electrical rolling stock has passed out of the lowered pantograph area.

Responsibilities

OR.DEF.45 Driver

You may begin raising the pantograph(s) when the electrical rolling stock has passed the raise pantograph marker.

Change per 2024-06-16:

You may begin raising the pantograph(s) when the ~~pantograph(s)~~electrical rolling stock has passed the raise pantograph marker.

OR.DEF.46 Driver

When the symbol for raise pantograph is displayed on the DMI it indicates that the front of the train has passed the lowered pantograph area. You may raise the pantograph(s) when the electrical rolling stock has left the lower pantograph area.

Change per 2024-06-16:

When the symbol for raise pantograph is displayed on the DMI it indicates that the front of the train has passed the lowered pantograph area. You may raise the pantograph(s) when the ~~pantograph(s)~~electrical rolling stock has left the lower pantograph area~~.~~

~~The DMI will indicate the symbol in grey if raising the pantograph(s) happens automatically~~.

OR.DEF.906

Staying on the side of trains and vehicles prohibited

Change per 2024-06-16:

Staying on the side of trains and vehicles prohibited

OR.DEF.907 DEFINITION

Change per 2024-06-16:

The marker "Staying on the side of trains and vehicles prohibited" marks places where it is not permitted to stay on the side of trains or vehicles.

The marker is placed at trackside where objects are within the safety distance for shunting staff.

Responsibilities

OR.DEF.909 Shunter

Change per 2024-06-16:

Before passing the marker, you must ensure that there are no staff on the side of trains or vehicles.

OR.DEF.81

OS-mode

OR.DEF.82 DEFINITION

OS-mode (On Sight mode) is a supervised driving mode offered to the onboard by the signalling system. OS-mode cannot be selected by the Driver.

OS-mode allows movements on an OS MA in situations where a track could be occupied by another train or any kind of obstacle.

The train is supervised to a maximum speed of 40 km/h, speed restrictions and a target distance.

Responsibilities

OR.DEF.83 Driver

You must observe the conditions of on sight as long as the symbol for OS-mode is shown on the DMI.

As long as the text message "Entering OS" is displayed on your DMI, you must observe any speed restrictions below 40 km/h related to the part of your train not yet covered by the OS MA. The speed must not exceed 25 km/h when the message is indicated while driving from a possession or shunting area.

Change per 2024-06-16:

You must observe the conditions of on sight as long as the symbol for OS-mode is shown on the DMI.

~~If~~As long as the text message "Entering OS" is displayed on your DMI, you must observe any speed restrictions below 40 km/h related to the part of your train not yet covered by the OS MA. The speed must not exceed 25 km/h when the message is indicated while driving from a possession or shunting area.

OR.DEF.149

SN-mode

OR.DEF.150 DEFINITION

Running in SN-mode (STM National mode) enables ETCS equipped trains to use the STM to run on lines equipped with train control systems other than ETCS. Trains in SN-mode run in level ATC.

Change per 2024-06-16:

Running in SN-mode (STM National mode) enables ETCS equipped trains to use the STM to run on lines equipped with train control systems other than ETCS. Trains in SN-mode run in level ATC.

~~SN-mode is the standard driving mode for trains operating in level ATC, and is only available in level ATC.~~

Responsibilities

OR.DEF.151 Driver

When the symbol for SN-mode is indicated on your DMI you must check that the mode is appropriate for your location and you must observe operational rules valid for the line concerned.

OR.DEF.593

Electrical unit stop marker

OR.DEF.594 DEFINITION

The electrical unit stop marker is a marker placed in the catenary system or at trackside to indicate to the Driver that from the location of the marker and beyond, the catenary power supply ends.

At locations with multiple directions, and one direction leads into a track without catenary power, the electrical unit stop marker is supplemented with an arrow indicating the direction to which the marker applies.

Responsibilities

OR.DEF.601 Driver

You must as far as possible bring your electrical rolling stock to a standstill before any pantograph passes the electrical unit stop marker.

In case you identify that the pantograph(s) will pass the electrical unit stop marker, you must immediately lower the pantograph(s).

Change per 2024-06-16:

You must as far as possible bring your electrical ~~powered~~rolling ~~unit~~stock to a standstill before any pantograph passes the electrical unit stop marker.

In case you identify that the pantograph(s) will pass the electrical unit stop marker, you must immediately lower the pantograph(s).

OR.DEF.905 Shunter

Change per 2024-06-16:

You must bring electrical rolling stock to a standstill before any pantograph passes the electrical unit stop marker.

In case you identify that the pantograph(s) will pass the electrical unit stop marker, you must immediately lower the pantograph(s).

OR.DEF.36

Lower pantograph

OR.DEF.37 DEFINITION

Lower pantograph marks the beginning of a lowered pantograph area. The pantograph(s) on an electric traction unit must be lowered for the train to safely travel through e.g. because there is a change of traction voltage supply.

These areas are indicated in the Route Book and defined in the signalling system.

The location of the lower pantograph area is indicated by marker boards and for supervised trains, also on the Drivers DMI.

Responsibilities

OR.DEF.38 Driver

When the symbol for begin lowering pantograph is displayed on the DMI you must begin lowering the pantograph(s). The DMI will indicate the symbol in grey if lowering the pantograph(s) happens automatically.

OR.DEF.39 Driver

You must have the pantograph(s) lowered when the electrical rolling stock reaches the lower pantograph marker.

Change per 2024-06-16:

You must have the pantograph(s) lowered when the ~~train~~ electrical rolling stock reaches the lower pantograph marker.

OR.DEF.47

System electrical supply

OR.DEF.48 DEFINITION

System electrical supply describes the power supplied by the overhead wire by indicating the voltage and frequency.

Responsibilities

OR.DEF.49 Driver

You will encounter the system electrical supply marker when leaving a lowered pantograph area.

When your train reaches the system electrical supply marker you must only raise the pantograph(s) if your electrical rolling stock is capable of receiving the indicated power.

Change per 2024-06-16:

You will encounter the system electrical supply marker when leaving a lowered pantograph area.

When your train reaches the system electrical supply marker you must only raise ~~thepantographthe~~ pantograph(s) if your ~~train~~electrical rolling stock is capable of receiving the indicated power.

OR.DEF.695

Infrastructure

OR.DEF.410

Passenger and staff crossings

OR.DEF.411 DEFINITION

Warning systems exist at some staff crossings and passenger crossings, to provide a warning to passengers or staff crossing the track about approaching trains.

Passenger crossings indicates where passengers are permitted to cross the track to get to the opposite platform. For crossings equipped with a warning system, red warning lights and warning sound will warn the passengers about approaching trains. For crossings not equipped with a warning system, signs are placed to remind passenger to look for approaching trains.

Staff crossings are used by railway staff to use. Staff crossings can be provided with yellow flashing lights indicating to the railway staff that a train is approaching.

The warning system is not guaranteed to provide a warning and railway staff needs to be vigilant to approaching trains at all times.

A non activated warning system will be detected by the signalling system and a speed restriction of maximum 40 km/h will automatically be imposed at the crossing. The Driver will be informed via a text message which will be displayed along with the movement authority if a warning system is not activated. The signalling system will inform the O&M coordinator and the Signaller about failures in a warning system.

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A non activated warning system will be detected by the signalling system and a ~~temporary~~ speed restriction of maximum 40 km/h will automatically be imposed at the crossing. The Driver will be informed via a text message which will be displayed along with the movement authority if a warning system is not activated. The signalling system will inform the O&M coordinator and the Signaller about failures in a warning system.

Responsibilities

OR.DEF.412	Driver	When passengers have to cross a passenger crossing to leave your train, or to get to it, you must be vigilant to other trains approaching the crossing and if necessary warn the passengers.
OR.DEF.706	All	You must be vigilant to approaching trains at all times, regardless of the indication of the warning system.

OR.DEF.668

Handheld terminal operated point

OR.DEF.669 DEFINITION

Handheld terminal operated points can mark the entrance to a non interlocked area. The area behind the point is a permanent shunting area.

A handheld terminal operated point is protected by the signalling system in the correct lie to allow for supervised movements in the interlocked area.

The location of handheld terminal operated points is indicated in the Route Book and on the signalling control display.

In order to throw the point using the handheld terminal, the Signaller will establish a temporary shunting area or possession. In case the handheld terminal is not available, a handheld terminal operated point can be thrown by the Signaller, when a temporary shunting area is established. When the point is thrown to allow driving into the permanent shunting area behind the point, the Shunter may authorise a shunting movement into the area without further permission from the Signaller.

Handheld terminal operated points can also be thrown by maintainer using a hand crank after permission from the Signaller.

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Handheld terminal operated points can also be thrown by maintainer using a hand crank after permission from the Signaller.

Responsibilities

OR.DEF.670 Signaller

Before throwing a handheld terminal operated point from the Traffic control centre you must request the person requesting the throw of the point to do a visual inspection of the point to ensure that no rolling stock occupies the point.

Change per 2024-06-16:

Before throwing a handheld terminal operated point from the Traffic control centre you must ~~contact~~request the ~~Shunting~~person ~~area~~requesting ~~manager~~the ~~and~~throw ~~request~~of the point to do a visual inspection of the point to ensure that no rolling stock occupies the point.

OR.DEF.708 Maintainer

You must obtain permission from the responsible Signaller before using a hand crank to throw a handheld terminal operated point.

OR.DEF.709 Signaller

Before you permit a Maintainer to throw a handheld terminal operated point using a hand crank you must ensure that it is safe to do so.

OR.DEF.603

Point position indicators

OR.DEF.604 DEFINITION

Point position indicators are located at all points leading into a track area not equipped with catenary power. If the point position indicator shows a yellow aspect it indicates entry to an area not equipped with catenary power.

Point position indicators are installed at trap points and derailers.

Responsibilities

OR.DEF.605 Driver

When you are controlling electrical rolling stock, and you observe a yellow aspect on a point indicator, you must as far as possible bring your train to a standstill before the electrical unit passes the yellow aspect on a point indicator and inform the Signaller or Shunter.

In case you identify that the train will pass the yellow aspect on a point indicator, you must immediately lower the pantograph(s).

Change per 2024-06-16:

When you are controlling ~~an~~ electrical ~~powered~~rolling ~~unit~~stock, and you observe a yellow aspect on a point indicator, you must as far as possible bring your train to a standstill before the electrical unit passes the yellow aspect on a point indicator and inform the Signaller or Shunter.

In case you identify that the train will pass the yellow aspect on a point indicator, you must immediately lower the pantograph(s).

OR.DEF.647 Shunter

In case you identify that the train will pass the yellow aspect on a point indicator, you must instruct the Driver to immediately lower the pantograph(s).

OR.DEF.686

Driving

OR.DEF.31

Balise read error

OR.DEF.32 DEFINITION

A balise read error occurs when the onboard is not able to use the messages contained in a balise or the balise is not read in the expected location.

A balise read error may trigger a brake intervention, and will automatically report the balise read error to the signalling system.

Responsibilities

OR.DEF.33 Driver

When the text "Balise read error" is displayed on the DMI and the onboard automatically performs a brake intervention, you must contact the Signaller when the train has reached a standstill.

Change per 2024-06-16:

When the text "Balise read error" is displayed on the DMI and the onboard automatically performs a brake intervention, you must contact the Signaller when the train has reached a standstill.

~~If the brake intervention is released before the train has reached a standstill you may proceed on any valid movement authority displayed on the DMI.~~

OR.DEF.382

Unsupervised movements

OR.DEF.383 DEFINITION

Unsupervised movements can be performed by trains in SR- and SH-mode, with isolated onboard or vehicles performing shunting movements inside a possession, permanent shunting area or temporary shunting area.

There is no technical supervision preventing the train from overrunning the end of authority, or a vehicle overrunning the limits of the shunting movement. Furthermore, there is no technical supervision preventing the train or vehicle from exceeding temporary speed restrictions.

Change per 2024-06-16:

Unsupervised movements can be performed by trains in SR-~~,~~and SH-mode, ~~and~~with ~~IS-mode~~isolated onboard or vehicles performing shunting movements inside a possession, permanent shunting area or temporary shunting area.

There is no technical supervision preventing the train from overrunning the end of authority, or a vehicle overrunning the limits of the shunting movement. Furthermore, there is no technical supervision preventing the train or vehicle from exceeding temporary speed restrictions.

Responsibilities

OR.DEF.384 Driver

You are responsible for ensuring that your train or vehicle does not enter into an area where you are not authorised.

OR.DEF.385 Driver

You are responsible for ensuring that your train or vehicle does not exceed the maximum permitted speed.

OR.DEF.693

Emergency/incident

OR.DEF.475

Emergency services

OR.DEF.476 DEFINITION

Emergency services are a collective term for the emergency response services including Police, Fire Fighting and Ambulance services.

Change per 2024-06-16:

Emergency services are a collective term for the emergency response services including Police, Fire Fighting and Ambulance services~~ as well as Banedanmark response services~~.

OR.DEF.687

Preparing a mission

OR.DEF.860

G-brake

OR.DEF.861 DEFINITION

Trains which are braked only by the G-brake, or a combination of the P-brake and G-brake where the G-brake weight is more than 10 % of the total brake weight of the train, are defined as G-braked.

For trains where the G-brake weight is more than 10 % of the train's total brake weight, all wagons and traction units are as far as possible set to G-brake.

The brake on working traction units are set to G-brake if the train length is more than 600 metres and/or the train weight is more than 800 tonnes.

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The brake on working traction units are set to G-brake if the train length is more than 600 metres and/or the ~~hauled~~train weight is more than 800 tonnes.

Responsibilities

OR.DEF.863 Driver

You must ensure that the all wagons and traction units are as far as possible set to G-brake when the G-brake weight is more than 10 % of the total brake weight of the train.

OR.DEF.864 Driver

You must ensure that the brake of working traction units are set to G-brake when the train length is more than 600 metres and/or the train weight is more than 800 tonnes.

Change per 2024-06-16:

You must ensure that the brake of working traction units are set to G-brake when the train length is more than 600 metres and/or the ~~hauled~~train weight is more than 800 tonnes.

OR.DEF.635

Front end indication

OR.DEF.636 DEFINITION

The front end of a train or vehicle is indicated with three white lights in an isosceles triangle. The front end indication are always lit and must be displayed with the strongest possible light when the train is being driven from that end.

For trains and vehicles without three working headlights, the front end of the train or vehicle can be indicated by two white lights.

For propelling locomotives the front end indication can be indicated on the rear end of the locomotive.

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For propelling locomotives the front end indication can be indicated on the rear end of the locomotive.

Responsibilities

OR.DEF.637 Driver

You must ensure that correct front end indication of your train or vehicle is always applied during any movements.

When passing oncoming trains or vehicles and when performing shunting movements, you must ensure that the front end indication is dimmed.

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When passing oncoming trains or vehicles and when performing shunting movements, you must ensure that the front end indication is dimmed.

OR.DEF.873 Driver

If the front end indication of the train fails during a mission, such that a minimum of two white lights cannot be shown, you must inform the Signaller and ensure that the speed of the train does not exceed 40 km/h.

OR.DEF.113

Safe and fit for service

OR.DEF.114 DEFINITION

Safe and fit for service determines if the rolling stock is qualified to be included in a train performing supervised movements.

Safe and fit for service centres around two states:

1. Safe - the rolling stock does not pose a threat to other trains and/or the infrastructure
2. Fit - the rolling stock is able to comply with the planned mission.

The minimum requirements for a train to classify as safe and fit for service are:

Safe:
- conditions for specific rolling stock use permit are met. This includes checking that the following is functioning:
a) onboard
b) front end indication
c) rear end indication
d) audible warning device (checked according to internal Railway Undertaking procedures)
- freight cargo securely loaded (if applicable)
- brakes tested and in working order
- all units in the train are connected to the continuous braking system
- the brake percentage of the train is at least 50 (exempting snow ploughs)
- the front and rear units have automatic brakes (exempting snow ploughs).

Fit:
- tunnel checks performed (if applicable)
- brake performance is compatible with the scheduled mission
- trained personnel needed for the scheduled mission is available
- train consist is compatible with the scheduled mission
- train speed compatible with the scheduled mission
- train length compatible with the scheduled mission.

In order to be safe and fit for service a train must fulfill both the requirements of ORF as well as any other requirements resulting from other sets of rules that may apply to the scheduled journey of the train.

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- trained personnel needed for the scheduled mission is available
- train consist is compatible with the scheduled mission
- train speed compatible with the scheduled mission
- train length compatible with the scheduled mission.

~~Documentation available in the lead cab:~~
~~- ORF~~
~~- route book~~
~~- book of forms~~
~~- timetable.~~

In order to be safe and fit for service a train must fulfill both the requirements of ORF as well as any other requirements resulting from other sets of rules that may apply to the scheduled journey of the train.

OR.DEF.173

Onboard train data

OR.DEF.174 DEFINITION

Onboard train data is information stored in the onboard to describe the characteristics of a train.

Onboard train data is:

- ETCS operational train category
- train length
- traction and deceleration data
- maximum train speed
- loading gauge
- axle load/meter weight
- power supply accepted by the train
- train fitted with airtight system
- additional data for the available STMs
- number of axles.

All supervised trains are controlled by the interaction between assigned movement authorities from the signalling system and the stored onboard train data and the safety of the system is dependant of the data being correct.

Some train data can be fixed by rolling stock specific configuration. Fixed data are not available for the Driver to edit.

Other train data is entered by the Driver and can be available as predefined values. For these data entries, the Driver only needs to acknowledge the data, or modify the data by entering or selecting the correct value.

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Other train data is entered by the Driver and can be available as predefined values. For these data entries, the Driver only needs to acknowledge the data, or modify the data by entering or selecting the correct value.

Responsibilities

OR.DEF.175 Driver

You must ensure that the onboard train data is updated to be consistent with the train whenever the consist or performance of the train changes. If the train has a movement authority indicated in the DMI, you must close the desk and perform a new start of mission before updating the train data.

OR.DEF.688

Shunting

OR.DEF.465

Safe for shunting movement

OR.DEF.466 DEFINITION

Safe for shunting movement means that the traction unit and/or wagons are in a safe condition to perform an unsupervised movement.

Preparation of the traction units testing that the following works:

- brakes
- radio- or mobile telephone connection between the Driver and Shunter
- audible warning device (checked according to internal Railway Undertaking procedures).

Preparation of wagons means that the movement can be performed without causing damage to infrastructure or rolling stock.

Change per 2024-06-16:

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Preparation of the traction units testing that the following works:

- brakes
- radio~~-connection (including-~~ ~~control~~or ~~tone,~~mobile ~~if~~ telephone ~~relevant)~~connection between the Driver and Shunter
- audible warning device (checked according to internal Railway Undertaking procedures).

Preparation of wagons means that the movement can be performed without causing damage to infrastructure or rolling stock.

OR.DEF.160

Temporary shunting area

OR.DEF.161 DEFINITION

A temporary shunting area is an interlocked area temporarily set up to allow shunting operations. A temporary shunting area is always under the responsibility of a Shunting area manager.

A temporary shunting area is established to ensure that all track leading out of the area is limited by facing ETCS stop markers, unless points can be blocked to prevent movement out of the area.

A temporary shunting area can be limited by a buffer stop not fitted with an ETCS stop marker or by a permanent shunting area.

The time period allowed for the temporary shunting area is agreed between the Signaller and Shunting area manager before the temporary shunting area is established.

In locations, where shunting in temporary shunting areas often occurs, the most commonly used areas may be defined in the location specific descriptions by a name or number.

Points in the temporary shunting area are released for the Shunting area manager to control via the handheld terminal, if not locked for safety reasons. If the handheld terminal is not available, the Shunting area manager requests the Signaller to throw the points inside the area.

Change per 2024-06-16:

A temporary shunting area is an interlocked area temporarily set up to allow shunting operations. A temporary shunting area is always under the responsibility of a Shunting area manager.

A temporary shunting area is established to ensure that all track leading out of the area is limited by facing ETCS stop markers, unless points can be blocked to prevent movement out of the area.

A temporary shunting area can be limited by a buffer stop not fitted with an ETCS stop marker or by a permanent shunting area.

The time period allowed for the temporary shunting area is agreed between the Signaller and Shunting area manager before the temporary shunting area is established.

In locations, where shunting in temporary shunting areas often occurs, the most commonly used areas may be defined in the location specific descriptions by a name or number.

Points in the temporary shunting area are released for the Shunting area manager to control via the handheld terminal, if not locked for safety reasons. If the handheld terminal is not available, the Shunting area manager requests the Signaller to throw the points inside the area.

Responsibilities

OR.DEF.164	Signaller	You must agree the boundaries and timing of the temporary shunting area with the Shunting area manager. All movements in and out of the temporary shunting area must be coordinated between you and the Shunting area manager.
OR.DEF.166	Shunting area manager	You must agree the boundaries and timing of the temporary shunting area with the Signaller. When the temporary shunting area is established you are in charge of that particular area of infrastructure. All movements in and out of the temporary shunting area must be coordinated between you and the Signaller.
OR.DEF.167	Shunting area manager	You must regulate shunting movements within the temporary shunting area to be conducted safely.

OR.DEF.87

Permanent shunting area

OR.DEF.88 DEFINITION

A permanent shunting area is a non-interlocked area which is bounded by an ETCS stop marker at the exit. No ETCS stop markers are located within a permanent shunting area.

At the exit from the permanent shunting area, there are balises placed to ensure update of a valid position. A further balise may be installed which will protect against an active desk exiting the permanent shunting area without authority unless a movable element at the exit already provides this protection.

Location specific descriptions may contains special provisions and regulations applying to the movement of trains and vehicles in a permanent shunting area. When a permanent shunting area has a Shunting area manager assigned, information about this can be found in the location specific descriptions.

Movements performed inside a permanent shunting area are the responsibility of the Shunter. Several movements can take place in the area at the same time.

An area behind a handheld terminal operated point is a permanent shunting area, but this area are not normally equipped with ETCS stop markers at the exit of the area.

Change per 2024-06-16:

A permanent shunting area is a non-interlocked area which is bounded by an ETCS stop marker at the exit. No ETCS stop markers are located within a permanent shunting area.

At the exit from the permanent shunting area, there are balises placed to ensure update of a valid position. A further balise may be installed which will protect against an active desk exiting the permanent shunting area without authority unless a movable element at the exit already provides this protection.

Location specific descriptions may contains special provisions and regulations applying to the movement of trains and vehicles in a permanent shunting ~~areas~~area. ~~If~~ When ~~for~~a ~~an~~permanent ~~area~~shunting ~~there~~area ~~is~~has a Shunting area manager assigned, information about this can be found in the location specific descriptions.

Movements performed inside a permanent shunting area are the responsibility of the Shunter. Several movements can take place in the area at the same time.

An area behind a handheld terminal operated point is a permanent shunting area, but this area are not normally equipped with ETCS stop markers at the exit of the area.

Responsibilities

OR.DEF.89 Signaller

For areas where there is a local Shunting area manager present, you must coordinate all movements in and out of the permanent shunting area with the Shunting area manager.

OR.DEF.90 Shunting area manager

All movements in and out of the permanent shunting area must be coordinated between you and the Signaller.

You must regulate shunting movements within the permanent shunting area to be conducted safely.

OR.DEF.847 Shunter

In permanent shunting areas you must be aware of other movements.

In permanent shunting areas where no Shunting area manager is available, you must coordinate movements out of the permanent shunting area with the Signaller.

OR.DEF.689

Signalling System

OR.DEF.14

End of authority

OR.DEF.15 DEFINITION

The end of authority (EOA) is the location to which a train running on a movement authority will be supervised to a standstill, or the location to which a train running on an Operational Instruction is authorised to proceed.

The end of authority is indicated to the Driver on the DMI. The end of authority is only indicated on Operational Instructions when it is not the next ETCS stop marker.

For supervised trains, the signalling system will supervise the train to a standstill at the end of authority. If the Driver fails to react to an intervention warning the onboard will automatically command a brake intervention. When a movement authority is extended the end of authority is updated according to the new information.

For unsupervised trains, the Driver is responsible to bring the train to a standstill at the end of authority indicated on of the Operational Instruction form unless a movement authority is displayed on the DMI which allows the continued driving passed the end of authority.

Change per 2024-06-16:

The end of authority (EOA) is the location to which a train running on a movement authority will be supervised to a standstill, or the location to which a train running on an Operational Instruction is authorised to proceed.-

The end of authority is indicated to the Driver on the DMI. The end of authority is only indicated on Operational Instructions when it is not the next ETCS stop marker.

For supervised trains, the signalling system will supervise the train to a standstill at the end of authority. If the Driver fails to react to an intervention warning the onboard will automatically command a brake intervention. When a movement authority is extended the end of authority is updated according to the new information.

For unsupervised trains, the Driver is responsible to bring the train to a standstill at the end of authority indicated on of the Operational Instruction form unless a movement authority is displayed on the DMI which allows the continued driving passed the end of authority.

Responsibilities

OR.DEF.16 Driver

You must control the train to a standstill at the end of authority.

You must never pass the end of authority, unless instructed to do so by the Signaller on Operational Instruction 1 or 7.

When approaching the end of authority at an ETCS stop marker, you must control your train to a standstill at a distance from where the identity of the ETCS stop marker can be clearly read.

OR.DEF.17 Driver

When approaching the end of authority at a buffer stop you must control your train to a standstill at a safe distance to the ETCS stop marker fitted on the buffer stop.

OR.DEF.698

Possession

OR.DEF.620

Track crossing

OR.DEF.621 DEFINITION

A track crossing is an arrangement used to transport materials or machinery over the tracks to get to and from a worksite.

Change per 2024-06-16:

A track crossing is ~~a temporary~~an arrangement used to transport materials or machinery over the tracks to get to and from a worksite.

Responsibilities

OR.DEF.622 PICOSS Before transporting materials or machinery across a temporary track crossing you must contact the Signaller for approval in every single case, unless other instructions have been given by the Person responsible for traffic operation.

OR.DEF.623 Signaller Before authorising the passage of a track crossing with materials or machinery you must ensure that no train or vehicle will approach the track crossing until the PICOSS has reported that the track is cleared.

OR.DEF.333

Possession

OR.DEF.334 DEFINITION A possession is when a section of track is taken out of normal operation for e.g. fault correction or maintenance. The section of track under possession is under the authority of a PICOP, and all movements within the possession are controlled by the PICOP as shunting with the PICOP acting as Shunting area manager.

A possession is established to ensure that all track leading out of the possession is limited by facing ETCS stop markers, unless points can be blocked to prevent movement out of the possession.

A possession can be limited by a buffer stop not fitted with an ETCS stop marker or by a permanent shunting area.

Possessions in transition areas are established between the system border and an ETCS stop marker.

A possession may contain one or more worksites.

All possessions are as far as possible ended at the agreed time. In case a possession cannot be ended at the agreed time, the PICOP informs the Signaller.

Points in the possession are released for the PICOP to control via the handheld terminal, unless they are prevented from throwing for safety reasons. If the handheld terminal is not available, the PICOP requests the Signaller to throw the points inside the possession.

Change per 2024-06-16:

A possession is when a section of track is taken out of normal operation for e.g. fault correction or maintenance. The section of track under possession is under the authority of a PICOP, and all movements within the possession are controlled by the PICOP as shunting with the PICOP acting as Shunting area manager.

A possession is established to ensure that all track leading out of the possession is limited by facing ETCS stop markers, unless points can be blocked to prevent movement out of the possession.

A possession can be limited by a buffer stop not fitted with an ETCS stop marker or by a permanent shunting area.

Possessions in transition areas are established between the system border and an ETCS stop marker.

A possession may contain one or more worksites.

All possessions are as far as possible ended at the agreed time. In case a possession cannot be ended at the agreed time, the PICOP informs the Signaller.

Points in the possession are released for the PICOP to control via the handheld terminal, unless they are prevented from throwing for safety reasons. If the handheld terminal is not available, the PICOP requests the Signaller to throw the points inside the possession.

Responsibilities

OR.DEF.335	Signaller	You must coordinate all movements going in to or out of the possession with the PICOP.
OR.DEF.336	PICOP	You are responsible for the safe regulation of all shunting movements, for communication with other participants and for the safety of work taking place in your area of control.
OR.DEF.337	PICOP	You must coordinate all movements going in to or out of the possession with the Signaller.
OR.DEF.661	PICOP	In case your possession cannot be ended at the agreed time, you must inform the Signaller about the expected delay as soon possible.

OR.DEF.690

Terms

OR.DEF.349

Route Book

OR.DEF.350	DEFINITION	A description of the railway lines and the associated trackside equipment for the operated lines which have relevance to the driving task.

Change per 2024-06-16:

A description of the railway lines and the associated trackside equipment for the operated lines which have relevance to the driving task.-

~~The Route Book is issued and managed by the Railway Undertaking based on information provided by Banedanmark.~~

OR.DEF.583

Authority to move

OR.DEF.584 DEFINITION

An authority to move is a collective term used for the permission given to a Driver to move a train or vehicle.

An authority to move can be given by:

- movement authority on the DMI
- Operational Instruction 1, 2 or 7 from the Signaller to the Driver
- the form "Backwards movement authorisation" from the Signaller to the Driver
- shunting instructions from the Shunter to the Driver.

Change per 2024-06-16:

An authority to move is a collective term used for the permission given to a Driver to move a train or vehicle.

An authority to move can be given by:

- movement authority on the DMI
- Operational Instruction 1, 2 or 7 from the Signaller to the Driver
- the form "Backwards movement authorisation" from the Signaller to the Driver
- shunting instructions from the Shunter to the Driver.

Responsibilities

OR.DEF.585 Driver

You may only begin procedures to move your train or vehicle when an authority to move has been received.

OR.DEF.691

Train Radio

OR.DEF.245

Deleted

Change per 2024-06-16:

~~Train radio self test~~Deleted

OR.DEF.246 DEFINITION Deleted

Change per 2024-06-16:

~~When the train radio is switched on, the train radio will start a self test, this will test the parts of the train radio functionality required to establish communication.~~

~~A failed train radio self test will be displayed on the train radio.~~Deleted

Responsibilities

OR.DEF.247 Driver Deleted

Change per 2024-06-16:

~~If the train radio displays “Self test failed”, you must not consider the train safe and fit for service.~~Deleted

OR.DEF.692

Tunnels

OR.DEF.538

Tunnel distance

OR.DEF.539 DEFINITION Tunnel distance is a restriction applied by the signalling system or the Signaller to ensure correct separation of trains in the tunnel when required. The tunnel separation requirements are described in the location specific descriptions.

Change per 2024-06-16:

Tunnel distance is a restriction applied by the signalling system or the Signaller to ensure correct separation of trains in the tunnel when required. The tunnel separation requirements are described in the ~~locations~~location specific descriptions.

Procedures

1947

Normal operation

2014

Awakening with invalid or unknown position

2015 Precondition The Driver has pressed the Start button. The position stored by the onboard cannot be validated by the signalling system.

2016 Purpose To authorise the Driver to begin a mission using SR-mode on an Operational Instruction 7.

PROCEDURE

2017 Driver, Signaller

When the position stored by the onboard cannot be validated by the signalling system it is not possible to issue an FS MA or OS MA to the train. A press of the start button will cause the signalling system to automatically offer the Driver to acknowledge a change to SR-mode.

The Signaller is informed via the signalling control display about train's whose position cannot be validated by the signalling system.

The position status of the train is checked when the train passes over a balise and receives a position update from the signalling system.

3710 Driver

If the symbol "Acknowledge SR-mode" is indicated on the DMI after pressing the start button, the Driver must inform the Signaller.

2018 Signaller

When the Driver informs that a movement authority was not provided to the train after pressing the start button, the Signaller must in co-operation the Driver establish the location of the train.

2021 Signaller

When the correct location of the train has been established the Signaller must ensure that:

1. Allocate the correct train running number to the indication of the train on the signalling control display
2. Moveable elements where authority to move on Operational Instruction 7 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements where authority to move on Operational Instruction 7 will be valid are safe to pass according to the procedure Infrastructure fault -Handling of an undetected point that is not trailed, Infrastructure fault - Handling of a trailed point or location specific description
3. The track section where authority to move on Operational Instruction 7 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area
4. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 7 will be valid
5. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 7 will be valid, unless the Operational Instruction 7 will apply to an occupied track section, a buffer stop, a possession or a shunting area
6. Instruct the Driver to complete an Operational Instruction 7.

Change per 2024-06-16:

When the correct location of the train has been established the Signaller must ensure that:

1. Allocate the correct train running number to the indication of the train on the signalling control display
2. Moveable elements ~~in the track section~~ where authority to move on Operational Instruction 7 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements ~~in the track section~~ where authority to move on Operational Instruction 7 will be valid are safe to pass according to the procedure [Infrastructure fault --Handling of an undetected point that is not trailed], [Infrastructure fault - Handling of a trailed point] or location specific description
3. The track section where authority to move on Operational Instruction 7 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area
4. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 7 will be valid
5. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 7 will be valid, unless the Operational Instruction 7 will apply to an occupied track section, a buffer stop, a possession or a shunting area
6. Instruct the Driver to complete an Operational Instruction 7.

3902 Signaller

Change per 2024-06-16:

The Signaller must assess if any of the following restrictions apply to the continued driving of the train on Operational Instruction 7:

- unusual transport restrictions,
- electrical rolling stock,
- restrictions specified in location specific descriptions.

3903 Signaller

Change per 2024-06-16:

If a level crossing is located between the train and the end of authority of the Operational Instruction 7, the Signaller must apply the procedure [Degraded operation - Passing a level crossing without a movement authority].

3904 Signaller

Change per 2024-06-16:

If the Signaller requires the train to enter an occupied track and it is not according to the production plan, the Signaller must inform the Driver (if relevant) of the occupying train that another train is to approach.

3905 Signaller

Change per 2024-06-16:

If the Signaller wants to authorise the train into a possession or shunting area, the Signaller must first contact the PICOP or Shunting area manager (if relevant) and request permission for the movement.

3906 Signaller

Change per 2024-06-16:

When the continued driving of the train is protected, the Signaller must instruct the Driver to complete an Operational Instruction 7. The Operational Instruction 7 must include (as required):

- any speed restriction below 40 km/h
- information about any occupied track
- information about any level crossing not protected
- stopping location if it is not the next ETCS stop marker
- information about possessions or shunting areas.

3907 Signaller

Change per 2024-06-16:

The Signaller must ensure that the continued driving of the train remains
protected until one of the following conditions is fulfilled:

- the train has reached the end of authority of Operational Instruction 7
and has changed into supervised driving
- the Operational Instruction is revoked by an Operational Instruction 3
- the Driver reporting that the train is at a standstill at the end of authority of Operational Instruction 7 without a movement authority.

3908 Driver

Change per 2024-06-16:

When the Operational Instruction 7 is completed, the Driver must check the location of the end of authority of the Operational Instruction 7 either by using the Route Book or by local area knowledge.

The Driver is then authorised to press override to enter SR-mode and proceed to the next ETCS stop marker, or the location instructed, using the information contained in the Operational Instruction 7.

If the movement ends in a possession or shunting area, the Driver may only start the movement according to Operational Instruction 7 when the movement inside the area has been agreed with the PICOP or Shunting area manager. The Driver must immediately after entering the area make sure that the onboard changes to SH-mode.

3909 Driver

Change per 2024-06-16:

If Operational Instruction 7 contains additional information of a level crossing not protected, the Driver must stop in front of the level crossing and proceed on sight, however with a maximum of 10 km/h, while using sound signal "Warning", until the lead cab has passed the level crossing.

The Driver may omit the use of sound signal "Warning", when staff present at the level crossing is applying the hand signal "road traffic, stop".

2023 Driver

Deleted

Change per 2024-06-16:

~~The Driver must complete the Operational Instruction 7 according to the Signaller's instructions. The Driver is then permitted to acknowledge SR-mode and perform the movement as instructed.~~ Deleted

2026 Driver

If the train reaches the nex ETCS stop marker, or the location specified on the Operational Instruction, and no movement authority is received, the Driver must press the Start button to request a movement authority.

Change per 2024-06-16:

~~When the train reaches the next ETCS stop marker, or the location specified on the Operational Instruction, and a movement authority is received, the Driver may continue according to the indications in the DMI.~~

If the train reaches the nex ETCS stop marker, or the location specified on the Operational Instruction, and no movement authority is received, the Driver must press the Start button to request a movement authority.

3787 Signaller

If the train has reached the next ETCS stop marker or the location specified on the Operational Instruction, and it is still not possible to issue a movement authority to the train, the Signaller must apply the procedure Degraded operation - Authorised passing of the end of authority.

2061

Deleted

Change per 2024-06-16:

~~Resume driving after stopping short of scheduled stopping location~~ Deleted

2062 Precondition

Deleted

Change per 2024-06-16:

~~The Driver has stopped the train short of the scheduled stopping location.~~Deleted

2063 Purpose

Deleted

Change per 2024-06-16:

~~To enable the Driver to move the train from the actual stopping location to the scheduled stopping location.~~Deleted

PROCEDURE

3082 Railway Undertaking

Deleted

Change per 2024-06-16:

~~The Railway Undertaking must have procedures to ensure safe departure from unusual stopping locations.~~Deleted

2065 Driver — Deleted

Change per 2024-06-16:

~~If the Driver has stopped the train short of the scheduled stopping location at a platform the Driver may resume driving according to Railway Undertaking procedures and move the train to the scheduled stopping location along the platform.~~Deleted

2066 Driver — Deleted

Change per 2024-06-16:

~~If the Driver has stopped the train short of the scheduled stopping location not at a platform, the Driver is permitted to move the train to a position from where the end of authority can be clearly identified.~~Deleted

2067 Driver — Deleted

Change per 2024-06-16:

~~Before the Driver resumes driving, the Driver must confirm that a valid movement authority is available as well as ensuring that any additional Railway Undertaking procedures have been followed.~~ Deleted

2068 Driver — Deleted

Change per 2024-06-16:

~~If no movement authority is available, the Driver must initiate the procedure [Normal operation - Train departure].~~Deleted

3292

Handling of TR-mode

3293 Precondition — A train has entered TR-mode and the emergency brake is applied.

3294 Purpose — Resume driving after entering TR-mode.

PROCEDURE

3295	Driver, Signaller		When a train exceeds the authority supervised by the onboard, or an unsafe condition arises either in the signalling system or detected by the onboard, or an emergency stop is issued from the signaller the onboard will enter TR-mode. When the onboard enters TR-mode, the emergency brakes will be applied bringing the train to a standstill. When the train is at a standstill the onboard automatically changes into acknowledge TR-mode. Trains entering into TR-mode are indicated to the Signaller on the signalling control display.
3296	Signaller		When a train has entered TR-mode due to exceeding its authority and poses a danger to other movement in the area, the Signaller must apply the procedure Emergency - Stop trains and vehicles from entering hazardous area.
3297	Driver		When the train enters TR-mode, the Driver may acknowledge TR-mode once the train is at a standstill.
3298	Driver, Signaller		When the Driver acknowledges TR-mode the onboard changes from TR-mode to PT-mode and the symbol indicating PT-mode is displayed on the DMI. Once in PT-mode, the emergency brake is released enabling the Driver to continue once a new movement authority is received.
3299	Driver		When the Driver has acknowledged TR-mode the Driver must determine the reason for the entry into TR-mode and inform the Signaller. If the entry into TR-mode is caused by an onboard failure the Driver must apply the procedure Train failure - Train and/or onboard failure during a mission. If the train is required to be moved the Driver must request the Signaller for permission to proceed.
3300	Signaller		When the Signaller is informed of an entry into TR-mode, the Signaller must determine if the train has entered TR-mode as a result of exceeding its own authority or if it is caused by another reason. If the train has exceeded its own authority, the Signaller must apply the procedure Incidents - Reporting incident. If the train has been stopped because an emergency stop was sent, the Signaller must only allow the train to continue driving when it has been verified that it is safe to do so. If the train must continue driving, the Signaller must request the Driver to press the Start button.
3586	Driver		When requested by the Signaller, the Driver must press the Start button to request a movement authority from the signalling system. The Driver must report to the Signaller if a movement authority is received.
3302	Signaller		If the train enters TR-mode entering or exiting a possession, temporary or permanent shunting area the Signaller must obtain further information from the Shunter or PICOP before permitting the train to be moved.

3587	Signaller	If the Driver reports that a movement authority is received, the Signaller may allow the Driver to continue driving according to the movement authority. If the Driver reports that no movement authority is received, the Signaller must ensure that: 1. Moveable elements where authority to move on Operational Instruction 2 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements where authority to move on Operational Instruction 2 will be valid are safe to pass according to the procedure Infrastructure fault -Handling of an undetected point that is not trailed, Infrastructure fault - Handling of a trailed point or location specific description 2. The track section where authority to move on Operational Instruction 2 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area 3. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 2 will be valid 4. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 2 will be valid, unless the Operational Instruction 7 will apply to an occupied track section, a buffer stop, a possession or a shunting area 5. Instruct the Driver to complete an Operational Instruction 2.

Change per 2024-06-16:

If the Driver reports that a movement authority is received, the Signaller may allow the Driver to continue driving according to the movement authority.

If the Driver reports that no movement authority is received, the Signaller must ensure that:

1. Moveable elements ~~in the track section~~ where authority to move on Operational Instruction 2 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements ~~in the track section~~ where authority to move on Operational Instruction 2 will be valid are safe to pass according to the procedure [Infrastructure fault --Handling of an undetected point that is not trailed], [Infrastructure fault - Handling of a trailed point] or location specific description]
2. The track section where authority to move on Operational Instruction 2 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area
3. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 2 will be valid
4. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 2 will be valid, unless the Operational Instruction 7 will apply to an occupied track section, a buffer stop, a possession or a shunting area
5. Instruct the Driver to complete an Operational Instruction 2.

3895 Signaller

Change per 2024-06-16:

The Signaller must assess if any of the following restrictions apply to the continued driving of the train on Operational Instruction 2:

- unusual transport restrictions,
- electrical rolling stock,
- restrictions specified in location specific descriptions.

3896 Signaller

Change per 2024-06-16:

If a level crossing is located between the train and the end of authority of the Operational Instruction 2, the Signaller must apply the procedure [Degraded operation - Passing a level crossing without a movement authority].

3897 Signaller

Change per 2024-06-16:

If the Signaller requires the train to enter an occupied track and it is not according to the production plan, the Signaller must inform the Driver (if relevant) of the occupying train that another train is to approach.

3898 Signaller

Change per 2024-06-16:

When the continued driving of the train is protected, the Signaller must instruct the Driver to complete an Operational Instruction 2. The Operational Instruction 2 must include (as required):

- any speed restriction below 40 km/h
- information about any occupied track
- information about any level crossing not protected
- stopping location if it is not the next ETCS stop marker
- information about possessions or shunting areas.

3899 Signaller

Change per 2024-06-16:

The Signaller must ensure that the continued driving of the train remains
protected until one of the following conditions is fulfilled:

- the train has reached the end of authority of Operational Instruction 2
and has changed into supervised driving
- the Operational Instruction is revoked by an Operational Instruction 3
- the Driver reporting that the train is at a standstill at the end of authority of Operational Instruction 2 without a movement authority.

3900 Driver

Change per 2024-06-16:

When the Operational Instruction 2 is completed, the Driver must check the location of the end of authority of the Operational Instruction 2 either by using the Route Book or by local area knowledge.

The Driver is then authorised to press override to enter SR-mode and proceed to the next ETCS stop marker, or the location instructed, using the information contained in the Operational Instruction 2.

If the movement ends in a possession or shunting area, the Driver may only start the movement according to Operational Instruction 2 when the movement inside the area has been agreed with the PICOP or Shunting area manager. The Driver must immediately after entering the area make sure that the onboard changes to SH-mode.

3901 Driver

Change per 2024-06-16:

If Operational Instruction 2 contains additional information of a level crossing not protected, the Driver must stop in front of the level crossing and proceed on sight, however with a maximum of 10 km/h, while using sound signal "Warning", until the lead cab has passed the level crossing.

The Driver may omit the use of sound signal "Warning", when staff present at the level crossing is applying the hand signal "road traffic, stop".

3301 Driver Deleted

Change per 2024-06-16:

~~The Driver must complete the Operational Instruction 2 form as instructed by the Signaller.~~

~~When the Operational Instruction 2 is completed, the Driver may acknowledge SR-mode and proceed according to information contained in Operational Instruction 2.~~Deleted

3303 Signaller If no further movements are required the Signaller must instruct the Driver to close the driving desk by means of Operational Instruction 2 using the additional instructions section.

3224

Parking in an interlocked area

3225 Precondition A need for an unplanned parking in an interlocked area has occurred.

3226 Purpose

To ensure the parking does not affect the production plan and this is updated with the changes.

PROCEDURE

3227 Railway Undertaking

The Railway Undertaking must have procedures describing how the Driver can perform a safe parking of rolling stock in an interlocked area. This includes correct application of parking brakes for the concerned rolling stock to prevent any unintentional movement.

3228 Driver

The Driver must request the Signaller for permission to park rolling stock.

The request must contain:

- length of the rolling stock
- track number
- expected parking duration
- reason for parking.

3230 Signaller

The Signaller must assess the request and decide if the parking can be approved.

If the request can be approved, the Signaller must ensure that the changes is updated in the production plan or it is noted in the Signaller log.

The Signaller then inform the Driver if the train can be parked and potentially issue a movement authority, to the track where parking have to take place.

Change per 2024-06-16:

The Signaller must assess the request and decide if the parking can be approved.

If the request can be approved, the Signaller must ensure that the changes is updated in the production plan or it is noted in the Signaller log.

The Signaller then inform the Driver if the train can be parked and potentially issue a movement authority, to the track where parking have to take place.

3231 Signaller

If the request cannot be approved, the Signaller must inform the Driver and agree on an alternative.

3232 Driver

When the train has arrived at the agreed parking track, the Driver must secure the parked rolling stock against any unintended movements according to Railway Undertaking procedures.

3364

Supervised driving into a possession or shunting area

3365 Precondition

A supervised train has to enter a possession or shunting area.

3366 Purpose

Ensure that the Shunting area manager has accepted the train before it is routed into the possession or shunting area.

PROCEDURE

3367 Signaller, Shunting area manager

When route setting into a possession or shunting area is requested, a request to accept or reject the train is sent to the handheld terminal of the Shunting area manager. The train will not receive a movement authority into the area before the Shunting area manager has accepted the request on the handheld terminal.

If no handheld terminal is associated with the possession or shunting area a request to accept the train into the area may be indicated to the Signaller on the signalling control display.

Change per 2024-06-16:

When ~~a~~ route ~~is requested~~setting into a possession or shunting area is requested, a request to accept or reject the train is sent to the handheld terminal of the Shunting area manager. The train will not receive a movement authority into the area before the ~~route~~ Shunting ~~is~~area ~~set~~manager has accepted the request on the handheld terminal.

If no handheld terminal is associated with the possession or shunting area a request to ~~confirm that~~accept the train ~~can enter~~ into the area ~~is~~may be indicated to the Signaller on the signalling control display.

3368 Shunting area manager

When the Shunting area manager is requested on the handheld terminal, or by the Signaller, to accept a train into the possession or shunting area, the Shunting area manager must only accept the train when it is safe to do so.

Prior to accepting the train into the possession or shunting area, the Shunting area manager must ensure that the Driver is instructed about the shunting movements to be performed inside the area. The Shunting area manager must ensure that the Driver is informed about any special restrictions or precautions which apply to shunting movements in the area.

Change per 2024-06-16:

When the ~~handheld~~Shunting ~~terminal~~area ~~indicates~~manager ~~that~~is ~~a~~requested ~~train~~on ~~is~~the ~~to~~handheld ~~approach~~terminal, or ~~the Signaller contacts~~by the ~~Shunting area manager with a request~~ Signaller, to ~~confirm that~~accept ~~the~~a train ~~can be permitted to enter~~ into the possession or shunting area, the Shunting area manager must only accept the train when it is safe to do so.

Prior to accepting the train into the possession or shunting area, the Shunting area manager must ensure that the Driver is instructed about the shunting movements to be performed inside the area. The Shunting area manager must ensure that the Driver is informed about any special restrictions or precautions which apply to shunting movements in the area.

3369 Signaller

If a request to accept or reject a train into a possession or shunting area, managed by a Shunting area manager without a handheld terminal, is indicated on the signalling control display, the Signaller must only accept the train into the area when permission from the Shunting area manager has been obtained.

When driving into a permanent shunting area not managed by a Shunting area manager, the Signaller may allow driving into the area without further arrangements.

Change per 2024-06-16:

If a request to accept or reject a train into a possession or shunting area, managed by a Shunting area manager without a handheld terminal, is indicated on the signalling control display, the Signaller must only accept the train into the area when permission from the Shunting area manager has been obtained.

When driving into a permanent shunting area not ~~under the responsibility~~managed ~~of~~by a Shunting area manager, the Signaller ~~must~~may ~~accept~~allow driving into the ~~request~~area without further ~~agreement~~arrangements.

3562 Signaller

If a train unintentionally stops during driving into a possession or shunting area, after changing to SH-mode, the Signaller may allow the Driver to resume driving into the area without further agreement from the Shunting area manager.

Change per 2024-06-16:

If ~~the Shunting area manager receives a~~ ~~request~~train ~~to~~ unintentionally ~~resume~~stops during driving ~~after~~into ~~a standstill, by~~ possession ~~the~~or ~~Driver~~shunting ~~of~~area, ~~a~~after ~~train~~changing ~~in~~to SH-mode ~~outside,~~ the ~~possession~~ ~~or~~Signaller ~~shunting~~may ~~area,~~ allow the ~~Shunting~~Driver ~~area~~to ~~manager~~resume ~~must~~driving ~~obtain~~ into ~~authorisation~~the ~~from~~area ~~the~~without ~~Signaller~~further ~~before~~ agreement ~~permitting~~from the ~~Driver~~ ~~to~~Shunting ~~resume~~area ~~driving~~ manager.

3139

Operating a bascule bridge

3140 Precondition

The Bridge guard needs to operate the bridge.

3141 Purpose

Ensure that the Bridge guard can operate the bridge without affecting operations and it is agreed with the PICOP, if there is a possession on the bridge.

Change per 2024-06-16:

~~Allow~~Ensure that the Bridge guard ~~to~~can operate the bridge without affecting operations and it is agreed with the PICOP, if there is a possession on the bridge.

PROCEDURE

3143	Bridge guard		The Bridge guard must request the bridge released for operation and provide the Signaller with any necessary information.
3819	Bridge guard		If a possession is established on the bridge, the Bridge guard must contact the Signaller to request authority to release the bridge for operation themselves.
3820	Signaller		If a possession is established on the bridge, the Signaller must contact the PICOP and request permission to release the bridge for operation by the Bridge guard. The Signaller may only allow the Bridge guard to operate the bridge for operation when the PICOP has given authority to do so. **Change per 2024-06-16:** If a possession is established on the bridge, the Signaller must contact the PICOP and request permission to release the bridge for operation by the Bridge guard. The Signaller may only allow the Bridge guard to ~~release~~operate the bridge for operation when the PICOP has given authority to do so.
3144	Signaller		When the release of a bascule bridge is requested the Signaller must decide on a convenient time to release the bridge.
3145	Signaller		When the Signaller has decided on a convenient timeslot, the Signaller may acknowledge the request. When the agreed timing arrangements are met, and it is still appropriate to release the bridge, the Signaller must acknowledge the release of the bridge, handing over responsibility for the bridge to the Bridge guard.
3821	Bridge guard		If a possession is established on the bridge, the Bridge guard may release the bridge for operation themselves when the Signaller has given permission to do so.
3146	Bridge guard		When the Signaller has released the bridge, the Bridge guard may operate the bridge.
3147	Signaller, Bridge guard		Once the bridge guard has returned the bridge to its normal position, the bridge is locked and the release of the bridge is automatically revoked by the signalling system.
3148	Bridge guard		When it is no longer required to have the bridge open, the Bridge guard must return the bridge to its normal position. If a possession is established on the bridge, the Bridge guard must contact the Signaller and report when the bridge is back to its normal position.

Change per 2024-06-16:

When it is no longer required to have the bridge open, the Bridge guard must return the bridge to its normal position.

If a possession is established on the bridge, the Bridge guard must contact the Signaller and report when the bridge is back to its normal position.

3894 Signaller

Change per 2024-06-16:

When the Bridge guard reports that the bridge is back to its normal position, the Signaller must inform the PICOP.

3184

Level transition

3185

Unsupervised level transition into a level 2 area

3186 Precondition

It is not possible to clear the signal to the transition area from the level 0 or level ATC area. The train is ready to perform an unsupervised level transition into a level 2 area.

3187 Purpose

For the Signaller to ensure adequate protection for a route to permit the Legacy signaller to authorise the train to approach the system border. Furthermore, for the Signaller to authorise the train to proceed to the first ETCS stop marker.

PROCEDURE

3188 Signaller

When the Legacy signaller requests permission to verbally authorise a train to approach the system border, the Signaller must protect the transition area.

The Signaller must protect the transition area by ensuring that no train or vehicle has authority to move within or into the track section between the system border and the first ETCS stop marker.

3189 Signaller

When the transition area is protected, the Signaller must inform the Legacy signaller, that the train can approach the system border.

3588 Driver

When the train is at a standstill at the system border, the Driver must apply the procedure Degraded operation - Authorised passing of the end of authority.

3589 Driver

If the train passes the system border, without changing into level 2, the Driver must continue to the end of authority of the Operational Instruction 1 and inform the Signaller.

Change per 2024-06-16:

If the train passes the system border, without changing into level 2, the Driver must continue to the end of authority ~~indicated on~~of the Operational Instruction 1~~,~~ and inform the Signaller.

Degraded operation

Authorised passing of the end of authority

Precondition

It is not possible to issue a movement authority. The train is at a standstill and voice communication has been established between the Driver and the Signaller.

Purpose

For the Signaller to ensure adequate protection to allow the train to continue driving and authorise the Driver to pass the end of authority by use of Operational Instruction 1.

PROCEDURE

Driver

The Driver must report current location to the Signaller and request authority to proceed.

Signaller

When the Signaller has exhausted all possibilities for issuing a movement authority, the Signaller must protect the continued driving of the train and authorise the Driver to proceed past the end of authority and to the next ETCS stop marker, or other unambiguous location.

To allow the continued driving of the train, the Signaller must ensure that:

1. Moveable elements where authority to move on Operational Instruction 1 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements where authority to move on Operational Instruction 1 will be valid are safe to pass according to the procedure Infrastructure fault -Handling of an undetected point that is not trailed, Infrastructure fault - Handling of a trailed point or location specific description
2. The track section where authority to move on Operational Instruction 1 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area
3. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 1 will be valid
4. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 1 will be valid, unless the Operational Instruction 1 will apply to an occupied track section, a buffer stop, a possession or a shunting area.

Change per 2024-06-16:

When the Signaller has exhausted all possibilities for issuing a movement authority, the Signaller must protect the continued driving of the train and authorise the Driver to proceed past the end of authority and to the next ETCS stop marker, or other unambiguous location.

To allow the continued driving of the train, the Signaller must ensure that:

1. Moveable elements ~~in the track section~~ where authority to move on Operational Instruction 1 will be valid are detected in the correct lie and prevented from further throwing or any moveable elements ~~in the track section~~ where authority to move on Operational Instruction 1 will be valid are safe to pass according to the procedure [Infrastructure fault— -Handling of an undetected point that is not trailed], [Infrastructure fault –- Handling of a trailed point] or location specific description
2. The track section where authority to move on Operational Instruction 1 will be valid is unoccupied, unless the Signaller requires the train to enter an occupied track section, a possession or a shunting area
3. No other trains have authority to move within or into the track section where authority to move on Operational Instruction 1 will be valid
4. No other trains have authority to move within or into the track section which follows the track section where authority to move on Operational Instruction 1 will be valid, unless the Operational Instruction 1 will apply to an occupied track section, a buffer stop, a possession or a shunting area.

2737 Signaller

The Signaller must assess if any of the following restrictions apply to the continued driving of the train on Operational Instruction 1:

- unusual transport restrictions,
- electrical rolling stock,
- restrictions specified in location specific descriptions.

Change per 2024-06-16:

The Signaller must assess if any of the following restrictions apply to the continued driving of the train on Operational Instruction 1:

- unusual transport restrictions,
- ~~electric traction~~electrical ~~unit~~rolling ~~restriction~~stock,
- restrictions specified in location specific descriptions.

2738 Signaller

If a level crossing is located between the train and the end of authority of the Operational Instruction 1, the Signaller must apply the procedure Degraded operation - Passing a level crossing without a movement authority.

2739 Signaller

If the Signaller requires the train to enter an occupied track and it is not according to the production plan, the Signaller must inform the Driver (if relevant) of the occupying train that another train is to approach.

3772 Signaller

If the Signaller wants to authorise the train into a possession or shunting area, the Signaller must first contact the PICOP or Shunting area manager (if relevant) and request permission for the movement.

2740 Signaller

When the continued driving of the train is protected, the Signaller must instruct the Driver to complete an Operational Instruction 1. The Operational Instruction 1 must include (as required):

- any speed restriction below 40 km/h
- information about any occupied track
- information about any level crossing not protected
- stopping location if it is not the next ETCS stop marker
- information about possessions or shunting areas.

2743 Signaller

The Signaller must ensure that the continued driving of the train remains protected until one of the following conditions is fulfilled:

- the train has reached the end of authority of Operational Instruction 1 and has changed into supervised driving
- the Operational Instruction is revoked by an Operational Instruction 3
- the Driver reporting that the train is at a standstill at the end of authority of Operational Instruction 1 without a movement authority.

2744 Driver

When the Operational Instruction 1 is completed, the Driver must check the location of the end of authority of the Operational Instruction 1 either by using the Route Book or by local area knowledge.

The Driver is then authorised to press override to enter SR-mode and proceed to the next ETCS stop marker, or the location instructed, using the information contained in the Operational Instruction 1.

If the movement ends in a possession or shunting area, the Driver may only start the movement according to Operational Instruction 1 when the movement inside the area has been agreed with the PICOP or Shunting area manager. The Driver must immediately after entering the area make sure that the onboard changes to SH-mode.

2745 Driver

If Operational Instruction 1 contains additional information of a level crossing not protected, the Driver must stop in front of the level crossing and proceed on sight, however with a maximum of 10 km/h, while using sound signal "Warning", until the lead cab has passed the level crossing.

The Driver may omit the use of sound signal "Warning", when staff present at the level crossing is applying the hand signal "road traffic, stop".

3091

Supervised passing of failed level crossing

3092 Precondition

A supervised train is approaching a level crossing.

3093 Purpose

To pass a level crossing not automatically activated by the signalling system without causing any harm to infrastructure, rolling stock, passengers or road users.

PROCEDURE

3094 Driver, Signaller

All level crossings are equipped with a local control box enabling on site operation of the level crossing. The local control box is used in case of failures, fault correction or planned maintenance.

3095 Driver

When the train is supervised to a speed restriction of 10 km/h, and the unprotected level crossing symbol is displayed on the DMI, the Driver must bring the train to a standstill in front of the level crossing and inform the Signaller.

The information must include the ID number of the level crossing and, if possible, the nature of the fault.

3096 Signaller

When the Signaller is informed by a Driver that the train is at a standstill at an unprotected level crossing, the Signaller must try to operate the level crossing manually.

If the level crossing cannot be operated manually, the Signaller must request the Driver to operate the level crossing using the local control box.

If the level crossing cannot be operated using the local control box, the Signaller must instruct the Driver to pass the unprotected level crossing using a verbal safety message.

The verbal safety message must include train running number and level crossing ID.

3097 Signaller

If the Signaller knows that the level crossing cannot be operated manually by using the manual controls or the local control box, the Signaller may omit the process for manual activation and instruct the Driver to pass the unprotected level crossing using a verbal safety message.

The verbal safety message must include train running number and level crossing ID.

Change per 2024-06-16:

If the Signaller knows that the level crossing cannot be ~~protected~~ operated manually by using the manual controls or the local control box, the Signaller may omit the process for manual activation and instruct the Driver to pass the unprotected level crossing using a verbal safety message.

The verbal safety message must include train running number and level crossing ID.

3098 Driver

The Driver may continue driving if the level crossing speed restriction of 10 km/h is lifted.

When instructed by the Signaller to operate the level crossing, the Driver must use the local control box.

If the level crossing cannot be protected, the Driver must inform the Signaller.

3099 Driver

When the Signaller has authorised the passing an unprotected level crossing by a verbal safety message, the Driver must pass the level crossing on sight using sound signal “Warning” until the lead cab has passed the level crossing.

The Driver may omit the use of sound signal "Warning", when staff present at the level crossing is applying the hand signal "road traffic, stop".

3100 Signaller

If the level crossing cannot be protected automatically or manually, the Signaller must apply the procedure Infrastructure fault - Handling report of infrastructure fault.

3255

Overrunning/routed in wrong direction

3256 Precondition

A train has overrun its scheduled stopping location or is routed in a wrong direction and is at a standstill.

3257 Purpose

To assess if the train will remain at the current location, continue, or be moved to another location.

PROCEDURE

3258 Railway Undertaking 

The Railway Undertaking must have procedures describing if backwards movements are permitted with non passenger trains.

Change per 2024-06-16:

The Railway Undertaking must have procedures describing if ~~a train not being a passenger~~backwards ~~train~~movements are permitted ~~backwards~~with ~~movements~~non passenger trains.

3259 Driver

If a scheduled stopping location is overrun or a train is routed in the wrong direction the Driver must inform the Signaller, providing additional information regarding the actual location of the train and any expected delays to current operations.

3260	Signaller	When informed of an overrun, or a train routed in a wrong direction, the Signaller must in close cooperation with the Driver determine the appropriate response. The Signaller must determine if: - the passengers may be exchanged without moving the train - the train must continue - the Driver must be instructed to close the desk and perform train awakening in the other end of the train - the train must perform a backwards movement (provided that the train is not a passenger train).
3261	Signaller	The Signaller must instruct the Driver about how to proceed.
3262	Signaller	If the train has to perform a backwards movement, and the train does not carry passengers, the Signaller must: - disable automatic route setting - revoke any movement authority into the area behind the train - ensure no train or vehicle has authority to move into the necessary track section(s) behind the train - establish a temporary shunting area around the train, or set a route for shunting, to allow the backwards movement - instruct the Driver to complete the form "Backwards movement authorisation".
3263	Driver	When instructed by the Signaller, the Driver must complete the form "Backwards movement authorisation", provided that backwards movements are permitted by the Railway Undertaking. When the form backwards movement authorisation is completed, the Driver must press “Shunt” to enter SH-mode and perform the movement as instructed. The Driver must inform the Signaller when the movement is completed, and the train is at a standstill.
3264	Signaller	When the Driver informs the Signaller that the backwards movement is completed, and the train is at a standstill, the Signaller must instruct the Driver to exit SH-mode and prepare the train to continue its mission. When the train has exited SH-mode, the Signaller must end the temporary shunting area, or ensure the entire route for shunting is released, as applicable.
3561	Driver	When instructed by the Signaller, the Driver must exit SH-mode and initiate the procedure Normal operation - Enter onboard train data to continue the mission.
3563		## Speed restriction
3268		### Inform Driver of an unplanned speed restriction
3269	Precondition	The Driver of an unsupervised train is instructed to stop due to an unplanned speed restriction below 40 km/h.
3270	Purpose	To ensure that the unsupervised trains do not exceed the unplanned speed restriction speed.

PROCEDURE

3271 Driver

The Driver must report to the Signaller when the train is at a standstill.

3272 Signaller

When the Signaller is informed by the Driver that the train is at a standstill, the Signaller must issue a new Operational Instruction 1 that will revoke the current Operational Instruction 1 and containing the new speed restriction.

Change per 2024-06-16:

When the Signaller is informed by the Driver that the train is at a standstill, the Signaller must ~~revoke~~issue ~~the~~a ~~current~~new Operational Instruction 1 ~~and~~that ~~issue~~will ~~a~~revoke ~~new~~the current Operational Instruction 1 and containing the new speed restriction.

2699

Handling an unplanned speed restriction

2700 Precondition

The need for an unplanned speed restriction is reported to the Signaller.

2701 Purpose

Ensuring that trains do not run in the affected area at a speed greater than the unplanned speed restriction.

PROCEDURE

2704 Signaller

Deleted

Change per 2024-06-16:

~~When the need for an unplanned speed restriction is reported by anyone other than the O&M coordinator, the Signaller must bring all movements in or into the affected area to a standstill.~~Deleted

2703 Signaller

When the need for an unplanned speed restriction is reported, the Signaller must:

1. Revoke existing movement authorities in or into the area
2. Disable automatic route setting into the affected area
3. Bring relevant unsupervised movements to a standstill.

Change per 2024-06-16:

When the need for an unplanned speed restriction is reported ~~by the O&M coordinator~~, the Signaller must:

1. Revoke existing movement authorities in or into the area
2. Disable automatic route setting into the affected area
3. Bring relevant unsupervised movements to a standstill.

2705 Signaller

The Signaller must ensure that all supervised trains inside or entering the affected area remain at standstill until such time the speed restriction is implemented in the signalling system.

2706 Signaller

If the unplanned speed is lower than the maximum permitted speed for unsupervised movements the Signaller must ensure that all unsupervised movements inside or entering the affected area remain at standstill until the Drivers are informed about the unplanned speed restriction according to the procedure Speed restriction - Inform Driver of an unplanned speed restriction.

3786 Signaller

The Signaller must ensure that the speed restriction is planned according to the procedure Speed restriction - Implementing an unplanned speed restriction.

3514

Incidents

3515

Reporting incident

3516 Precondition

An incident considered being a threat to the safety of people or the operation of the railway is reported or detected.

3517 Purpose

To ensure that the incident is reported and appropriate actions are taken.

PROCEDURE

3519 All

When an incident is observed this must be reported to the Signaller immediately. This report has to include the name and contact information of the observer, location of the incident, what the incident is and any other observations or information that may be relevant.

3521 Signaller

If the severity of the reported incident could escalate, the Signaller must attempt to prevent or reduce this by any available means.

3520 Signaller

When the Signaller observes, is involved in or is informed of an incident, the Signaller must ensure that this is reported to the Network manager and the Banedanmark incident investigator immediately.

Change per 2024-06-16:

When the Signaller observes, is involved in or is informed of an incident, the ~~incident~~Signaller must ~~be~~ensure ~~reported~~that ~~according~~this is reported to the ~~Banedanmark~~Network ~~procedure~~ manager ~~for~~and ~~handling~~the ~~incidents~~Banedanmark incident investigator immediately.

3522 Signaller

If the incident:
- was caused by a possible Driver error
- has affected the capability of the Driver to safely drive the train
- was caused by defective rolling stock

the Signaller must have permission from the Banedanmark incident investigator prior to allowing the train or vehicle to continue.

3523 Signaller

If the incident was caused by failure in the infrastructure or the infrastructure is damaged, the Signaller must obtain confirmation from the O&M coordinator that the infrastructure is safe to resume operations.

3872 Signaller

If the incident concerns a motorist who passes an activated level crossing, passes right in front of a train or vehicle in an user worked crossing or holds between the barriers in a level crossing, the Signaller must ensure that it is reported to the police .

The notification must, as far as possible, contain information about:

- registration number or the type, brand and color,
- possible company name and other special characteristics,
- the direction of travel of the car and the distance from the train or vehicle,
- the number and location of the level crossing
- information about the notifier.

3873 Signaller

In the event of an incident in connection with a level crossing, the Signaller must immediately ensure that a Maintainer is called in and inform the Banedanmark investigation investigator.

2977

Emergency

3025

Evacuation of train

3026 Precondition

A train must be evacuated.

Change per 2024-06-16:

~~Remaining on the train is hazardous to people on the train and the~~A train must be evacuated.

3027 Purpose

Safe evacuation from a disabled train or a train exposed to any kind of danger as a rescue or precautionary measure.

PROCEDURE

3028 Railway Undertaking 

The Railway undertaking must have procedures in place describing how and when to conduct an evacuation from all types of rolling stock.

3029 Driver

When the Driver has identified that the train must be evacuated the Driver must inform the Signaller about the exact location of the train and request the Signaller to ensure safe operational conditions for the evacuation.

Change per 2024-06-16:

When the Driver has identified that the train must be evacuated the Driver must inform the Signaller about the exact location of the train and request ~~authorisation from~~ the Signaller to ensure safe operational conditions for the evacuation.

3032	Signaller	When the Signaller is informed that an evacuation of a train is to be performed, the Signaller must ensure that all other trains or vehicles vacate the area, or are brought to a standstill. The Signaller must ensure that unsupervised trains and vehicles are not authorised to move in the area.
3033	Signaller	If the Signaller has knowledge of a broken overhead wire in the proximity of the "emergency" train the Signaller must apply the procedure Catenary isolation - Emergency catenary isolation.
3035	Signaller	The Signaller must carry out any relevant procedures included in location specific descriptions before authorising the evacuation of the train.
3037	Signaller	When the area is operationally safe for evacuation the Signaller may authorise the Driver to begin evacuation. The Signaller must inform the Network manager that evacuation has been authorised.
3041	Driver	When the Driver is authorised by the Signaller the Driver must follow Railway Undertaking procedures and procedures in location specific descriptions to ensure safe evacuation of the train.
3042	Driver	When the evacuation is completed and the track is clear of staff and passengers the Driver must inform the Signaller that the evacuation is completed.
3043	Signaller	When the Signaller is informed that the evacuation is completed and the track is clear of staff and passengers the Signaller must inform the Network manager and then allow operations to resume.
2384		# Infrastructure fault
2385		## Handling report of infrastructure fault
2386	Precondition	A fault or error in the infrastructure is detected by an observer or the signalling system.
2387	Purpose	To quickly process faults or error and identify the problem to avoid further damages and/or accidents.
		PROCEDURE
2388	O&M coordinator	When a fault report is received the O&M coordinator must ensure the fault or error is logged in the signalling system. The O&M coordinator must in coordination with the Signaller decide upon the most appropriate response to the reported fault or error.
2390	Signaller	If the Signaller assess the situation as hazardous, the Signaller must use all possible means to stop all movements from entering the hazardous area by initiating the procedure Emergency - Stop trains and vehicles from entering hazardous area.
2389	Signaller	If a fault report is received from sources other than the O&M coordinator the Signaller must inform and discuss the implications with the O&M coordinator. If the reported fault concerns the catenary system, the Signaller must inform the Catenary manager.

2391 O&M coordinator

If the fault or error demands an unplanned speed restriction the O&M coordinator must ensure the procedure Speed restriction - Implementing an unplanned speed restriction is initiated.

Change per 2024-06-16:

If the fault or error demands an unplanned speed restriction the O&M-
coordinator must ~~initiate~~ensure the procedure [Speed restriction - Implementing an unplanned speed restriction] is initiated.

2392 O&M coordinator

If the fault or error results in changes to driving conditions the O&M coordinator must initiate the procedure Infrastructure fault - Changes in driving conditions.

2393 O&M coordinator

The O&M coordinator must contact the maintainer to plan appropriate corrective actions.

2171

Possession

2254

End possession with handheld terminal

2255 Precondition

Infrastructure work has been completed and information about any restrictions in the use of the infrastructure is passed on to the Signaller. The PICOP has a handheld terminal available.

2256 Purpose

Ensure that the responsibility of the infrastructure is handed back to the Signaller.

PROCEDURE

2259 PICOP

When the PICOP has determined that the infrastructure is safe to be handed back into operations, according to the rules for working in infrastructure, the PICOP must remove the worksite protection.

Change per 2024-06-16:

When the PICOP has determined that the infrastructure is ~~cleared and~~ safe to be handed back into operations, according to the rules for working in infrastructure, the PICOP must remove the worksite protection.

2261 PICOP

The PICOP must end a possession by selecting the appropriate possession ID on the handheld terminal and scan an RFID-tag (Radio-frequency identification) at an ETCS stop marker, or other infrastructure object associated with the possession.

2262 PICOP

Scanning a tag not associated with the possession will result in an error message.

2263 Signaller , PICOP

When a request to end a possession is received from the handheld terminal, the signalling system will run a diagnostics test of the infrastructure and log any detected errors.

The signalling system will present any detected errors to the Signaller on the signalling control display and request the Signaller to accept or reject to end the possession.

If the request to end the possession is accepted it will be indicated on the handheld terminal.

2265 Signaller

When a request to end a possession is displayed on the signalling control display, the Signaller must decide if the possession can be ended as requested.
The Signaller must either accept or reject the request.

2264 PICOP

When the handheld terminal indicates that the request to end the possession has been accepted the PICOP is relieved of responsibility for the infrastructure. The PICOP must note the time in the PICOP log.

3791 Signaller

The Signaller must ensure that the time the possession was ended is recorded in the Signaller log.

2266 PICOP

If an end of possession request is rejected due to detected infrastructure errors the PICOP must contact the Signaller to negotiate conditions for ending the possession.

2269

End possession without handheld terminal

2270 Precondition

Infrastructure work has been completed and information about any restrictions in the use of the infrastructure is passed on to the Signaller.
It is not technically possible to use a handheld terminal.

2271 Purpose

Ensure that the responsibility of the infrastructure is handed back to the Signaller.

PROCEDURE

2274 PICOP

When the PICOP has determined that the infrastructure is safe to be handed back into operations, according to the rules for working in infrastructure, the PICOP must remove the worksite protection.

Change per 2024-06-16:

When the PICOP has determined that the infrastructure is ~~cleared and~~ safe to be handed back into operations, according to the rules for working in infrastructure, the PICOP must remove the worksite protection.

3890 PICOP

If the possession is outside interlocked areas and a Shunting area manager is assigned to the area, the PICOP informs the Shunting area manager.

If the possession is outside interlocked areas the PICOP informs the Signaller.

2276 PICOP

The PICOP must end a possession or a part of a possession inside interlocked areas by contacting the Signaller and report:

- PICOP ID
- possession ID of the possession that can be ended
- that the area is safe for operations.

2277 Signaller

When the Signaller receives a request to end a possession from a PICOP the Signaller must:

1. Verify that the PICOP is registered as responsible for the possession
2. enter the request into the signalling system.

2278 PICOP, Signaller

The signalling system will run a diagnostics test of the infrastructure handed back by the Signaller and log any detected errors. If any error is detected the signalling system will request the Signaller for an acknowledgement.

If no error is detected the request to end a possession is automatically accepted.

2279 Signaller

The Signaller must evaluate reported errors indicated on the signalling control display and either reject or accept the request to end a possession.

2280 Signaller

If the request to end the possession is rejected due to detected infrastructure errors the Signaller must instruct the PICOP to correct the error or negotiate conditions for ending the possession.

2281 Signaller

When the possession is ended, the Signaller must inform the PICOP the time it was ended.

2282 PICOP

When the PIOCP is informed by the Signaller of the time the possession ended the PICOP must enter the time into the PICOP log and then the PICOP is relieved of responsibility for the infrastructure.

3792 Signaller

The Signaller must ensure that the time the possession was ended is recorded in the Signaller log.

3760

End possession in a transition area

3761 Precondition

The infrastructure work has finished and the PICOP is ready to end both possessions in a transition area.

3762 Purpose

Ensure that the responsibility for the infrastructure on both sides of the system border is handed back to operation.

Change per 2024-06-16:

Ensure that the responsibility for the infrastructure on both sides of the system border is handed back to ~~the Signallers~~operation.

PROCEDURE

3765 PICOP

Before a possession in a transition area can be ended, the PICOP must ensure that both possessions are ready to be ended.

The PICOP may then apply the procedure Possession - End possession with handheld terminal or Possession - End possession without handheld terminal to end the possession in the level 2 area.

3766 Signaller

When the PICOP requests to end a possession in a transition area, the Signaller must apply the procedure Possession - End possession with handheld terminal or Possession - End possession without handheld terminal.

3767 PICOP

When both possessions in the transition area are ended, the PICOP must report to the Signaller or Legacy signaller responsible for the part of the infrastructure where the possession was ended last, that both possessions are ended, and the track is cleared.

Change per 2024-06-16:

When both possessions in the transition area are ended, the PICOP must report to the Signaller or Legacy signaller responsible for the part of the infrastructure where the possession was ended last, that both possessions are ended, and the track is cleared.

3768 Signaller

When the PICOP reports that both possessions in the transition area are ended, the Signaller must contact the Legacy signaller and agree the conditions for resuming operation.

3329

Shunting

3330

Prepare shunting movement

3331 Precondition

A train or vehicle is to be moved as a shunting movement.

3332 Purpose

Ensure that shunting movements are only carried out with rolling stock that is safe for shunting movements and necessary instructions are provided.

PROCEDURE

3333 Railway Undertaking

The Railway Undertaking must have procedures describing how:

- traction units are prepared prior to shunting movements
- it is checked that the rolling stock is safe for shunting movement
- safe coupling of rolling stock is performed.

3334 Driver

The Driver must ensure the traction unit is safe for shunting movement prior to engaging in shunting movements.

3335 Shunter

The Shunter must plan the shunting movement to take place inside a permanent shunting area, a temporary shunting area, a possession or on a route for shunting.

The Shunter may request assistance from the Signaller when planning for a temporary shunting area or a route for shunting.

3336	Shunter	The Shunter must coordinate all movements within a permanent shunting areas (if applicable), temporary shunting areas and possessions with the Shunting area manager.
3337	Signaller	If requested by a Shunter the Signaller must provide assistance in planning a shunting movement, assessing the optimum use of a temporary shunting area or route for shunting.
3338	Shunter	The Shunter must ensure that only rolling stock that meets Railway Undertaking requirements to be safe for shunting movement is added to the consist of a shunting movement and coupling of rolling stock is performed according to Railway Undertaking procedures.
3339	Shunter	The Shunter must instruct the Driver prior to the shunting movement to ensure the movement can be controlled safely within the area of control of the Shunter. The instruction must contain sufficient information for the Driver to recognise the boundary of the area appointed for the shunting movement. If the shunting movement is to be controlled by use of a radio, the Shunter must instruct the Driver about which number to use for communication. If the shunting movement is performed without the use of radio or mobile telephone, the Shunter must control the shunting movement using hand signals.

Change per 2024-06-16:

The Shunter must instruct the Driver prior to the shunting movement to ensure the movement can be controlled safely within the area of control of the Shunter. The instruction must contain sufficient information for the Driver to recognise the boundary of the area appointed for the shunting movement.

If the shunting movement is to be controlled by use of a radio, the Shunter must instruct the Driver about which number to use for communication.-

If the shunting movement is ~~to~~ beperformed ~~controlled~~without ~~by~~the use of ~~a~~ radio ~~without control tone functionality,~~ or ~~if the Shunter cannot safely perform the shunting tasks while using the control tone, the Shunter must inform must inform the Driver that verbal control tone will be used instead.~~

~~If the shunting movement is performed without the use~~ ~~of~~mobile ~~radio~~telephone, the Shunter must control the shunting movement using hand signals.

3372

Shunting movement

3373	Precondition	A shunting movement is to be performed on a shunting route, inside a possession or shunting area.

Change per 2024-06-16:

A shunting movement is to be performed on a shunting route, inside a possession or shunting area.

3374 Purpose

To perform a shunting movement on a shunting route, inside a possession or shunting area.

Change per 2024-06-16:

To perform a shunting movement on a shunting route, inside a possession or shunting area.

PROCEDURE

3375 Shunter

Interlocked points inside possessions or temporary shunting areas are released for local control if not locked for protective purposes. The handheld terminal can be used to throw the lie of the point inside possessions or temporary shunting areas.

The lie of points is not indicated on the handheld terminal.

3376 Shunter

The Shunter must protect the shunting movement by ensuring:

- points are in the correct lie for the movement
- obstacles that may cause a hazardous situation are avoided
- the shunting movement will not come into conflict with other shunting movements in the area
- level crossings included in the shunting movement are activated via the local control box and protected.

If a level crossing cannot be protected, and the cab is in the forward facing end of the movement, the Shunter must instruct the Driver to use sound signal “Warning” until the cab has cleared the level crossing.
If the cab is not in the forward facing end of the movement, the Shunter must stop the road traffic by using hand signal “Road traffic, stop”. When the hand signal is used, the Shunter must instruct the Driver not to use sound signal "Warning" during the passing of the level crossing.

Throughout the shunting movement the Shunter must be located in a position from where as much of the shunting path can be observed, and as far as possible, continually ensure the conditions listed above are met.

3603 Shunter

When performing shunting movements in areas with public access the Shunter must ensure that yellow flashing light on the traction unit is activated if mounted.

When performing shunting movements in areas with public access in darkness or low visibility the Shunter must ensure that first and last vehicle is marked with yellow flashing light.

3741 Shunter

If the shunting movement is controlled by using a radio or a mobile telephone, the Shunter must use verbal control tone. The Shunter must use verbal control tone by transmitting the message “Continue” with a maximum of five second intervals when no other messages needs to be exchanged.

Change per 2024-06-16:

If the shunting movement is controlled by using a radio ~~with control tone functionality, the Shunter must ensure that the control tone is activated at all times during the movement.~~

~~In case the shunting movement is controlled by using~~or a ~~radio without control tone~~mobile ~~functionality~~telephone, the Shunter must use verbal control tone. The Shunter must use verbal control tone by transmitting the message “Continue” with a maximum of ~~10~~five second intervals when no other messages needs to be exchanged.

3377 Shunter

When the Shunter has setup the conditions for the required shunting movement, the Shunter must contact the Driver of the train to initiate the movement.

The Shunter must use the standard phrases or hand signals to instruct the Driver about the movement to take place.

3378 Shunter

The Shunter may be located in a position from where the shunting path cannot be observed, provided the Driver is controlling the train or vehicle from the leading cab for the direction of travel and the Driver is instructed about the shunting movement.

The instruction must include an unambiguous start and end location, and any relevant information related to the shunting movement.

3379 Driver

When the Driver receives shunting instructions from the Shunter, the Driver must perform the movement as instructed.

Throughout the entire movement the Driver must as far as possible observe that:

- the lie of points matches the intended movement
- obstacles that may cause a hazardous situation are avoided
- the shunting movement will not come into conflict with other shunting movements in the area.

If a point is not in the correct lie for the intended movement, or there is risk for a hazardous situation to occur, the Driver must immediately bring the train or vehicle to a standstill and contact the Shunter.

3742 Driver

When performing a shunting movement by use of radio, the Driver must continuously check that the verbal control tone (message “Continue” is transmitted with a maximum of five second intervals) is audible.

If the verbal control tone cannot be heard, the Driver must bring the shunting movements to a standstill and inform the Shunter.

Change per 2024-06-16:

When performing a shunting movement by use of radio, the Driver must continuously check that the ~~control tone or~~ verbal control tone (message “Continue” is transmitted with a maximum of ~~10~~five second intervals) is audible.

If the ~~control tone or~~ verbal control tone cannot be heard, the Driver must bring the shunting movements to a standstill and inform the Shunter.

3560 Shunter

When the entire consist of rolling stock has cleared the level crossing, the Shunter must ensure the level crossing is deactivated.

3382

Start shunting from SB-mode

3383 Precondition

The Driver of a train in SB-mode inside a possession or shunting area has been instructed by a Shunter to request SH-mode.

Change per 2024-06-16:

The Driver of a train in SB-mode inside a possession or shunting area has been instructed by a Shunter to ~~select~~request SH-mode.

3384 Purpose

To authorise the train in SB-mode to enter into SH-mode.

PROCEDURE

3385 Driver

The Driver must press the "Shunting" button on the DMI to request SH-mode from the signalling system.

3386 Driver, Signaller, Shunter

If the train is inside an active shunting area or possession, and the position of the train can be validated by the signalling system, the request to enter SH-mode will be accepted.

If the position of the train can be validated by the signalling system, but the train is outside an active shunting area or possession, or if the position of the train cannot be validated, the request to enter SH-mode will be refused. The text message “SH refused” will be indicated to the Driver on the DMI.

3708 Driver

If the text message “SH refused” is displayed on the DMI, the Driver must inform the Shunter.

3709 Shunter

If the Driver reports that the request to enter SH-mode has been refused by the signalling system, the Shunter must inform the Signaller.

3387 Signaller

If the Signaller is informed by the Shunter that the request to enter SH-mode has been refused, the Signaller must assess if the reason for the refusal is because the position of the train cannot be validated by the signalling system.

If the reason for the refusal is that the position of the train cannot be validated, the Signaller must establish the location of the train in co-operation with the Shunter.

3388	Signaller	If the location of the train is established within an active shunting area or possession, the Signaller must activate the special function which will allow the signalling system to accept the train's next request to enter SH-mode. The Signaller must inform the Shunter that another press of the "Shunting" button will be necessary. If the train is not located within an active shunting area or possession, the Signaller must inform the Shunter that the train is located in an area where shunting is not permitted.

Communication

CO.62

Transfer

Change per 2024-06-16:

~~Relay~~Transfer

CO.63	Signaller	A Signaller receiving a safety message related to an area outside their area of control must relay the safety message to the Signaller controlling the area.
CO.64	Signaller	When a Signaller transfer the caller to the correct Signaller, the Signaller must inform the caller where the call is being transferred to so as not to introduce any further confusion.