

A group of children are looking out of a large window in a modern, brightly lit metro train. The view outside shows a wide, elevated metro track with multiple lanes, supported by concrete pillars. The sky is overcast. The interior of the train is clean and modern, with a curved ceiling and large windows. The children are dressed in casual clothing, including hoodies and jackets. The overall atmosphere is one of curiosity and modern transportation.

The Copenhagen Driverless Unattended Metro

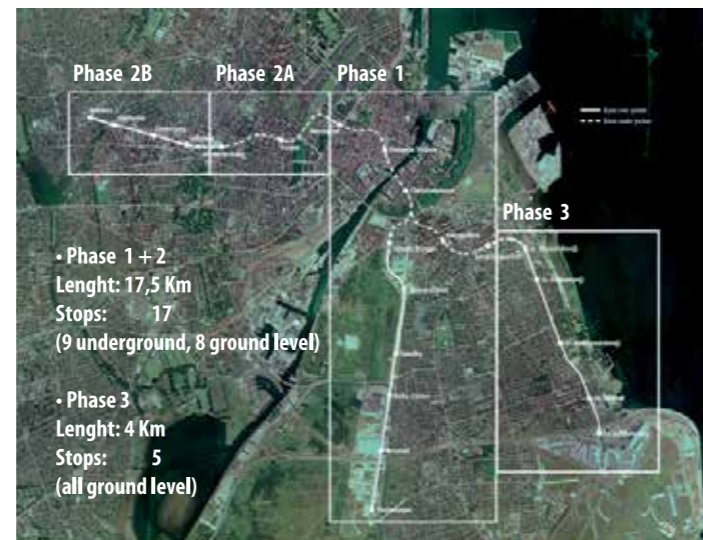
Ansaldo STS

A Hitachi Group Company



Copenhagen M1/M2 Driverless Unattended Metro

To meet growing transport needs of Copenhagen, Ansaldo STS delivered, operates and maintains a driverless unattended, high performance, safe and future-proof metro system. It links the Copenhagen airport and the Orestad new town development with the city centre and existing suburbs. Ansaldo STS provided the engineering, system integration, track work, rolling stock and system technologies for the complete turn key project.



Copenhagen M1/M2 features

Passenger service around the clock	
Line length phase 1-3	21.5 km
Min Headway (Day)	90 sec
Min Headway (Night)	15 min
Stations	22
Train capacity (4 p/m ²)	300 pass
Line capacity (4 p/m ²)	12,000 pphpd
Passengers/year phase 1-3	61 millions
Train Fleet	34 - 3 cars trains of 39m
Commercial speed	39 km/h
Max speed	80 km/h
Third rail power supply	750Vdc

In passenger service and operated by AnsaldoSTS since 2002

Success after Success: The Copenhagen City Ring Driverless Unattended Metro



Copenhagen City Ring features

Passenger service around the clock	
Line length	17 km underground
Min Operational Headway (Day)	100 sec
Min Operational Headway (Night)	15 min
Stations	17
Train capacity (4 p/m ²)	300 pass
Line capacity (4 p/m ²)	11,000 pphpd
Passengers/year	70 millions
Train Fleet	28-3 cars trains of 39m
Commercial speed	39 km/h
Max speed	90 km/h
Electrical substations	8+1
Technologies:	CBTC Driverless Unattended
Depot dimension:	90,000 m ²
Third rail power supply	750Vdc

In passenger service and operated by Ansaldo STS starting from 2018.

Ansaldo STS has delivered in 2002 the Copenhagen M1/M2 Driverless Unattended Metro and operated the system since then.

In december 2010, AnsaldoSTS has been awarded with one of the most important contract of its history: the design and construction of the new Copenhagen City Ring Driverless Unattended Metro line, including also five years of operation and maintenance with an option of further three years.

Our clients confidence is the proof of how valuable Ansaldo STS transportation solutions are.



Copenhagen City Ring main sub-systems

- ATC (Automatic Train Control)
CBTC Based
- Telecommunications and Data Communication System
- SCADA
- Power Supply & Traction Power
- Passengers Security & Information System
- Access Control & Intrusion Detection
- Control & Maintenance Centre
- Passenger Counting System
- Platform Screen Doors
- Rolling Stock
- Permanent way





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