

OPINION

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OF THE EUROPEAN RAILWAY AGENCY

FOR

EUROPEAN COMMISSION

REGARDING

OPINION CONCERNING THE ISSUE OF LEVEL BOARDING FOR A NEW HS2 RAIL SERVICE IN THE UK

Disclaimer:

The present document is a non-legally binding opinion of the European Railway Agency. It does not represent the view of other EU institutions and bodies, and is without prejudice to the decision-making processes foreseen by the applicable EU legislation. Furthermore, a binding interpretation of EU law is the sole competence of the Court of Justice of the European Union.



1 General Context

1. In its letter referenced as Ares(2015)683084 and dated on 18 February 2015 addressed to the European Railway Agency ("ERA"), the European Commission requested ERA to prepare a technical opinion regarding the issue of level boarding for the future High Speed 2 rail service in the UK. That issue was put forward by the UK Department for Transport (DfT).
2. This question is relative to the height of the platforms on the planned High Speed 2 (HS2) rail service that will connect London with major cities in the north of England and Scotland. The intention is to provide level access as far as possible throughout the new stations, so as to improve accessibility and reduce the dwell time. Level access is to be understood as an access for which the vertical gap is less than 50mm and the horizontal gap less than 75mm.
3. A document about the conditions and consequences of level access at the platform-train interface of the HS2 platforms is provided to support the request (Document n. HS2-HS2-EN-REP-000-000016 rev. P04). The document concludes that offering a level access is essential for a truly accessible train and that it contributes to much shorter boarding and alighting times, giving opportunity for more capacity on a line. Level access would require platforms of circa 1200mm high.
4. This platform height is not part of the target system as it is defined in the Infrastructure TSI¹. In addition, the characteristics of the HS2 project do not give ground to a possible derogation according to the article 9 of the Interoperability Directive².
5. The DfT is asking what the best solution is to solve the problem and proposes three options: amendment to the Infrastructure TSI including a new value of platform height for the target system, additional specific case for the UK or use of the innovative solution procedure defined in the article 10 of the Infrastructure TSI.
6. Whereas the HS2 is not expected to enter into service before 2026, the project needs to make a decision relatively to the height of platforms by the end of 2015.

2 Legal Background

2.1 Origin of the target values for platforms

1. The Interoperability Directive 2008/57/EC specifies the content of the TSIs in its article 5. In particular, it states that *"each TSI shall be drawn up on the basis of an examination of an existing subsystem and indicate a target subsystem that may be obtained gradually within a reasonable time-scale"*.
2. As per the Directive, the Infrastructure TSI indicates the target subsystem for platforms in its point 4.2.9.2: *"The nominal platform height shall be 550 mm or 760 mm above the running surface for radii of 300 m or more"*. The UK has a specific case for platform height (point 7.7.17.6 of the TSI), making reference to a National Technical Rule GI/RT7016 by which a platform height of 915mm is allowed.
3. These target values have not been defined or revised in the course of the latest revision of the Infrastructure TSI. These values were already present in the first Infrastructure TSI from 2002³

¹ Commission Regulation (EU) No 1299/2014 of 18 November 2014 on the technical specifications for interoperability relating to the 'infrastructure' subsystem of the rail system in the European Union - OJ L 356, 12.12.2014, p. 1

² Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community - OJ L 191, 18.7.2008, p. 1

³ Commission Decision of 30 May 2002 concerning the technical specification for interoperability relating to the infrastructure subsystem of the trans-European high-speed rail system referred to in Article 6(1) of Council Directive 96/48/EC - OJ L 245, 12/09/2002 p. 143



where the point 4.1.6 specifies: *“Provided that the requirements of Point 7.3 [note: point covering specific cases] are observed, two values are allowed for platform height: 550 and 760 mm”*.

4. The origin of these target values dates back to 1990, with a Resolution adopted by the European Conference of Ministers of Transport (ECMT). This Resolution recommended accessibility guidelines to be drawn up in conjunction with UIC. An expert working group with representation from UIC and ECMT was set up to begin to implement this recommendation and, in its thirty-ninth report from 1992, the ECMT endorses the values of 550mm and 760mm about to be adopted by the UIC⁴.

2.2 Accessibility of the railway system

1. The Commission Directive 2013/9/EU⁵ amends the Annex III to the Interoperability Directive and adds a new Essential Requirement relative to accessibility: *“The “infrastructure” and “rolling stock” subsystems must be accessible to persons with disabilities and persons with reduced mobility in order to ensure access on an equal basis with others by way of the prevention or removal of barriers, and by way of other appropriate measures. This shall include the design, construction, renewal, upgrade, maintenance and operation of the relevant parts of the subsystems to which the public has access”*.
2. The fulfilment of the Essential Requirement is ensured through the compliance with the recently published revised TSI relative to the accessibility of the railway system (PRM TSI⁶). The TSI was drafted by the Agency with the support of a Working Party gathering experts from the European Representative Bodies of the Railway sector (RBs), the National Safety Authorities (NSAs), and passengers organisations, including persons with disabilities (European Disability Forum – EDF). These organisations were able to provide their expectations that were discussed within the Working Party; expectations have not all been satisfied. When this was the case, it was reported in the report accompanying the Agency recommendation⁷ (“the report”).

2.3 Conditions for the inclusion of a specific case and definition of an innovative solution

1. A specific case is defined in the article 2 of the Interoperability Directive as *“any part of the rail system which needs special provisions in the TSIs, either temporary or definitive, because of geographical, topographical or urban environment constraints or those affecting compatibility with the existing system. This may include in particular railway lines and networks isolated from the rest of the Community, the loading gauge, the track gauge or space between the tracks and vehicles strictly intended for local, regional or historical use, as well as vehicles originating from or destined for third countries”*.
2. Recital 30 of the Interoperability Directive 2008/57/EC mentions that *“the drawing up of TSIs and their application to the rail system should not impede technological innovation, which should be directed towards improving economic performance.”*
3. To that effect, article 10 of the Infrastructure TSI specifies that *“if an innovative solution is proposed, the manufacturer or his authorised representative established within the Union shall declare how it deviates from or complements to the relevant provisions of this TSI and submit the deviations to the Commission for analysis. The Commission may request the opinion of the Agency on the proposed innovative solution.”*

⁴ https://play.google.com/store/books/details?id=iVFcAQAAQBAJ&rdid=book-iVFcAQAAQBAJ&rdot=1&source=gsb_vpt_read&pcampaignid=books_booksearch_viewport p. 189

⁵ Commission Directive 2013/9/EU of 11 March 2013 amending Annex III to Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community - OJ L 68, 12.3.2013, p. 55

⁶ Commission Regulation (EU) No 1300/2014 of 18 November 2014 on the technical specifications for interoperability relating to accessibility of the Union's rail system for persons with disabilities and persons with reduced mobility - OJ L 356, 12.12.2014, p. 110

⁷ http://www.era.europa.eu/Document-Register/Documents/PRM_REC_002_Accompanying_report_V1.pdf



3 Analysis

1. The document provided to support the request studies the consequences for Interoperability of an additional platform height. Four rolling stock categories are considered: captive train (i.e. running on HS2 only), 'classic compatible' train (i.e. running on HS2 and on the existing UK network with a platform height of 915mm), existing European train (i.e. trains currently serving platforms with a height of 550mm and 760mm, that could be operated on platforms with a height of 1200mm in the future) and new European train (i.e. future trains designed for being able to serve all three platform heights).

For the first two categories, a specific design of the rolling stock would enable level access from platforms of 1200mm. For the 'classic compatible' version, a simple deployable step is used from the platforms of 915mm, enabling a non-level access, still compliant to the PRM TSI. For the last two categories, the authors of the document acknowledge that some investigations would be needed to find an optimised solution. In the context of a possible evolution of the EU legislation, such investigations on rolling stock designs and their interface with platforms should also be performed considering the other existing networks.

2. Benefits expected by HS2 from a high platform are a better accessibility and a shorter dwell time. Regarding accessibility, the presence of steps frequently requires the use of assistive devices with personnel; this is a concern for associations representing persons with disabilities. As stated in the report⁸:

"Users associations (EDF, AGE, EPF) regret that the target system for platforms still includes two different platform heights at 550mm and 760mm. The opinion of these associations is that, in such conditions, it is not possible to target a system where a level access to the rolling stock will be the rule (...)

EDF proposed the TSI to mandate preferable solutions when it comes to boarding and alighting, similarly to the legislation in force in the USA requiring, in the following order of preference: Level access all along a platform, Partial local rising of platforms, On-board boarding aids, Platform boarding aids. After discussions, this proposal was not retained".

Accordingly, adding a third platform height would not be perceived as a global improvement of accessibility. Regarding preferable solutions, they are not mandated by the TSI, but these should be considered as guideline by infrastructure managers when designing platforms.

3. Characteristics enabling independent and spontaneous travel should be the aim of the target system. However, other solutions than a high platform may be explored, such as a dedicated low floor access leading to the wheelchair spaces in the train, or the partial raising of platforms coupled with a better management of the train stopping point. The Agency identified in the report⁹ a research need for solutions enabling independent access; this was set down, for instance, in the Master Plan of the Shift²Rail joint undertaking¹⁰ asking for the development of *"Innovations in passenger access systems along with new solutions for autonomous boarding of persons with reduced mobility"*.
4. Regarding the dwell time, the presence of steps is one of many factors that influence the time for the boarding and alighting of passengers: the aisle width and the size of the vestibule, the location and the width of the passengers access doors, the number of accesses are other factors that have not been taken into account in the document supporting the request.
5. The HS2 project is intended to link London Euston station to West Midlands first, and then to be extended to Manchester and Leeds. It is currently not planned to make a connection with HS1 that runs from London St Pancras to the Channel Tunnel and then to the continent, but this situation

⁸ See § 4.4.1, p. 17 and § 7.3.2, p. 28

⁹ See § 7.3.2, p. 28

¹⁰ <http://ec.europa.eu/transport/modes/rail/doc/2014-09-24-draft-shift2rail-master-plan.pdf>, § 3.1.3 p. 26



may still evolve. As a matter of fact, the HS2 line is already considered as part of the European comprehensive core network as illustrated by the map 2.3 of the Regulation (EU) No 1315/2013¹¹.

4 The opinion

1. The Agency is of the opinion that the inclusion of a second specific case for the UK is not an appropriate solution. None of the characteristics of the HS2 project would permit its classification as a specific case.
2. Secondly, considering the demands expressed by users associations during the revision of the PRM TSI, the Agency is of the opinion that level access to trains is the most effective way to improve the accessibility of railways and is a relevant objective for new railway projects.
3. On the other hand, the Agency considers that the arguments provided do not bring evidence of the necessary inclusion of a third target platform height in the Infrastructure TSI. Targets have been adopted at the level of Transport Ministers more than twenty years ago; many efforts have been made since then to adapt existing platforms to those targets and all new platform have also been built according to those targets. A specificity such as proposed by the HS2 project contradicts to some extent the principles of a trans-European transport network.
4. The HS2 document supporting the request should be complemented by a study at European level, taking into account all aspects: interoperability and integration into all existing networks, improvement of the accessibility and reduction of the dwell time. Such study may be envisaged in the context of an innovative solution. However, it would require a specific mandate due to its extent in terms of technical and economic data to be gathered and corresponding timeframe.
5. Considering the elements above, the Agency is of the opinion that the introduction of a third level of platform height in the Infrastructure TSI is currently not justified.

Valenciennes, 17.04.2015

Josef DOPPELBAUER
Executive Director

¹¹ Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU - OJ L 348, 20.12.2013, p. 1



ANNEX 1

Letter referenced Ares(2015)683084 and dated on 18 February 2015