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[redacted] Deputy Director Rail Industry Standards and Capability Department for Transport Great Minster House 33 Horseferry Road London SW1P 4DR

Website: www.gov.uk/dft

22 May 2023

Dear [redacted]

## RE: THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011- REGULATION 14 DECISION FOR THE USE OF HYBRID COUPLERS ON STADLER CLASS 93

Thank you for your email of 28 September 2022 to my colleague, [redacted], providing an updated application for an exemption under Regulation 14 of the Railways (Interoperability) Regulations 2011 (RIR 2011) for the use of hybrid couplers on Stadler Class 93 vehicles.

Regulation 14(2) (f) states that an exemption can be granted for cases where a project employs innovative solutions which either do not comply with the relevant NTSNs or to which the assessment methods in the specified NTSNs cannot be applied.

Your application states that your client Rail Operations UK (ROUK) requested a multipurpose locomotive based on the Stadler Class 88 that was capable of hauling both freight and passenger stock. Your application states that ROUK specified for the Stadler Class 93 to be compatible with two types of couplers: UIC screw coupler and Scharfenburg autocoupler without the need for a separate coupler adapter. In your application you mention that the cargoflex hybrid coupler was identified by your organisation as the only coupler that met the specifications requested by ROUK.

Your application states that you have identified that, in proceeding with assembling the Stadler Class 93 with the cargoflex hybrid coupler, this will lead to a non-compliance with the **Rolling Stock – Locomotive and Passenger NTSN** clause 4.2.2.2.5(2) which says:

To comply with this requirement, units fitted with manual coupling systems of UIC type as per clause 4.2.2.3(b) shall comply with the following requirements (the 'Bern rectangle'):

- On units equipped with screw couplers and side buffers, the space for staff operation shall be in accordance with the specification referenced in Appendix J-1, index 6.
- Where a combined automatic and screw coupler is fitted it is permissible for the auto coupler head to infringe the Berne rectangle on the left-hand side when it is stowed, and the screw coupler is in use.
- There shall be a handrail under each buffer. The handrails shall withstand a force of 1.5 kN.

Your application states that you would not be able to meet the first and second requirements stated in this provision. The use of the cargoflex hybrid coupler would reduce the space of the Bern rectangle to a trapezium with the dimensions 400 x 297 -263 which conflicts with the first requirement. The automatic coupler head of the hybrid coupler is centred and folds upwards and

cannot therefore satisfy the requirement for the automatic coupler to infringe the Bern rectangle on the left-hand side when it is stowed, and the screw coupler is in use. Your validation test report states that there are no negative practical implications with the proposed non compliances mentioned above. However, your application states that the hybrid coupler meets the third requirement regarding the handrail under the buffer and its withstanding force.

Your application notes that you have assessed the practical impact of using the hybrid coupler by conducting a Hazard Operability Study, which was witnessed by your AsBo. You mention that the purpose of the study was to identify any additional safety risks associated with the adoption and the use of the hybrid coupler including the required deviation from the Bern rectangle. Your study concluded that the use of a hybrid coupler and the deviation from the Bern rectangle requirements as set out in clause 4.2.2.2.5(2) of the LOCPAS NTSN does not introduce any additional safety risks.

DfT has considered your application in consultation with the ORR. The decision of the Competent Authority is that use of the cargoflex hybrid coupler to meet the specifications as set out by your client ROUK is an acceptable "innovative solution". I note that you have engaged with the ORR, who do not object to your proposal as they have not identified additional safety risks. On that basis, it is the Competent Authority's decision that the requested exemption is granted.

I am copying this letter to [redacted] at the ORR.

Yours sincerely,

[redacted] Deputy Director Rail Industry Standards and Capability