

AUDIENCE:

Train Crew

X

Maintenance Staff &
Cleaners

X

Signallers

X

Control
Office

X

This bulletin is aimed at persons engaged in the maintenance of GSM-R Cab Radio and is provided only for information and actioned by the Operator as appropriate.

Further information and support can be obtained by contacting:

NRTenquiries@networkrail.co.uk

Please ensure that the subject title of the e mail is "GSM-R Bulletin 43"

Introduction

This guidance note has been produced so to:

- Reduce service disruptions due to the need to replace GSM-R Cab Radios
- Return of Cab Radios back to Siemens Rail Communications resulting in incurring "No Fault Found" costs.

This fault finding guidance note provides guidance to Drivers, Maintainers and Signallers of the relevant actions to known GSM-R Cab Radio failure / issues which are covered within existing GSM-R Bulletins:

21; Flow Chart for Registration Failures

28: Cab Radio Blank Screen

34: Searching for Networks

38: Flow Chart for recovery from "Searching for Networks"

Listed below are five known symptoms failures / issues with recommended actions.

These known issues are attributed to external network interference by such things as Public Phone Operators, changes to surrounding infrastructure or atmospheric conditions.

Drivers and Operators are encouraged to report any occurrences to their Network Rail Route Control so to be recorded and enable Network Rail's ongoing analysis.

Network Rail is developing new GSM-R Cab Radio software (version 4) to resolve these issues and which shall be tested prior to national rollout.

Known Symptoms Failures / Issues & Recommended Actions

Failure / Issue	Cause	Indications	Action
Searching for Networks	Possible External network interference	Searching for Networks displayed on DCP	Select GSM-R GB from Menu Option 1 as Bulletin 38
Intermittent Failure 01	External network interference	Failure 01 displayed on DCP	Cab Radio to be Re-booted by reset of MCB
3.Bar Initialisation	External network interference	DCP displays and remains at 3 bars during initialisation start up.	Cab Radio to be Re-booted by reset of MCB
Blank Screen	Precise cause unknown, under investigation	Blank screen after powering up the radio with driver's key In.	Cab Radio to be Re-booted by reset of MCB as Bulletin 28
One Way Audio	Precise cause unknown, under investigation	Driver can hear signaller but signaller cannot hear driver (or in reverse)	Cab Radio to be Re-booted by reset of MCB

Reminder: If GSM-R GB is displayed on the DCP but the cab mobile fails to register, this is a symptom and not classed as a defective radio (refer to Bulletin 21).

Maintainer Wild Card Numbers

Maintainers can test GSM-R Cab Radios fully registered by use the maintainer 'Wild Card' and Location Codes as listed below (*Reference GSM-R Bulletin Nos. 17 & 18*)

Please note the importance of de registration after testing

Allocation of 99x wild card numbers for each Operator

ScotRail	990	c2c	991
Greater Anglia	991	LOROL	991
South Eastern	992	Yellow Plant	992
Southern	993	First Capital Connect	993
South West Trains	994	WCRC/Heritage	994
Great Western. Railway	995	Arrive Trains Wales	995
Heathrow Express/Connect	995	Chiltern Railways	996
Northern Rail	996	First Transpennine	996
MerseyRail	996	Virgin Trains	996
London Midland	997	East Midlands Trains	997
Arriva Cross Country	998	First Hull Trains	998
Grand Central	998	Virgin East Coast	998
Freight operators	999		

4 digit location code

1100	1111	1122	1132	1144	1155	1166	1177	1188	1199
1101	1112	1123	1133	1145	1156	1167	1178	1189	
1102	1113	1124	1134	1146	1157	1168	1179	1190	
1103	1114	1125	1135	1147	1158	1169	1180	1191	
1104	1115	1126	1136	1148	1159	1170	1181	1192	
1105	1116	1127	1137	1149	1160	1171	1182	1193	
1106	1117	1128	1138	1150	1161	1172	1183	1194	
1107	1118	1129	1139	1151	1162	1173	1184	1195	
1108	1119	1130	1141	1152	1163	1174	1185	1196	
1109	1120	1131	1142	1153	1164	1175	1186	1197	
1110	1121	1131	1143	1154	1165	1176	1187	1198	