



Federal Ministry
for Digital
and Transport



Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of the Environment, Transport,
Energy and Communications DETEC

DAC is on the way!

The German Federal Ministry for Digital and Transport Affairs, the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology and the Swiss Federal Department of the Environment, Transport, Energy and Communications are confident that sustainable, automated and digitalised rail freight transport will in future be able to deliver flexible, fast and cost-efficient logistics.

The **Digital automatic coupler (DAC)** forms the heart of this endeavour. It helps to make rail freight transport more productive, and in future it will also play a key role in networking rail freight transport. In addition, greater use of environmentally friendly and energy-efficient railways for freight transport will be essential to achieving the climate targets of the transport sector in Europe

The German, Austrian and Swiss transport ministries are committed to automating and digitalising rail freight transport, with the aim of DAC being used throughout Europe from 2025. They value the work that the sector is carrying out as part of Europe's Rail Joint Undertaking (ERJU) and the European DAC Delivery Programme (EDDP) – work made possible by funding from the European Union.

The efforts and political will shown by Germany, Austria and Switzerland are necessary to this process, but are insufficient to achieve the stated objective. If DAC is to be implemented across Europe within the planned timeframe, the EU and other member states must demonstrate their willingness to do so. A unified European approach to DAC is required in order to revolutionise rail freight transport.

Germany, Austria and Switzerland have already begun with the following activities:

Germany

- Introducing a commitment in the coalition agreement to accelerate the conversion to DAC.
- Initiating and funding the DAC4EU demonstrator train that will be used to test technical solutions.
- Providing potential additional project funding through the federal programme for the future of rail freight transport.
- Facilitating the transport ministry's DAC round table meetings, where all stakeholders from the sector can engage in regular exchange.
- Participating and sharing its experience in European organisations such as the EDDP and ERJU.

Austria

- Providing funding for DAC as part of the country's research, technology and innovation (RTI) initiatives. Two national RTI projects from the transport ministry's Mobility of the Future programme (TARO and DACIO) have provided funding for the ÖBB's DAC projects since 2019.
- Testing the DAC4EU test train to develop technical solutions by ÖBB in Austria in 2022 and 2023.
- Participating actively in ERJU flagship project 5, TRANS4M-R, with the ÖBB as a consortium partner; providing funding as well as project management services on Full Digital Freight Train Operations (FDFTO), a part of the project that is putting an ÖBB DAC test train into operation.
- Leading involvement by the ÖBB in EDDP programme management and working at European level on the development and implementation of the Migration Road Map.
- Providing funding from the BMK for the conversion to DAC, as soon as a common EU-wide approach emerges and the technical and legal preparations for the universal introduction of DAC are finalised.

Switzerland

- Drafting a bill and the necessary financial decrees for introducing and securing funding for DAC. Stakeholders from politics, business and civil society showed broad support during the consultation process.
- Testing of automatic coupling and automatic brake testing systems in commercial SBB operations has been conducted successfully: 40 locomotives and 250 wagons have been tested since 2019, co-financed by the Federal Office of Transport (FOT).
- Testing of DAC4EU test train in 2022 for SBB to develop technical solutions in Switzerland.
- Participating actively with SBB as a consortium partner in ERJU flagship project 5, TRANS4M-R, financed by the Swiss State Secretariat for Education, Research and Innovation SERI.
- Testing SBB's own DAC+ test train for the electrical and digital functionalities on the train, co-financed by the FOT.
- Conducting a joint project with the sector to develop a process for converting vehicles to DAC as quickly and easily as possible.

In addition to automatic coupling, it is DAC's digital functions – for example brake testing or determining wagon order – that significantly reduce the time and cost involved in preparing trains. The locomotives and wagons must be equipped with the necessary components in order to use DAC, which takes time and requires investment, but being able to use even a few of DAC's central functions already provides benefits.

The ministries in Germany, Austria and Switzerland are aware of the need for a funding solution that can buffer the time between this investment and its subsequent benefits. In fact, this provides another argument for driving forward with deployment of the system, ideally across Europe as a whole. Quick conversion to DAC, together with skilful preparation and implementation of the conversion, will automatically accelerate the economic benefits DAC will bring.

It is essential to exploit synergies and to advance the work of the ERJU and EDDP in parallel as far as possible. DAC should be usable for defined transport operations soon after the necessary parameters are defined in the TSI, which will allow users to gain necessary experience in day-to-day operations. In order to facilitate this process, the technical, operational and financial prerequisites for pre-deployment must be in place so that the pre-deployment phase can begin as soon as possible.

Germany, Austria and Switzerland are open to co-financing the conversion to DAC at national level. However, this will not be enough to put DAC into operation across the entire sector. First and foremost, the EU is needed to advance cross-border and interoperable rail freight transport as a whole.

The ministries in Germany, Austria and Switzerland would therefore welcome it if

1. the European Commission were to act as a first mover, by developing and adopting in a timely manner a concept for EU-wide funding tailored to individual needs
2. all EU member states and interested neighbouring countries were to look into the necessary political preparations for co-financing DAC in parallel with the ongoing work
3. the sector were to lay the foundations for the gradual introduction of DAC with key basic functions in accordance with the EDDP timetable as well as its advance pre-deployment; and vehicle owners were to carry out timely technical preparations on wagons in the course of regular maintenance so that DAC can be fitted in a straightforward manner.

For the German Federal Ministry for Digital and Transport

Dr. Volker Wissing, Federal Minister

For the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

Loenore Gewessler, Federal Minister

For the Swiss Federal Department of the Environment, Transport, Energy and Communications (DETEC)

Albert Rösti, Federal Councillor, Head of DETEC