



## EC FLEET REFIT

### Data and facts

Swiss Federal Railways' (SBB) fleet of 236 Eurocity coaches (EC coaches) is currently predominantly used for international transport. Thanks to the use of the new Pendolino tilting trains and the new ICE train from Deutsche Bahn, these vehicles are gradually becoming more available and there are plans to use them in inland transport in the future. In order to make them fit for the next 20 years, the fleet has been modernised and technically upgraded, which has simultaneously brought it into line with the requirements of the Federal Act on the Elimination of Discrimination against People with Disabilities, which has been in force since 2014.

### Requirements

The refit programme is planned to cover a total of 236 coaches, 154 of which are second-class coaches, 70 are first-class coaches and 12 are panoramic coaches. Key elements of the refit include, on the one hand, value-retention measures:

- Performance of an R3 revision
- Restoration of windows and window profiles
- Replacement and refurbishment of the armrests

The refit also covers modernisation measures and technical upgrades:

- New appearance as per the corporate identity for long-distance transport
- Updating of the entire energy-supply system

- New lighting concept
- 230 V/50 Hz sockets for mobile phones and laptops
- New passenger-information system
- Implementation of the Federal Act on the Elimination of Discrimination against People with Disabilities
- Processing of the seating and interior coverings
- Installation of a closed WC system (bioreactors)
- Push-pull capability
- Installation of yaw dampers
- Compliance with the new fire-safety concept for the Lötschberg Base Tunnel and the new Mattstetten-Rothrist high-speed line

### Implementation

The refit is being carried out at the SBB industrial plant in Olten, Switzerland. The experience gained from the conversion of two sample vehicles will be used to create a production and logistics concept for serial production. The modernised vehicles will meet the RIC provisions for European rail operators, meaning that they can also continue to be used outside of Switzerland.

### Customer benefits

The employees of CE cideon engineering started work in Switzerland in May, 2008, and had soon carried out a lot of work, meaning that SBB was able to present a prototype at the Innotrans trade fair in Berlin as early as September 2008. SBB has also benefited from the high degree of competence, a reasonable price, and the high levels of readiness and flexibility offered by CE cideon engineering over the course of the project.

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