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| ERTMS/GSM-R FUNCTIONAL GROUP | Document No: F-0019<br>O-2151<br>Change Control Reference No. _____ |
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| **Source:** | **Operators' Group** |
| **Author:** | **Simon Wootton** |
| **Date:** | **20 August 2001** |
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|---|---|
| Specification: | EIRENE FRS V5.0 |
| Subject: | 14 Shunting Mode |
| Reason for change: | Functional requirement is not adequately specified |
| Other remarks: | |

## 14.4 Link assurance signal

14.4.1 The link assurance signal is a means to provide end-to-end confirmation between users that a voice communication link remains intact. This facility is required principally for the safe conduct of pushing manoeuvres to assure continuing availability of the radio channel while a shunting worker is guiding a train driver. (I)

14.4.2 The link assurance signal shall consist of an intermittent audio tone (between 800 and 850Hz). The tone shall be of one second duration, followed by an interval of two seconds. (M)

14.4.3 In order to fulfil the requirements of some railways, it should be possible to provide an alternative means of link assurance indication. (O)

14.4.4 This means will consist of an additional safety device (external to the radio system) interposed between the Cab radio and the loudspeaker with the purpose of muting the continuous link assurance signal for the driver's convenience. In this case, the safety device will alert the driver only if the link assurance signal has failed or if it is cancelled. (I)

14.4.5 The link assurance signal shall be deactivated upon receipt of a shunting emergency call or be interrupted when the initiator of the link assurance signal presses the PTT to speak. (M)~~The link assurance signal shall only be interrupted when a shunting emergency call is received or when the initiator of the link assurance signal presses the PTT to speak. (M)~~

14.4.6 All members of the shunting group shall be unable to speak during the transmission of the link assurance signal. However, they shall be able to initiate a shunting emergency call at any time. (M)

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| **Author:** | **Simon Wootton** |
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|---|---|
| Specification: | EIRENE FRS V5.0 |
| Subject: | Network Selection |
| Reason for change: | Move network selection requirements to section 4 |

### 3.3 Network selection

3.3.1 ~~Where more than one mobile radio network is available for use by a mobile, the selection of the network to use shall be automatic (see section 10.5 for a list of preferred networks). (M)~~Deleted.

3.3.2 ~~It shall be possible for a user to manually override the automatic network selection where more than one authorised mobile radio network is available. (M)~~Deleted.

3.3.3 Less than 0.5% of calls should be lost when a train moves from one network to another. (O)

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| ERTMS/GSM-R FUNCTIONAL GROUP | Document Nos: F-0038<br>O-2196<br>Change Control reference No. _____ |
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|---|---|
| Specification: | EIRENE FRS V5.0 |
| Subject: | Network Selection |
| Reason for change: | Clarify requirements for network selection and move from section 3 |

## 4.4 Network selection

4.4.1 Where more than one mobile radio network is available for use by a mobile, the selection of the network to use shall be automatic (see section 10.5 for a list of preferred networks). (M)

4.4.2 It shall be possible for a user to manually override the automatic network selection where more than one authorised mobile radio network is available. (M)

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|---|---|
| Specification: | EIRENE FRS V 5.0 |
| Subject: | 11 Functional numbering and location-dependent addressing |
| Reason for change: | Management system not used for forced deregistration |
| Other remarks: | None |

11.3.3.4 In addition, a given set of users shall also be allowed to: (M)

- deregister a functional number ~~from the management system (eg deregister a functional number~~ which is no longer valid but which has not been deregistered by the user~~)~~;

- deregister, by overriding, another user of the same type (eg a driver can deregister a train number that another driver has forgotten to deregister);

- deregister, with one action, all functional numbers associated with the same mobile (eg the driver deregisters all functions at the end of the journey).

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| ERTMS/GSM-R FUNCTIONAL GROUP | Document No: F- 0069<br>O- 2266<br>Change Control Reference No. _____ |
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|---|---|
| Specification: | EIRENE SRS V13.0 & EIRENE FRS V5.0 |
| Subject: | List of definitions |
| Reason for change: | Primary and Secondary Controller definitions need improving |

Primary controller

The location and direction of movement of any particular train permits the unique identification of a Primary Controller. The Primary Controller is currently the co-ordinator of train emergency calls. The Primary Controller is normally responsible for the operation of a designated area of track. The exact responsibilities of the Primary Controller are determined on a national basis.

~~The location and direction of movement of any particular train permits the identification of a unique controller who has primary responsibility for that train (eg the controller who is the first point of contact in an emergency). This controller is termed the primary controller.~~

Secondary controller

A Secondary Controller is a train controller who holds responsibility for the safe running of trains on a designated area of track (e.g. a signaller). Secondary Controllers require the facility to communicate with trains in all situations in order to perform their function. The split of responsibilities between Primary Controllers and Secondary Controllers is determined on a national basis.

~~Any controller who is not a primary controller. A given train and its location and direction will uniquely define a secondary controller.~~