

**Memorandum of DAC
Prague Feb 16, 2023**

Representatives of individual associations of rail freight carriers operating in Central Europe met in Prague on 16th February 2023 for a meeting on the issue of the digital automatic coupler (hereinafter referred to as DAC).

They agreed on the following minimum requirements that are absolutely necessary for the implementation of this new technology:

- 1) Determination of a single specific type of coupling, including its digital and electrical parts; that means defining a new uniform standard for both the mechanical and digital/electrical parts of the solution (technical and user parts). Only then will that be possible to clearly quantify the costs and benefits of the solution and decide on modifying the relevant TSI.
- 2) Completed tests, trials and sufficiently long verification in real operation (i.e. operation with goods, loading and unloading operations) of the selected specific type of DAC in its highest (final) version that will be the subject of wagon conversions, with a positive confirmation of the problem-free operation, including extreme weather conditions, transportation of dangerous goods, operation in a dusty unloading environment, etc. – clear verification of the future 100% replaceability of the currently used conventional screw coupling of wagons by the DAC solution.
- 3) Demonstrated benefit, i.e. a positive Cost-Benefit Analysis (CBA) made on the basis of real and verified input data, including data from carriers who today process trains without DAC and can evaluate potential positive impacts on the processing of a train with a DAC technology. Expected period of the positive CBA 10 years, not 30 years.
- 4) In every respect, to ensure backwards compatibility for the migration period, or by means of additional technology to ensure the operation of mutually incompatible wagons and locomotives for a transitional period. (This is both a question of operation in non-EU countries and operation of non-retrofitable freight wagons and locomotives).
 - a. This period can be of varying length in different European countries, no longer than the remaining life of the existing technology.
 - b. The migration period and the migration start date must be determined realistically and with regards to the possibilities of equipping wagons and locomotives, the necessity of their structural modifications and their approvals, so that there are no limitations on the capacities of rail freight transport during the migration itself and its preparatory period.
 - c. The migration period cannot be derived retroactively from political goals; it must be based on real possibilities and realistic timing.
- 5) To confirm and guarantee the method and amount of co-funding of the vehicle retrofits by the European Commission throughout the whole migration period as the carriers and the vehicle keepers cannot bear the high one-off costs of equipment and other costs associated with the maintenance of the solution. These increased costs cannot be transferred to prices for rail freight customers.
- 6) To ensure compliance with the authorities approving the vehicle conversion in the EU so that the retrofit approval process does not negatively affect the operational availability of the fleet during the authorization process.

- 7) To ensure consensus over the migration plan across the sector in the entire area of the standard track gauge. That is not only the producers in terms of their capacities, but especially the carriers (i.e. users) with regard to operational situations during the migration period so that there is no limitation of the availability of wagons and a reduction in the quality of the service provided to railway customers and thus to the shift of transports from rail to road.

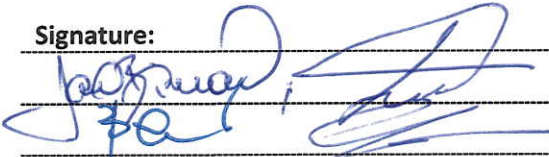
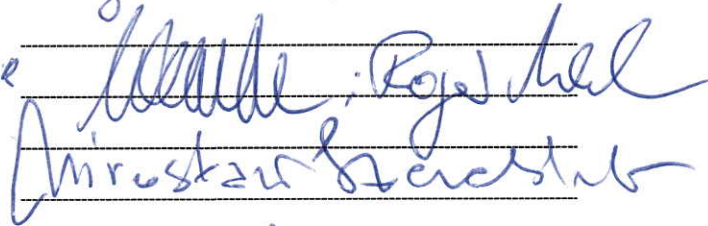
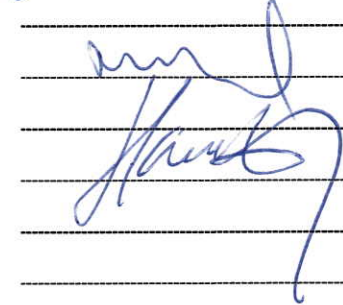
Without meeting the requirements above, we are against the central and mandatory implementation of DAC. We want to retain the existing rail transport volumes and we do not intend to gamble with the favor of our existing and new customers neither through the price offered nor the quality of the service provided.

Parties to Memorandum of DAC, Prague Feb 16, 2023

I) ASOCIÁCIA ŽELEZNIČNÍCH DOPRAVCOV SLOVENSKÁ - AROS	SLOVENSKÁ REPUBLIKA
II) HUNGARIL - HUNGARIAN RAIL ASSOCIATION	MAGYARORSZÁG
III) NEE - NETZWER EUROPAISCHER EISENBÄHNER S. V.	DEUTSCHLAND
IV) FEDERATION OF INDEPENDENT RAIL OPERATORS	RECEZ POSPOLITA POLSKA
V) SDRUŽENÍ PROVOZOVATELŮ A DRŽITELŮ ŽELEZNIČNÍ VOZIDEL, Z. S.	ČESKÁ REPUBLIKA
VI.) ŽESNAD.CZ	ČESKÁ REPUBLIKA

List of Signatures of the Parties to Memorandum of DAC, Prague Feb 16, 2023

Signatures:

For:	Signature:
I) ASOCIÁCIA ŽELEZNIČNÍKOV DOPRAVY SLOVENSKA - APOS	
II) HUNG RAIL - HUNGARIAN RAIL ASSOCIATION	Lajos Székely
III) NEE - NETZWERK EUROPÄISCHER EISENBÄHNEN z. V.	
IV) FEDERATION OF INDEPENDENT RAIL OPERATORS	
V) SDRUŽENÍ PROVOZOVATELŮ A DRŽITELŮ DRÁŽNÍCH VOZIDEL, z. s.	
VI) ŽESNAD.CZ	