
HIGH SPEED 1
HS1 RAILWAY SYSTEMS CODE

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PART 1 - GENERAL PROVISIONS

1. DEFINITIONS IN PART 1

- 1.1 The definitions set out in clause 5 shall apply in this Part 1 so far as relevant, except that "User" means a participant in the Railway Industry who has an agreement with any Systems Owner (not just HS1 Ltd) for use of a Railway Code System.

2. AIMS

- 2.1 This Code is prepared by HS1 Ltd to set out arrangements for obtaining access to, using, managing and developing certain computer systems. In doing so, it aims to:-
- 2.1.1 make clear the responsibilities that exist between Systems Owners and Users of data and information systems in the Railway Industry;
 - 2.1.2 lay upon all Systems Owners and their Users the disciplines of good practice in managing their relationships in the systems area;
 - 2.1.3 provide for wide access to data whilst protecting confidentiality and encourage Systems Owners and Users to improve the quality of data used in the Systems;
 - 2.1.4 provide to new owners and new entrants clear guidance on the computer systems that are necessary or expedient in order to operate trains over HS1, and show them a practical way of working that supports the development and change of systems to the general advantage of the Railway Industry;
 - 2.1.5 encourage Systems Owners to garner support for changes in functionality and operational cost so that the changes do not become obstacles to progress or good commercial relationships;
 - 2.1.6 allow Users to be confident that changes in function and cost will not be forced upon them without consultation or voting backed by an appeal process;
 - 2.1.7 generally protect and balance the rights of Systems Owners and Users in relation to the Railway Code Systems;
 - 2.1.8 provide for fair, competitive and non-discriminatory behaviour in the systems area; and provide Principles to be applied by Systems Owners other than HS1 Ltd.

3. APPLICATION

- 3.1 Part 1 of this Code (General Provisions) shall be followed by all those who own, use or modify Railway Code Systems. Part 2 of this Code (HS1 Specific Provisions) shall be followed by HS1 Ltd and any Affiliate of HS1 Ltd, Users, and each other person who uses or modifies Railway Code Systems which are owned by HS1 Ltd. HS1 Ltd shall use reasonable endeavours to procure that any Affiliate complies with this Code insofar as that Affiliate operates, or is involved in the operation of HS1.

4. PRINCIPLES

- 4.1 Each Systems Owner is responsible for making its own arrangements for the management, maintenance and development of its Railway Code Systems.
- 4.2 The Systems Owner shall manage its Railway Code Systems and changes to them by processes which include appropriate consultation with Users and shall strive for consensus.
- 4.3 In the development of a Railway Code System the Systems Owner shall have regard to requests made by Users, recognising the importance of the System to them and the financial consequences to them of imposing or denying change.
- 4.4 The Systems Owner is responsible for arranging for the cost of development. The Systems Owner may agree with Users for them to pay specific contributions, or may itself bear the cost (or some of it) and recoup its outlay through charges for use of the Railway Code System. Where practicable, Users who do not benefit from a particular development should not have to pay for it. Costs of assessment of change proposals shall also be shared having regard to the benefit and costs of the proposed change to the assessing party.
- 4.5 In respect of any Competent Authority Change, Systems Owners and Users shall bear their own costs.
- 4.6 The Systems Owner and Users shall have regard to and comply with applicable safety standards. Compliance with HS1 Standards and other applicable safety standards takes precedence over compliance with this Code.
- 4.7 Systems Owners and Users shall enter into contracts providing reasonable terms for appropriate use of or access to data from Railway Code Systems, including terms relating to payment for access to data, access to or use of services and for maintenance and development. In the execution of contracts, Systems Owners shall not discriminate unduly between participants in the Railway Industry.
- 4.8 The content and range of Railway Code Systems will not remain static. The Systems Owners shall manage them in a positive and responsive way. Amongst other things, Systems Owners are encouraged to develop, as soon as is reasonable and financially practicable, historically shared function systems into separate systems that communicate with Users through published and defined "message pair" interfaces.
- 4.9 New Railway Code Systems shall be fully documented. In the development of the Railway Code Systems, Systems Owners and Users shall strive to achieve data integrity and protection of confidential data.
- 4.10 Systems Owners are encouraged to develop user documentation within a reasonable time for provision to Users where there is an existing Railway Code System without adequate user documentation.
- 4.11 Systems Owners shall ensure that any arrangements made in accordance with the principles of the Code are consistent with the aims of the Code.
- 4.12 Systems Owners shall inform Users that this Code applies to their Railway Code Systems. Contracts relating to Railway Code Systems shall state that Part 1 of this Code applies to those systems, and relevant contracts entered into by HS1 Ltd shall state that the entire Code applies.

- 4.13 Each Systems Owner shall provide information for its Railway Code Systems as reasonably required by HS1 Ltd for the preparation and maintenance of an up-to-date Catalogue. Information to update the Catalogue will not normally be required more frequently than once in every calendar quarter.
- 4.14 Any dispute arising between a Systems Owner and a User, or arising between Users, relating to the implementation of these Principles or the management or development of Railway Code Systems may be referred by the disputing parties for resolution in accordance with clause 21.
- 4.15 Any dispute arising between Systems Owners (whether acting as such or in any other capacity) relating to these Principles or their implementation (including contents of the Catalogue) may be referred by the disputing parties for resolution in accordance with clause 21.
- 4.16 Part 1 of this Code may be amended by the agreement of all the Systems Owners or at the reasonable requirement of HS1 Ltd. Users wishing for changes to Part 1 of the Code are encouraged to discuss their wishes with HS1 Ltd.
- 4.17 HS1 Ltd shall consult with the members of the Railway Code Systems Group on proposed changes to Part 1 of this Code. HS1 Ltd shall give all members written notice of the proposed change and shall allow at least 28 days for comment. If any member disagrees with the implementation of the change, the member may refer the matter as a dispute for resolution in accordance with the Disputes Resolution Procedure.

PART 2 - HS1 SPECIFIC PROVISIONS

5. DEFINITIONS AND INTERPRETATION

Access Agreement	has the meaning ascribed to it in Part A of the HS1 Network Code;
Advisory Panel	means the panel of experts convened by HS1 Ltd to consider one or more Requests for Systems Change and to advise HS1 Ltd whether to approve the Request(s) for Systems Change;
Affiliate	has the meaning ascribed to the term "affiliate" in Part C of the HS1 Network Code;
Catalogue	means the document maintained by HS1 Ltd in accordance with clause 7 of this Code;
Code	means this HS1 Railway Systems Code as may be amended from time to time;
Competent Authority	has the meaning ascribed to it in Part A of the HS1 Network Code;
Competent Authority Change	means a change to a Railway Code System to ensure that such Railway Code System complies with any law, mandatory requirements, or direction of a Competent Authority;

Dot Release	means a release of software to:- <ul style="list-style-type: none"> (i) correct a failure of a Railway Code System to comply with specification; or (ii) remedy an operational failure; or (iii) implement a minor change or enhancement, that in achieving its aims changes the look, feel, functioning or external interfaces of a system in a way that is or may become apparent to a User of that system but for which the User will not require training;
Double Dot Release	means a modification to a Railway Code System which does not change the look, feel, functioning or external interfaces of a system in a way that is apparent to a User;
Emergency Change	means a change to a Railway Code System to ensure that the Railway Code System is able to meet unforeseen changes in operational circumstances, including without limitation those relating to the safety and security of the Railway Industry;
Expedient System	means a computer application (not being an operating system, proprietary database, software package or other general- purpose substrate of an application) or Interface Specification of which HS1 Ltd (or any Affiliate or Related Undertaking) is the owner and the use of which is expedient (but not necessary) for or in connection with the operation of trains on or access rights to HS1;
HS1	has the meaning ascribed to it in Part A of the HS1 Network Code;
HS1 Ltd	has the meaning ascribed to it in Part A of the HS1 Network Code;
HS1 Network Code	means the document entitled "HS1 Network Code" and previously known as the "CTRL Track Access Conditions" as may be amended from time to time;
HS1 Standards	has the meaning ascribed to it in Part A of the HS1 Network Code;
Integer Release	means an enhanced or significantly modified version of a Railway Code System issued or implemented by HS1 Ltd as the current fully supported operational release and which then replaces the version previously in use;
Interface Specification	means a statement of the structure of a message and the means of exchanging it between two computer systems;
Necessary System	means a computer application (not being an operating system, proprietary database, software package or other general- purpose substrate of an application) or Interface

	Specification, whether owned by HS1 Ltd or not, use of which is necessary for or in connection with the operation of trains on or access to HS1;
Principles	means the principles set out in clause 4 of this Code;
Project Manager	means the manager within HS1 Ltd responsible for the management of a project to consider and to make changes to a Railway Code System;
Railway Code System	means a Necessary System or an Expedient System;
Railway Code Systems Group	means all Systems Owners and contracted Users of Railway Code Systems;
Railway Industry	means all persons concerned in the course of business in any way with operating trains on HS1 or maintaining HS1;
Related Undertaking	means in relation to HS1 Ltd, any undertaking in which HS1 Ltd has a participating interest (and for this purpose "undertaking" has the meaning given by section 1161 of the Companies Act 2006);
Release Development Plan	means a document issued by HS1 Ltd that describes a plan for developing and implementing a Dot Release or Integer Release of one or more of its Railway Code Systems;
Request for Systems Change	means a request for change to one or more Railway Code Systems made in accordance with this Code;
Safety Management System	has the meaning ascribed to it in the Railways and Other Guided Transport Systems (Safety) Regulations 2006;
Sponsor	means one or more Users making a Request for Systems Change or, in respect of any Request initiated by HS1 Ltd and included in a System Release Proposal, HS1 Ltd;
System Release Proposal	means a statement issued by HS1 Ltd that describes the proposed content of one or more Dot Release or Integer Releases or proposed Interface Specification;
Systems Change	means a change, other than an Emergency Change, to a Railway Code System which leads to a Dot Release or an Integer Release;
Systems Owner	means a person either owning the intellectual property in a Railway Code System or controlling other than collectively the right to modify it or having the exclusive right to licence it;
User	means a participant in the Railway Industry having (or entitled to have) a contract with HS1 Ltd, for use of a Railway Code System;

User Group means HS1 Ltd and Users of a Railway Code System or of a number of Railway Code Systems.

The rules of interpretation in the HS1 Network Code shall have effect in this Code save that for the purposes of Condition 1.1(h) (Conflict) of Part A of the HS1 Network Code this Code shall have precedence over the HS1 Network Code.

6. IDENTIFICATION OF RAILWAY CODE SYSTEMS

6.1 HS1 Ltd shall at least once in each year review computer systems relevant to the Railway Industry, including Railway Code Systems for the time being. Following the review, HS1 Ltd shall publish its proposals for:-

- 6.1.1 designating a system newly as a Railway Code System;
- 6.1.2 designating a Railway Code System as no longer being a Railway Code System;
and
- 6.1.3 changing the designation of a system between the categories of Necessary System and Expedient System.

6.2 HS1 Ltd shall consult on the proposal with the Railway Code Systems Group and take account of comments it receives. If still so minded after taking account of any comments, HS1 Ltd may proceed so to designate the system.

7. CATALOGUE OF RAILWAY CODE SYSTEMS

7.1 HS1 Ltd shall maintain the Catalogue.

7.2 The Catalogue shall state for each Railway Code System:-

- 7.2.1 its title;
- 7.2.2 the name of the Systems Owner,
- 7.2.3 whether it is a Necessary System or an Expedient System;
- 7.2.4 its main functions and features;
- 7.2.5 its relevance to the Railway Industry;
- 7.2.6 a summary of current System Release Proposals and Release Development Plans relating to it;
- 7.2.7 an indication of relevant contract provisions;
- 7.2.8 categories of data to be exchanged using the Railway Code System;
- 7.2.9 whether it is a safety-related Railway Code System;
- 7.2.10 a list of Double Dot Releases (identified by system, number and date only).

7.3 A copy of the up-to-date Catalogue shall be kept at HS1 Ltd's registered office and shall be available for inspection during normal working hours. The updated version may take the form of a supplement to the preceding version.

- 7.4 HS1 Ltd shall make available on request one copy of the Catalogue and each supplement free of charge to each User.
- 7.5 HS1 Ltd shall supply a copy of the Catalogue within a reasonable time to any person on request and payment of a reasonable charge.
- 7.6 The Catalogue shall state whether use of each Railway Code System (or part of it) is necessary for any category of transaction between HS1 Ltd and any Users. The Catalogue shall also state, so far as has been notified to HS1 Ltd, whether use is necessary for any category of transaction between Users or between Users and other Systems Owners. HS1 Ltd shall strive to make the statements precise and to reduce the scope of necessary use of particular systems to a reasonable minimum.

8. ANNUAL PREVIEW

- 8.1 HS1 Ltd shall each year send to Users a preview of HS1 Ltd's targets for development of or change to Railway Code Systems and changes to the Catalogue for the following year.
- 8.2 HS1 Ltd shall aim to issue the preview at about the same time each year, for example, during the second quarter of the financial year.

9. CONTRACTS

- 9.1 HS1 Ltd shall provide for every User and every beneficiary of an Access Agreement to be able to obtain a licence and/or a contract for computer services relating to every Railway Code System owned by HS1 Ltd which that person shall use or wishes to use in the course of its business. The licence or contract shall be on reasonable terms (including terms as to charges) having regard to the nature and condition of the Railway Code System in question, the use for which that person wishes to take a licence or contract for services, the avoidance of unfair cross-subsidy among Users and all other relevant considerations.
- 9.2 HS1 Ltd shall grant licences and contracts for computer services on terms that are reasonable and do not unduly discriminate between different members of the Railway Industry.
- 9.3 A User or a beneficiary of an Access Agreement dissatisfied with the terms of a licence or contract for computer services offered by HS1 Ltd, or with a refusal by HS1 Ltd to offer a contract or delay by HS1 Ltd in entering into a contract, may proceed to dispute resolution under this Code whether or not that person is a User.

10. MANAGEMENT

- 10.1 HS1 Ltd shall manage the Railway Code Systems under its control in accordance with good software lifecycle management practices.
- 10.2 Where a Railway Code System exists without adequate user documentation, this includes the obligation to develop user documentation within a reasonable time and in consultation with Users, and to provide it to Users at a reasonable charge.
- 10.3 HS1 Ltd shall establish a User Group for each Railway Code System or family of systems to provide a forum for discussion and to facilitate communication between HS1 Ltd and Users. HS1 Ltd is not obliged to fund ongoing activities of User Groups and need not take responsibility for their management. Users are not obliged to take part in them.

11. SYSTEMS CHANGES

- 11.1 The remainder of the provisions of this Code applies to Systems Changes. They do not apply to Double Dot Releases (which HS1 Ltd alone shall manage). If changes are not made in accordance with this Code, or the implementation of a change does not proceed for any reason, HS1 Ltd shall bear any costs other than those authorised by the Code to be passed on to Users.
- 11.2 Any User of a Railway Code System may request a Systems Change. Users may join together to make a request.
- 11.3 Requests for Systems Change shall be relevant to the needs of the Railway Industry or any participant in it.
- 11.4 A Request for Systems Change shall:
- 11.4.1 state the purpose, scope of and need for the change;
 - 11.4.2 state the Sponsor's assessment of its importance to the Railway Industry and its priority relative to other known requests for change; and
 - 11.4.3 recommend a timetable for its implementation.
- 11.5 So far as is possible a Request for Systems Change should show that the requested change:-
- 11.5.1 improves or does not diminish safety; and
 - 11.5.2 does not impose cost or risk on another, or that all so affected are likely to consent to the change; or
 - 11.5.3 that an increased cost or risk is counterbalanced by a significant benefit to the Railway Industry or a member of it; or
 - 11.5.4 that the Sponsor will adequately compensate those affected and not consenting.
- 11.6 The Sponsor shall send the Request for Systems Change to HS1 Ltd. HS1 Ltd shall acknowledge receipt within 21 days of receiving it.
- 11.7 HS1 Ltd may stipulate the form and manner in which Requests for Systems Change may be made and may decline to deal with requests not substantially conforming in form or manner.
- 11.8 If the Sponsor seeks confidentiality in relation to the Request, it shall state so clearly in the Request. HS1 Ltd may decline to proceed with a Request if it considers a requirement for confidentiality to be unrealistic or to impose an unreasonable or inappropriate burden on any person.
- 11.9 HS1 Ltd is entitled on request to recover from the Sponsor all of HS1 Ltd's costs of evaluating a request, whether or not the request is included in a System Release Proposal.
- 11.10 Any affected member of the Railway Code Systems Group is entitled on request to recover from HS1 Ltd or the Sponsor (whichever has proposed or made the relevant Request for the relevant Systems Change) all of its costs of evaluating a Request, whether or not the Request is included in a System Release Proposal.

12. COMPETENT AUTHORITY CHANGE

- 12.1 Where HS1 Ltd is required (other than at its own request or instigation) to make a Competent Authority Change:-
- 12.1.1 HS1 Ltd shall, except to the extent that the relevant change of law or direction otherwise requires, comply with the change procedure;
 - 12.1.2 to the extent that HS1 Ltd does not follow the change procedure, it shall make the change in a reasonable way, having regard to the nature of the change of law or direction;
 - 12.1.3 each member of the Railway Code Systems Group shall make such alterations (for example, to railway vehicles, equipment or procedures) as are necessary to accommodate that change; and
 - 12.1.4 each member of the Railway Code Systems Group shall bear its own costs or losses in connection with or consequential to the Competent Authority Change.

13. SYSTEM RELEASE PROPOSAL

- 13.1 Within a reasonable time after receiving a Request for Systems Change, HS1 Ltd shall notify the Sponsor that it refuses the request or include the Request for Systems Change in a System Release Proposal. HS1 Ltd is responsible for ensuring that each Request for Systems Change is assessed fairly for inclusion in a System Release Proposal and for considering whether the Request complies with or satisfies the principles of this Code. HS1 Ltd may consolidate any number of Requests into a single System Release Proposal. HS1 Ltd may include any of its own requests in the Proposal, and stands as Sponsor for those requests.
- 13.2 HS1 Ltd shall appoint and publish the name of a Project Manager for each System Release Proposal and consequent development and implementation. The Project Manager is responsible for managing the Code processes and arranging appropriate meetings of the Advisory Panel before deciding on the final text of the System Release Proposal for publication to the potentially affected members of Railway Code Systems Group. The Project Manager is responsible for signing-off the final text of the draft System Release Proposal prior to consultation.
- 13.3 HS1 Ltd shall use its best endeavours to inform all Users of the membership of the Advisory Panel which will advise on the System Release Proposal.
- 13.4 HS1 Ltd shall exercise proper professional care in preparing a System Release Proposal. The Project Manager is responsible for ensuring that changes to the Railway Code Systems he is managing are properly designed, developed using a sound methodology, fully tested and supported with adequate documentation and training.
- 13.5 The System Release Proposal shall state clearly:-
- 13.5.1 the effect of the proposed changes on the functionality, look, feel, interfaces, operational requirements (including hardware and system software) and safety consequences of Railway Code Systems, and whether (if implemented) it is likely to constitute a Dot Release or an Integer Release;
 - 13.5.2 when and how the changes are proposed to be effected;
 - 13.5.3 an initial estimate of implementation costs to Users and any expected changes in

usage charges or licence fees (or other method of financing development) that will result;

- 13.5.4 HS1 Ltd's assessment of the likely impact of the change on safety and on the safety certificates held by affected Users (but the assessment does not relieve Users from observing or discharging any safety obligations or responsibilities that lie on them. An organisation is responsible for its own Safety Management System);
- 13.5.5 likely training consequences of the changes; and
- 13.5.6 the origin of the proposed changes and their rationale.

It shall also describe changes that have been requested but which HS1 Ltd has chosen not to implement, with brief reasons for their exclusion.

- 13.6 A System Release Proposal may exclude reference to changes that are being made in commercial confidence on behalf of HS1 Ltd or any User, provided the change will be transparent to all other Users or does not affect functionality of a Railway Code System available to them. However Users shall be notified that such change has been made.
- 13.7 The Project Manager shall take account of comments received on the System Release Proposal during consultation, ask the Advisory Panel to advise as appropriate and take into account the conclusions of the Advisory Panel.
- 13.8 Where it is not proposed to incorporate a significant comment received during the consultation process in any final draft of a System Release Proposal, the Project Manager shall advise the member which submitted the comment of the reasons for its omission. All other affected members of the Railway Code Systems Group shall be notified of such rejection.
- 13.9 Where significant changes are made to a System Release Proposal during development, the Project Manager shall consult the Advisory Panel and then circulate any amendments to members of the Railway Code Systems Group. If a Request for Systems Change is rejected by HS1 Ltd and recommended for abandonment, the Project Manager shall notify the Sponsor of the decision and supply a written explanation.
- 13.10 HS1 Ltd may from time to time publish its intended dates for System Release Proposals and may set and shall publish cut-off dates by which requests shall be received for inclusion in the next System Release Proposal.
- 13.11 Normally not less than one System Release Proposal for Integer Releases shall be prepared per Railway Code System or group of systems per year.

14. CONSULTATION

- 14.1 Members of the Railway Code Systems Group are entitled to be consulted on a System Release Proposal if such System Release Proposal has a financial, safety or operational or known potential financial, safety or operational significance to them. The Project Manager shall circulate the System Release Proposal to all those in the Railway Code Systems Group who in the Project Manager's opinion may be affected for noting and comment.
- 14.2 HS1 Ltd shall maintain a register of addresses and agreed single points of contact for each member of the Railway Code Systems Group. Each member shall keep HS1 Ltd informed

of any changes of address or contact.

- 14.3 HS1 Ltd shall provide one copy of each System Release Proposal free of charge to each affected member of the Railway Code Systems Group. HS1 Ltd shall at the same time provide other members with a brief summary of its contents, and provide them one free copy of the full System Release Proposal on request. Further copies shall be supplied on request to any person at a reasonable charge.
- 14.4 A reasonable time (normally a minimum of eight weeks for an Integer Release and four weeks for a Dot Release) shall be allowed for comments to be made to HS1 Ltd. The last date for comments shall be stated in the System Release Proposal and the summary. All members of the Railway Code Systems Group are deemed to accept the System Release Proposal and the implications of implementing it (as apparent from the System Release Proposal to a reasonably informed User) except to the extent that each member comments otherwise within that time.
- 14.5 HS1 Ltd is responsible for taking fair account of the received comments. Where appropriate, HS1 Ltd will undertake further consultation with Users.

15. RELEASE DEVELOPMENT PLAN

- 15.1 When it appears to HS1 Ltd that there is general or sufficient acceptance of a System Release Proposal and HS1 Ltd is satisfied that all safety issues have been duly resolved, it shall prepare and publish a Release Development Plan for the relevant Railway Code System. When it appears to HS1 Ltd that there is not general or sufficient acceptance of a System Release Proposal, it shall inform Users accordingly.
- 15.2 The Release Development Plan shall state the intended content of the release and advise all members of the Railway Code Systems Group affected by the System Release Proposal of their responsibilities during and after implementation and the steps that they shall take to prepare (by training, acquiring equipment or in other ways) for the System Release Proposal. It shall also specify:-
 - 15.2.1 the operational, functional and any interface changes that the release will bring about;
 - 15.2.2 key stages of the development and their dates;
 - 15.2.3 target dates for release and implementation of the developed system;
 - 15.2.4 dates and resources needed of Users for testing, training and implementation (and if no such resources are required, then stating so);
 - 15.2.5 information about the costs (or likely costs) of development and implementation which are to be shared, and about expected changes in charges, to allow Users to budget for the financial effects on them of the change. Such information shall comprise the initial estimated cost of development and the proportion to be borne by Users;
 - 15.2.6 HS1 Ltd's opinion of the likely effect of the development on the designation of any Systems as Necessary or Expedient Systems; and
 - 15.2.7 contingency plans.

- 15.3 A reasonable time (normally a minimum of 8 weeks for an Integer Release and 4 weeks for a Dot Release) shall be allowed between the date of issue of the Release Development Plan and the target implementation date.
- 15.4 Members of the Railway Code Systems Group not affected by the Release shall be advised of the contents of the Dot Release or Integer Release and the target date for implementation.
- 15.5 HS1 Ltd shall publish amendments to the Release Development Plan from time to time if there are significant changes to it. Such amendments shall include information on any significant or material changes in costs of development and the effect of this on the proportion of costs to be borne by Users.

16. ISSUE OF A RELEASE OR INTERFACE SPECIFICATION

- 16.1 HS1 shall arrange through its contracts with Users for appropriate documentation of Integer Releases or Dot Releases to be provided to them.
- 16.2 Where an Integer Release or Dot Release or an Interface Specification includes content commercially confidential to another member of the Railway Code Systems Group, this content shall not be released to any other body by HS1 Ltd without written approval from the member whose confidentiality might be compromised except when required for resolution of a dispute.
- 16.3 On implementation of an Integer Release or Dot Release or a replacement system, all members of the Railway Code Systems Group who used the earlier version shall replace the earlier version by the Dot Release or Integer Release or replacement system or cease use of the system altogether if this does not adversely affect safety requirements or current operational practices.
- 16.4 HS1 Ltd shall update the Railway Code Systems Catalogue with the details of the new Release or Interface Specification so that members, potential new Users or newcomers to the Railway Code Systems Group can ascertain accurately those Railway Code Systems which would be applicable to them. HS1 Ltd shall also include in the Catalogue an appropriate summary of data required to be input or exchanged using the Dot Release or Integer Release.
- 16.5 HS1 Ltd shall notify those affected of the training requirements and identify possible sources for such training. The choice of training and making arrangements for it are the responsibility of the User. HS1 Ltd has no liability whatsoever arising for training provided by any third party whether listed as a possible source for training or not.
- 16.6 HS1 Ltd may charge for any training it provides to Users.

17. EMERGENCY CHANGE PROCEDURE

- 17.1 An Emergency Change may be made when it is vital to rectify deficiencies in an existing Railway Code System to preserve functional or safety performance to a deadline imposed by circumstances beyond the control of HS1 Ltd making normal consultation impossible. HS1 Ltd itself shall determine and specify the minimum necessary change to restore the status quo ante or eliminate the operational, safety or regulatory risk.
- 17.2 After implementation of an Emergency Change, HS1 Ltd shall provide details to all those affected in the same form as a System Release Proposal.

18. DATA & LICENCES

- 18.1 All Users of Railway Code Systems shall strive to post data accurately and in a timely fashion. Members of the Railway Code Systems Group shall arrange appropriate systems training for their staff to ensure that this is done.
- 18.2 Users shall not without authority interfere with data posted or required by another.
- 18.3 HS1 Ltd shall ensure that access to data that is not confidential or proprietary to a User or a group of Users is extended to all members of the Railway Code Systems Group and all interested parties in the Railway Industry for their business purposes. All Users confirm that they agree to this extension.
- 18.4 All licences and contracts relating to Railway Code Systems or to data contained in Railway Code Systems shall be fair and equitable and not discriminate unduly between participants in the Railway Industry or lead to cross-subsidisation of their businesses.

19. ADVISORY PANELS

- 19.1 The Project Manager shall select an Advisory Panel of appropriate experts. To facilitate this, HS1 Ltd shall maintain a register of experts in systems development and usage in the Railway Industry drawn from the Railway Code Systems Group and other relevant bodies. The Project Manager shall invite the relevant User Group chairperson to nominate one or more representatives to the Advisory Panel, the particular number of representatives to be set by the Project Manager, which number of representatives shall not be less than 25% of the full Panel. Members of the Railway Code Systems Group shall not unreasonably refuse to provide nominations to the register of experts or to Advisory Panels or to release their staff for Advisory Panel work.
- 19.2 The role of an Advisory Panel is to inform and guide the design of a Railway Code System under the direction of the Project Manager. Advisory Panels do not have an approving role. They shall have regard to, amongst other things, safety and performance, give due regard to cost effectiveness and business processes in the Railway Industry, and conform with the principles of the Code.
- 19.3 Entry in the register of experts available for Advisory Panels shall be open to applicants nominated by members of User Groups or invited by HS1 Ltd. An Advisory Panel will not normally have more than 10 members. All expertise required in the preparation of a system should be represented in the composition of an Advisory Panel. The Panel should incorporate members from a diversity of backgrounds to obviate bias. Members of an Advisory Panel shall hold relevant technical or operational qualifications in respect of the Railway Code System under consideration or have proven appropriate practical experience.
- 19.4 HS1 Ltd shall periodically send invitations to all members of User Groups for nominations to the register of experts.
- 19.5 HS1 Ltd shall select members of the Advisory Panel from the register of experts when they have appropriate and sufficient relevant expertise but HS1 Ltd does not guarantee to select all or any of the names on the register for use in the preparation of a Railway Code System. HS1 Ltd may invite experts from outside the Railway Code Systems Group to join an Advisory Panel if it feels a significant contribution may so be made.
- 19.6 Membership of Advisory Panels should be rotated to avoid undue burden on or influence

by any particular person, business or body within the Railway Code Systems Group.

20. USER GROUPS

- 20.1 User Groups shall be established by HS1 Ltd in accordance with clause 10.3. A User Group shall use its knowledge of the functioning, capability, use and operational characteristics of a particular system in order to inform members of the User Group of its effective use or development
- 20.2 User Groups meetings should be convened by HS1 Ltd at intervals relevant to the activity in a Railway Code System area.
- 20.3 Members of Users Groups have the right to request HS1 Ltd to convene a User Group meeting to discuss activities in a Railway Code System area unless a meeting scheduled is to be convened within 2 weeks of receipt of such request

21. DISPUTES RESOLUTION

- 21.1 Notwithstanding any other agreement between any Users and/or System Operators concerning the resolution of disputes between them, disputes relating to this Code shall be resolved in accordance with the Dispute Resolution Procedure.

22. VOTING

- 22.1 Any affected member of the Railway Code Systems Group may request a vote in accordance with this clause if any of the following significant changes is proposed by HS1 Ltd:
 - 22.1.1 withdrawal of a Railway Code System or the introduction of a new Railway Code System;
 - 22.1.2 change of a Railway Code System from a single multi-user system to a system delineated by interfaces where it is not proposed to provide Users with software that enables them to operate on the User side of the interface as before the proposed change;
 - 22.1.3 a change which will directly increase a paying User's systems charges or internal information systems costs relating to the particular Railway Code System over a one year period by an amount which is:-
 - (A) more than 20% of the net benefit conferred on that User by the change, treated as a single event (the capital benefit basis); or
 - (B) 10% of the net annual benefit conferred on that User by the change, treated as a benefit accruing over a three year period (the revenue benefit basis);
 - 22.1.4 a change which would necessitate an amendment to contracts essential or expedient to the User's operations in the Railway Industry.
- 22.2 HS1 Ltd shall within 7 days of a request make arrangements for a vote by affected members of the Railway Code Systems Group to take place within a reasonable time. The vote will ordinarily be postal or be electronic mail, but a meeting with show of hands or

proxies is not precluded.

- 22.3 Each affected member of the Railway Code Systems Group shall have one vote, save and except for HS1 Ltd which shall have two votes.
- 22.4 The decision to proceed with the withdrawal or the change shall be affirmed by a 75% majority of all votes of members casting votes. HS1 Ltd shall notify a result promptly to all members who were entitled to take part in the vote; and shall within a reasonable time (for example, when next issuing an update to the Catalogue) inform other members of the vote and its outcome.
- 22.5 A member who disagrees with a decision determined by vote may refer the matter as a dispute for resolution in accordance with paragraph 21.

23. CHANGES TO THE CODE

- 23.1 Part 2 of this Code may be amended in the same manner as the HS1 Network Code and Part C of the HS1 Network Code shall apply to amendments to Part 2 of this Code mutatis mutandis.

24. COMPENSATION FOR SYSTEMS CHANGE

- 24.1 If a member of the Railway Code Systems Group (including HS1 Ltd) considers that it should be entitled to compensation for the consequences of the implementation of a Systems Change, it shall give notice of such claim to the Sponsor on receipt of the Release Development Plan.
- 24.2 The notice shall include a statement of the amount of compensation claimed and the means by which the compensation should be paid, including any security or other assurances of payment which the Sponsor should provide. Any such statement shall contain such detail as is reasonable to enable the Sponsor to assess the merits of the claim.
- 24.3 The amount of the compensation shall be an amount equal to the amount of the costs, direct losses and expenses (including loss of revenue) which can reasonably be expected to be incurred by the member in question as a consequence of the implementation of the proposed change other than any such costs, losses or expenses which are attributable to the Sponsor of the change improving its ability to compete with members which are other operators of railway assets.
- 24.4 There shall be taken into account in determining the amount of compensation:-
- 24.4.1 the benefit (if any) to be obtained or likely in the future to be obtained by the claiming member as a result of the proposed change; and
- 24.4.2 the ability or likely future ability of the claiming member to recoup any costs, losses and expenses from third parties including passengers and customers (including other members if the claiming member is not HS1 Ltd).
- 24.5 If the Sponsor fails:-
- 24.5.1 to agree with or comply with the terms of the notice claiming compensation, having been given a reasonable opportunity to do so; or
- 24.5.2 to refer the dispute for resolution in accordance with clause 21 within 14 days of receipt of the notice claiming compensation,

then the proposed change shall not be implemented.

24.6 In any case other than set out in clause 24.5, and subject to the other provisions of this Code, the Sponsor of the change shall be entitled to have such change implemented, but the costs of the implementation of any change proposed by the Sponsor shall be reimbursed:-

24.6.1 if the Sponsor is not HS1 Ltd, to HS1 Ltd and other members who would be affected by the proposed change in proportions to be agreed upon by the parties;
or

24.6.2 if the Sponsor is HS1 Ltd, to the other members who would be affected by the proposed change in proportions to be agreed upon by the parties.

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