THE RAILWAY SAFETY REGULATIONS 1999

EXEMPTION CERTIFICATE NO. 1 OF 2016

CONCERNING TRAIN PROTECTION ARRANGEMENTS FOR THE RUNNING OF CROSSRAIL TRAINS BETWEEN PADDINGTON STATION AND HEATHROW TUNNEL JUNCTION

 The Office of Rail and Road, in the exercise of the power conferred under regulation 6(1) of the Railway Safety Regulations 1999, having consulted such persons it considers appropriate and having had regard to the matters specified in regulation 6(3), grants an exemption to Network Rail, Crossrail Ltd and MTR Corporation (Crossrail) Ltd – "the parties" - from the prohibition in regulation 3(1) (use of a train protection system) in the following terms.

2. In this exemption:

- a. "Network Rail" means Network Rail Infrastructure Limited (Company Number 2904587);
- b. "the Regulations" means the Railway Safety Regulations 1999;
- c. "Train Stop System" means equipment which causes the emergency brakes of a train to apply automatically if the train passes without authority a stop signal;
- d. "Over Speed System" means equipment that causes the brakes of a train to apply automatically if a train travels at excessive speed on an approach to a main stop signal or buffer stop;
- e. "Main stop signal" means the signal conveying to the driver of the train an instruction to stop the train but does not include a signal provided for shunting purposes;
- f. "Running line" means the railway lines shown as passenger lines in Network Rail's Western Route Sectional Appendix to the Working Timetables and Books of Rules and Regulations;
- g. "Signal overlap" means the safety zone beyond each stop signal proved clear of other trains;

- h. "European Train Control System" means the signalling, control and train protection element of the European Rail Traffic Management System mandated under EU law¹; and
- i. Except where a definition above applies, expressions used in this exemption have the same meaning as in the Regulations.
- 3. The parties are exempt from the prohibition contained in regulation 3(1) of the Regulations (prohibition on permitting and operating a train on a railway unless a train protection system is in service) for the period 00.01 hour on 20 May 2018 until 23.59 on 31 December 2019 (the exemption period) in relation to the operation of Class 345 trains and accompanying rolling stock on the railway running line between:
 - a. Paddington Station and Heathrow Airport junction; and
 - b. Heathrow Airport junction and Heathrow Tunnel Junction.
- 4. This exemption is granted subject to the following conditions:
 - a. During the exemption period, the part of the railway covered by this exemption must have installed and in service an alternative train protection system comprising:
 - i. equipment which (A) causes the brakes of the train to apply automatically if the train either passes without authority a stop signal such passing of which could cause the train to collide with another train, or travels at excessive speed on a relevant approach, and (B) is installed so as to operate at every stop signal referred to in (A), except a stop signal on the approach to an emergency crossover, and at an appropriate place on every relevant approach;
 - Train Stop System at all main stop signals not included in item (i) above;
 - iii. Over Speed System on the approach to all main stop signals to enable any class 345 train to stop within the signal overlap when the emergency brake is applied;
 - iv. Over Speed System on the approach to all buffer stops to reduce the speed on any collision by a train to no more than 6mph;

¹ See Directive of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community and Commission Decisions 2012/88, 2012/696 and 2015/14

- v. Items (iii) and (iv) above are subject to a full assessment of the final specifications by Network Rail and must be agreed by ORR in accordance with condition (b);
- b. Any changes to the alternative train protection system must be notified to and agreed with ORR in writing no later than 12 months before the start of the exemption period.
- c. Network Rail will every 3 months from the date of signature of this exemption meet with ORR, unless otherwise agreed in writing, to provide an update on its progress in bringing into service the European Train Control System on its infrastructure for the operation of Class 345 trains on the railway set out in paragraph 3.
- d. Network Rail will report to ORR every 6 months, unless otherwise agreed in writing, from the date of signature of this exemption on:
 - i. progress and anticipated timing for bringing into service on its infrastructure the European Train Control System for the operation of Class 345 trains on the railway set out in paragraph 3;
 - ii. any material risks associated with (i);
 - iii. emerging or concluded assessments on any aspect of bringing the alternative train protection system into service, the timing for its implementation and any material risks; and
 - iv. any other matter relevant to the installation and bringing into service of train protection system equipment.
- 5. This exemption shall take effect immediately on the signing hereof and is granted subject to the power of the ORR to revoke the exemption in writing at any time pursuant to regulation 6(1) of the Regulations.

IN WITNESS whereof the Common Seal of the Office of Rail and Road is affixed on 15 March 2016 and authenticated by:

Ian Prosser, Director of Railway Safety

Signature:

FRONTLAL

