


RDG Guidance Note ETCS Commercial Arrangements

Written by



Steve Price
Operations Planning Advisor, RDG

Submitted by:



Phil Barrett
New Technology Introduction Team Leader, RDG

Authorised by:



Gary Cooper
Director: Planning, Engineering, Operations, RDG

Synopsis

This document provides information and guidance to train operators on the commercial arrangements to consider when implementing ETCS.

Applicability

This Guidance Note has been prepared for passenger operators. However, its content may also be of use to others.

Issue record

Issue	Date	Comments
One	September 2017	First Issue

Contents

- Part 1 About this Document 4**
- 1.1 Responsibilities 4
- 1.2 Explanatory note 4
- 1.3 Guidance Note status 4
- Part 2 Purpose and Introduction 5**
- 2.1 Purpose 5
- 2.2 Introduction 5
- Part 3 Commercial Principles 7**
- 3.1 Introduction 7
- 3.2 Franchised Train Operators post-franchise change or in Direct Award 8
- 3.3 Existing franchised Train Operators 8
- 3.4 Existing non-franchised Operators (Open Access) 9
- 3.5 New (from 2015) Non-franchised Operators (Open Access) 9
- Part 4 Commercial Risks 10**
- Part 5 Change Control and Stage-Gates 10**
- 5.1 Change Control 10
- 5.2 Stage-gates 10
- Part 6 Network Change 11**
- Part 7 Commercial Agreements between NR and TOCs 11**
- Part 8 Rolling Stock Fitment 12**
- Part 9 Changes to Track Access Contracts 14**
- Part 10 Delay Attribution & Schedule 8 ‘Transfer’ 15**
- Part 11 Training 15**
- Part 12 Defect Recording Analysis and Corrective Action System (DRACAS). 15**

Part 1 About this Document

1.1 Responsibilities

- 1.1.1 Copies of this Guidance Note should be distributed by Rail Delivery Group (RDG) members to persons within their respective organisations for whom its content is relevant.

1.2 Explanatory note

- 1.2.1 RDG produces Guidance Notes for the information of its members. RDG is not a regulatory body and compliance with RDG Guidance Notes is not mandatory.
- 1.2.2 RDG Guidance Notes are intended to reflect good practices. RDG members are recommended to evaluate the guidance against their own arrangements in a structured and systematic way. Some or all parts of the guidance may not be appropriate to their operations. It is recommended that this process of evaluation and any subsequent decision to adopt (or not to adopt) elements of the guidance should be documented.

1.3 Guidance Note status

- 1.3.1 This document is not intended to create legally binding obligations between railway duty holders and should be binding in honour only.
- 1.3.2 Copies of the Guidance Note may be obtained on request from RDG or from the RDG Members' Area.

Part 2 Purpose and Introduction

2.1 Purpose

- 2.1.1 This document provides information and guidance to train operators on the commercial arrangements to consider when implementing European Traffic Control System (ETCS).
- 2.1.2 The document is written to allow Train Operators to understand the known framework for Control Period 5 and 6.

2.2 Introduction

- 2.2.1 This Guidance Note outlines the commercial arrangements for funding European Traffic Control System (ETCS) in the GB rail industry from the perspective of Train Operating Companies (TOCs). This document highlights the funding challenge of the system's costs and benefits, as applicable to different organisations. This requires a clear funding structure which includes risk identification and mitigation.
- 2.2.2 It should be noted that Digital Railway (DR) (a cross-industry programme) has a remit from the Department of Transport (DfT) to manage the development and introduction of ETCS and other digital systems (such as Traffic Management). As DR develops and becomes more established, it is expected that this will result in changes to this Guidance Note in the future.
- 2.2.3 The introduction of ETCS is a major business change for the GB rail industry and the various elements within the programme have the potential to:
 - a) Increase commercial and performance risk for TOCs/FOCs.
 - b) Change operating practices.
 - c) Require funding for existing practices to be modified.
 - d) Require funding for additional activities to take place, including train fitment and staff training.
- 2.2.4 TOCs (whether franchised or Open Access operators) should understand how the above risks are identified and mitigated, and where funding is to be made available. With respect to franchised passenger TOCs the current assumption is that the majority of the funding will be part of the base costs of the franchise specified by, and agreed with, the DfT and not via NR Network Change.
- 2.2.5 ETCS roll out will require trains operating on ETCS infrastructure to be fitted with on-board ETCS equipment. New-build rolling stock is now required to be supplied with ETCS equipment fitted, or easily fitted at a later date. Existing rolling stock will require retro-fitment if it is to operate over ETCS infrastructure. Existing signalling systems cannot be decommissioned before train fitments are complete. Staff will require training on the new equipment and operational arrangements.
- 2.2.6 To provide context to the National ETCS Programme, NR issued a Notice of Intended Scope (NoIS) under the Network Code Complex Projects Procedure on 8 December 2014 ¹. This document:
 - a) Introduced the various forms of ETCS (application levels) that are to be used in GB.
 - b) Outlined the proposed works and provided an example of how national deployment might be achieved.
 - c) Summarised the consequences of the proposed changes.

¹ under reference NC/G5/2014/ETCS/001

- d) Identified that affected staff would require training, with some common toolkits to be provided.
- e) Defined the principles for compensation for TOCs and FOCs.
- f) Confirmed that as each region introduced ETCS, a further Network Change consultation with affected operators would be needed.

2.2.7 The NoIS identified the preparation that needs to be made by TOCs/FOCs prior to ETCS being commissioned on the lineside.

2.2.8 This NoIS is yet to be established and an updated NoIS is expected to be issued by DR at a later date.

Part 3 Commercial Principles

3.1 Introduction

- 3.1.1 TOCs will be compensated for any costs/losses in line with the underlying principles of Part G of the Network Code – either through Network Change or a commercial agreement.
- 3.1.2 For most franchised TOCs/FOCs, the costs of fitting and deploying ETCS will be part of the franchise specification, enabling the government to fix costs. New franchises (both competitively tendered and Direct Award) will be awarded against specific requirements to plan for and support the industry deployment of ETCS, and will be required to self-fund via franchise commitments. NR will not pay compensation for those activities or costs covered by the agreement with the franchising authority. If, after a Direct Award or franchise award, there are changes to the basis on which commitments were entered into, then NR will be responsible for any additional business costs.
- 3.1.3 The Network Change process will still be used to formally communicate the proposed lineside infrastructure changes, and to provide a framework on which any discussions can be held.
- 3.1.4 This position can be summarised in the table below:

	ETCS plans informed by data room documents ²²	No data room information	Subsequent changes to data room information
Franchise (including Direct Award) with franchising agreement reflecting ETCS plans and funding	TOC self-funded for all costs incurred	Commercial agreement, underpinned by Network Change principles, for all costs agreed by NR	Commercial agreement agreed with NR, underpinned by Network Change principles, but limited to additional costs, losses & expenses over and above those included as part of franchising agreement
Franchise (including Direct Award) with no reflection of ETCS plans and funding in franchising agreement	N/A	Commercial agreement, underpinned by Network Change principles, for all costs agreed by NR. If within last 12 months of franchise, requires agreement of franchising authority	N/A
Non-franchised TOC	N/A	Commercial agreement, underpinned by Network Change principles, for all costs agreed by NR	N/A

²² References to data room information include any specific and explicit assumptions built into the agreement of a Direct Award, or provided as part of bidder briefings.

3.2 Franchised Train Operators post-franchise change or in Direct Award

- 3.2.1 It is expected that they:
- a) Will be aware of their exposure to the Digital Programme requirements as part of the franchise or Direct Award specification.
 - b) Have factored their projected baseline cost/spending into the franchise bid/agreement.
 - c) Will deliver their obligations as per their franchise agreement.
 - d) Do not expect NR to compensate them under the terms of Part G of the Network Code where such a separate funding arrangement has been established between themselves and the franchising authority.
- 3.2.2 If no funding arrangement has been established between the TOC and the franchising authority in respect of ETCS activities, then an agreement will be necessary between NR, the franchising authority and the TOC.
- 3.2.3 Where changes take place to the lineside infrastructure after a franchise or after a Direct Award has been agreed with the franchising authority, the TOC will be able to negotiate any additional financial burden via Network Change with NR.
- 3.2.4 The DfT is keen for DR technology, including ETCS, Traffic Management and Connected Driver Advisory Systems, to be part of future franchise proposals. This is not covered in this document until the requirements becomes clearer.

3.3 Existing franchised Train Operators

- 3.3.1 It can be expected that these TOCs:
- a) Will not have been aware at the time of making their successful franchise bid of any additional leasing, maintenance and operating costs arising from preparing to fit, subsequent fitment or use of on-board ETCS equipment to trains.
 - b) Will not have any ETCS obligations as part of their franchise agreement.
 - c) Will need to be involved in the First in Class on-board equipment procurement, and any associated training costs.
 - d) May need to start preparations for subsequent fitting and use.
- 3.3.2 The costs of fitting and using on-board ETCS equipment on trains will not fall to existing TOCs in their current franchises. However, such TOCs may need to start preparations for subsequent fitting and use. In a few cases, the TOC may need to determine and possibly begin to implement manpower and training strategies in advance of a new franchise commencing. The TOC may be involved in determining the detail of the NR Route infrastructure deployment.
- 3.3.3 Existing franchised operators will be funded by NR in accordance with Part G of the Network Code. It is expected that these agreements would cease when the franchise itself comes to an end.
- 3.3.4 In the 12 months prior to franchise end, the TOC may have to seek the permission of the franchise authority to incur additional costs that will start in the current franchise but will last beyond the franchise term. Agreement will be necessary between NR, the franchising authority and the TOC on whether these additional costs are required and how the costs will be recovered.

3.4 Existing non-franchised Operators (Open Access)

- 3.4.1 It can be expected that these TOCs will:
- a) Not have factored into their business plans any ETCS costs/spending;.
 - b) Not have any ETCS obligations as part of their track access or other commercial agreements.
 - c) Need to be involved in the First in Class ETCS on-board equipment procurement, and any associated staffing / training costs.
 - d) Need to start preparations for subsequent fitting and use.
- 3.4.2 Open Access operators are self-funding, non-government backed organisations, and risk being exposed to unforeseen cost through infrastructure changes. Such operators will be funded by NR in accordance with Part G of the Network Code, with the terms of such funding set out in commercial agreements between NR and each individual TOC. These agreements will compensate, assist and protect operators in delivering the necessary changes by covering any additional leasing, maintenance and operating costs arising from fitment and use of on-board ETCS equipment. The agreement will compensate, assist and protect the TOC in determining the detail associated with NR Route infrastructure deployment.

3.5 New (from 2015) Non-franchised Operators (Open Access)

- 3.5.1 It can be expected that these TOCs will have factored their projected ETCS baseline cost/spending into their business plans, and as such will:
- a) Be aware of their exposure to the ETCS Programme on routes over which they operate.
 - b) Understand their obligations to operate vehicles fitted with on-board ETCS equipment to contribute to the delivery of NR's plans.
 - c) Have negotiated with NR as part of the development of their business model, track access contract, and/or other commercial agreements, identifying how any extra costs associated with fitting and operating on-board ETCS equipment are to be funded.
 - d) Have arrangements in place to ensure that rolling stock has operational on-board ETCS equipment ready for when the ETCS trackside is commissioned.
 - e) Not need to participate in the First in Class ETCS on-board equipment procurement if their operation solely requires the use of new-build rolling stock.
 - f) Not expect compensation from NR under the terms of Part G of the Network Code unless this has been agreed as part of the commercial negotiations. The TOC may have contractual clauses that restrict its ability to claim costs under any subsequent Network Change.
- 3.5.2 New Open Access operators will commence operations after some of the principles of ETCS have been agreed, and included in legislation.

Part 4 Commercial Risks

- 4.1 RDG has developed and maintains a TOC risk register and mitigation tracker for ETCS, in the style of a Risks, Assumptions, Issues and Dependencies (RAID) log. This format was adopted to align with the other Digital Railway Programme risk logs. The RAID log is reviewed bi-annually, in conjunction with TOCs.
- 4.2 The RAID log has been uploaded to NR's Active Risk Management (ARM) database, alongside similar risk logs from the Freight Group and National Joint Rolling Stock Company Project (NJRP).
- 4.3 The top risks from this process are examined and refined on a periodic basis by the groups within the RDG Governance architecture that supports the Digital Railway activity. Risks that are deemed to be commercial are reviewed by the RDG Digital Railway Commercial Group.

Part 5 Change Control and Stage-Gates

5.1 Change Control

- 5.1.1 The Digital Railway Programme approved a formal Change Control process in early 2015, to ensure that there is a properly defined process for approving changes. The RDG Digital Railway Commercial Group considers such formal requests as part of its regular business, and ensures that other RDG groups or individuals, including the views of affected TOC are considered before responding.
- 5.1.2 The Digital Railway Programme Management Office (PMO) manages the programme activity for the industry which includes updated the Change Control process.

5.2 Stage-gates

- 5.2.1 An ETCS Stage-Gate Principles document, approved in early 2016, helps to ensure each step of the Programme is delivered on time.
- 5.2.2 Formal decision points and an accompanying methodology are used to review actual and anticipated progress. They provide a firm, collaborative and transparent foundation for the Programme to progress past key, defined, milestones.
- 5.2.3 Depending on the part of the Programme under review, the key principles of the process are:
 - a) Stage-gates do not get passed unless all agree and all conditions are met.
 - b) The only possible outcomes are 'Go' or 'No-go' – conditional passage through a stage-gate is not part of the process.
 - c) The process is transparent, so all parties know that the activities have been completed satisfactorily to pass the stage-gate and that sufficient preparation for the next stage is in place.
 - d) All relevant industry stakeholders are involved, to form a final view on whether a stage-gate should be passed.
 - e) There is an escalation process in the event of disagreement between parties.
 - f) Whilst the final view might be taken by just a handful of accountable individuals, there are clear links from all the relevant meetings, so that the eventual decision can be supported by any stakeholder.

- 5.2.4 The above applies to the expected ETCS Programme Stage-Gate process. RDG and TOCs will need to consider how the principles of this process will be applied to the Local Infrastructure Plans being developed.
- 5.2.5 The PMO will provide an improved management of the programme which will include the required stage-gates.

Part 6 Network Change

- 6.1.1 Two types of Network Change documents are planned to be used as part of the ETCS work: a Notice of Intended Scope (under the Network Code G5 Complex Projects Procedure) and local Route-based G1 notices, to support Local Infrastructure Plans.
- 6.1.2 To provide context to the Digital Railway Programme, NR issued a Notice of Intended Scope (NoIS) on 8th December 2014. The purpose and content of this document has already been covered. This document was issued to all access beneficiaries, including all TOCs. This document is yet to become established.
- 6.1.3 Building on the 2014 NoIS, a Digital Railway NoIS was issued, covering not just ETCS but also other technologies that will complement it.
- 6.1.4 The Route-based G1 Network Change documents contain details of each Route deployment and the options that were considered and excluded from the ETCS scheme proposed. Where a TOC has agreed to the scope of the NoIS, it will not be able to object to those parts of the G1 Notices that conform to that scope.
- 6.1.5 Throughout early 2015, the ATOC ETCS Commercial Group (now RDG Digital Railway Commercial Group) developed a template response to the 2014 NoIS. The response was approved on 6 May 2014. Concerns that TOCs/FOCs had expressed over the NoIS were included as an itemised appendix. Individual TOCs could adopt or adapt the template as part of their own response to the consultation. Responses to the consultation were made by 22 May 2015.
- 6.1.6 The template response did not accept the NoIS at the time, but indicated that each TOCs would be able to confirm acceptance of it bi-laterally to NR, subject to the completion of an agreed stage-gate process and the satisfactory answering of the queries itemised in the appendices.
- 6.1.7 A new group was started in 2016 to consider the DR NoIS but is currently on hold due to changes with the proposed roll-out plan.

Part 7 Commercial Agreements between NR and TOCs

- 7.1.1 Commercial agreements are recommended to be in place between NR and TOCs to allow the recovery of extra costs (where appropriate) associated with the introduction of ETCS.
- 7.1.2 A template document was developed and agreed by the ATOC ETCS Commercial Group (now RDG DRCG) and NR in 2014 to provide a level of consistency between TOCs on the principles and content of these commercial agreements. The template covers the anticipated costs associated with the First in Class (FiC) procurements (see below) and is known as the 'TOC bi-lateral'. The template is capable of being used as the basis for an agreement between a TOC and NR.

- 7.1.3 A second, more comprehensive, template document was developed. This is known as a Compensation Framework Agreement (CFA) and will follow the same principles as the bi-lateral. It will also extend the scope to include the complete FiC fitment and testing process, including the actual release of vehicles and their subsequent return to the TOC. The CFA is also intended to be capable of being used as the basis for an agreement between a TOC and NR, and to supersede any agreements already reached using the TOC bi-lateral as a base.
- 7.1.4 The existence of a template document does not imply that any TOC has the right to claim compensation for any activity. The documents are designed to be used as the basis for agreement between TOCs and NR and it will be that agreement that will determine which costs are recoverable. The agreement will also confirm the extent to which evidence of additional costs is required.
- 7.1.5 A core principle for cost recovery is that the activity in question, or the resources for carrying out that activity, must be additional to the normal work of the TOC. This would normally preclude any claim for the recovery of management salaries, unless the costs can be shown to be additional to the business.
- 7.1.6 The scope of CFA will not include the design, supply and fitment of ETCS equipment to the remainder of the rolling stock vehicles in any fleet type.

Part 8 Rolling Stock Fitment

- 8.1.1 ETCS roll-out will require trains operating on ETCS infrastructure to be fitted with ETCS on-board equipment. For new-build rolling stock classes, the cost of providing on-board ETCS equipment will be integral to the provision of the asset and can be included into any franchise bid (or business model, for Open Access operators). The Technical Specification for Interoperability (TSI) requires new trains to be fitted with ETCS (or to be ETCS ready) at the latest ETCS Baseline unless it can be proved that the train will never encounter the system.
- 8.1.2 Existing rolling stock classes will require retro-fitment with on-board ETCS equipment. The industry principle is that, for franchised TOCs, this should be funded as part of the letting of the next franchise. Consequently, it will be necessary for franchise bidders to include the likely costs for any fleet fitments that are required in the Invitation to Tender (ITT). This has led to a project for the First in Class (FiC) procurement for affected traction and rolling stock classes that will be deployed on ETCS fitted infrastructure up to 2025. However, the new approach to the roll-out plan and an increase in new trains has reduced the need for the FiC programme.
- 8.1.3 The FiC tendering and process provides one train/unit fitted with an agreed design fully tested and authorised for use. The results of the FiC tendering and process can then inform future franchise bidders of the time and cost implications to fit fleets, with costs forming part of an addition to the Rolling Stock Company (RoSCo) leasing arrangements. In many cases, new trains are the preferred option. The process can also inform

- 8.1.4 The Freight Group is managing a FiC process and subsequent fitment for freight locomotives. For most of the national passenger rolling stock fleet, FiC is being undertaken by the National Joint RoSCo Project (NJRP) (on behalf of the three main RoSCos - Porterbrook, Eversholt and Angel). The lead Consultancy supporting the NJRP has agreed a parallel approach with Voyager Leasing Ltd.; this project is known as the Voyager Leasing ETCS Project (VLEP) and will be run in a similar way to the NJRP. The NJRP will directly provide services to assist Rolling Stock Financiers, such as McQuarrie.
- 8.1.5 A detailed procurement exercise has been run for each traction and rolling stock class and will result in a contract being placed by the RoSCo(s) (or by NR on behalf of the Freight Group) with the preferred supplier.
- 8.1.6 Full TOC participation in stages of the FiC is encouraged and applies to all users of the rolling stock class under review. This is important to ensure that the end product and fitment is deemed suitable by the TOCs who will use it. A lead TOC provides the unit upon which the FiC installation is carried out. The lead and affected TOCs have a say in the procurements and design.
- 8.1.7 Retro-fitment of on-board ETCS equipment will require rolling stock to be released from service. Current indications suggest that this down time could be anything up to three months in duration FiC fitment, although economies of scale should see fleet fitment down time of the order of one week for each train on average. It will be for TOCs themselves to manage release from service and it is likely to be a franchise commitment.
- 8.1.8 As part of a FiC contract, lead TOCs will incur some costs or may agree to provide facilities or activities to the supplier to speed up fitment. Although these will vary from TOC to TOC, the table below provides examples and guidance on where the associated costs might be recovered (if applicable):

Facility/Activity	Existing Franchise TOC	Franchised TOCs post-franchise change or in Direct Award	Existing Open-Access TOCs	New Open-Access TOCs
Use of home depot, sidings and facilities for FiC fitment and/or testing	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier, subject to agreement that TOC is entitled to participate in FiC
Use of traincrew and maintenance staff for FiC vehicle moves and associated general fault finding / maintenance	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier, subject to agreement that TOC is entitled to participate in FiC
Engineering change production and approval	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund

Facility/Activity	Existing Franchise TOC	Franchised TOCs post-franchise change or in Direct Award	Existing Open-Access TOCs	New Open-Access TOCs
Spares holding and timely return of faulty parts	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Maintenance of the ETCS equipment on the FiC unit	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Spares holding and timely return of faulty parts	Commercial agreement with NR	Contract with RoSCo or FiC supplier	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Maintenance of the ETCS equipment on the FiC unit	Commercial agreement with NR	Contract with RoSCo or FiC supplier	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Cab reversion	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier	Contract with FiC supplier, subject to agreement that TOC is entitled to participate in FiC
Traincrew / maintenance training or briefing for non-reverted cabs	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Update of any affected operational and maintenance documentation	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund
Update of Safety Management System (SMS) to reflect changes	Commercial agreement with NR	TOC to self-fund if covered by franchising agreement	Commercial agreement with NR	Commercial agreement with NR or TOC to self-fund

Part 9 Changes to Track Access Contracts

- 9.1.1 Some potential changes to Track Access Contracts (TAC) were identified by Network Rail, which would need to be agreed by the Office of Rail and Road (ORR) and thus form a part of the ORR template. After discussion at DRSG, it was agreed that these changes would not take place, as the franchise arrangements covered the potential risk of duplicate claims for costs.

Part 10 Delay Attribution & Schedule 8 ‘Transfer’

- 10.1.1 The introduction of ETCS is expected to transfer some delay attributions from being a Network Rail cause to being a TOC / FOC cause. The detail of this attribution shift is not yet understood, but could result in there being inadequate or no revision of benchmarks prior to ETCS implementation. A change mechanism within schedule 8 is being proposed by the RDG Policy Team to cover large shifts in delay attribution across Control Period 6.
- 10.1.2 An ETCS Incident Resolution Guide (IRG) is being prepared under the auspices of the Delay Attribution Board, at the request of both Thameslink Project and RDG. The IRG is due to be in place at the end of 2017 ready for Thameslink. Some additional delay codes are to be put in place in mid-2017.
- 10.1.3 ETCS Programme’s Performance Group has developed a high level delay calculator forecasting tool, using Microsoft Excel, designed to provide a quick assessment of the impact ETCS will have on performance. This was developed to help TOC/FOC and NR performance teams with the yearly performance forecasting process, but is also suitable for use as part of the development of Local Infrastructure Plans or by franchise bid teams. Further detail can be found in the RDG’s Guidance Note on Managing ETCS Performance.

Part 11 Training

- 11.1.1 TOC/FOC staff will require training in the operation and maintenance of ETCS on-board equipment (e.g. drivers, train preparers, despatch, maintenance staff) or in understanding how ETCS will change the way that railways operate (controllers and performance analysts). The Digital Railway Programme is developing toolkits to help TOCs/FOCs to deliver such training efficiently. TOCs/FOCs will be able to adapt these toolkits to suit their own needs. These training frameworks will minimise TOC/FOC development costs and provide consistency of application across the industry. It will be the responsibility of individual TOCs/FOCs to ensure sufficient numbers of staff are trained to an appropriate level to support the introduction of ETCS.
- 11.1.2 It is expected that the funding for the provision of such training (and associated changes to Safety Management Systems and the development of suitable Competency Management Systems) will be in accordance with the commercial principles already described. So, for example, where a TOC/FOC is required to fund fleet fitment as part of its franchise, then training costs associated with fleet fitment will form a part of that funding cost. The sole exception to this would be the provision of training to Lead TOC/FOC traction and rolling stock personnel, sufficient to support a FiC contract.

Part 12 Defect Recording Analysis and Corrective Action System (DRACAS)

- 12.1.1 The rail industry intends to introduce a Defect Recording Analysis and Corrective Action System (DRACAS). This will allow ETCS faults and failures to be recorded and the required corrective actions to be identified, both from an industry perspective and for individual applications. This is essential to manage the performance risk of ETCS introduction. A DRACAS project has been established to deliver this. It is intended that DRACAS will comprise of a set of business processes including industry standard(s) supported by an IT system.

- 12.1.2 DR has agreed to develop a DRACAS solution for Control Command and Signalling Systems. The solution will need to be in place for the first wide-scale ETCS deployment.
- 12.1.3 It is intended that the DRACAS IT system will be fed electronically with failure and performance data by existing asset (infrastructure and fleet) management systems. The DRACAS will use this data to create information so that faults can be fixed and faulting processes can be more efficient. The industry can also learn through pattern analysis.
- 12.1.4 Suppliers of ETCS equipment are expected to provide a system that will produce data for the DRACAS, using the agreed DRACAS interface specification.
- 12.1.5 The costs and benefits of the DRACAS with respect to TOCs/FOCs are being calculated. The specifications for data requirements and/or changes to existing systems will need to be developed.

{GN ends}