

Industry Sector Mobility Division

Berlin, Germany, November 23, 2010

Siemens to supply underground trains to Munich

Eco-friendly, energy-saving trains featuring service-proven technology

Munich City Utilities (SWM) have placed an order with Siemens Mobility for 21 new C2 type underground trains worth about 185 million euros. At the same time, SWM have taken out two options on a further 46 underground trains, totaling 276 cars, which can be exercised until 2016 and 2020, respectively. The total volume of the order, including these options, is around 550 million euros. Hans-Joerg Grundmann, CEO of the Siemens Mobility Division, said, “We’re proud to be able to continue our longstanding customer relationship with SWM and its subsidiary, Munich Public Transportation Company (MVG). This order represents a milestone project for us in our home market. During the development of the Munich vehicle we placed particular importance on environmentally clean, low CO₂ technology.” Siemens is one of the biggest suppliers of underground trains on the world market.

The further development of today’s C car enables Siemens to build on the success of the previous car generation, for which Siemens had already borne full responsibility as general contractor. This service-proven system is combined with innovative technologies reflecting the latest developments in metro vehicles marketed by Siemens under the name Inspiro. The technologies ensure a high degree of reliability and comfort. For Munich, Siemens will supply metro trains that are especially eco-friendly and energy-efficient. The reduced energy consumption is attributable to a combination of different innovative designs. When choosing the materials for this order, the Siemens engineers were guided by environmental concerns: for example, avoiding harmful substances, replacing the halogen lamps in the predecessor vehicle with LED lights, and using materials that ensure up to 97 percent recyclability. In this way, the new underground train will enhance the CO₂ balance in Munich, and assist both SWM/MVG and the city in their efforts to further reduce the amount of energy consumed in the public transportation sector. The car bodies are made entirely of a lightweight aluminum alloy that lowers the overall body weight and, consequently, power demand

1 / 3

of the train. As an option, these trains can be fitted with energy storage units. They are part of the Siemens environmental portfolio that enabled the company to achieve sales of approximately 28 billion euros in fiscal 2010. This makes Siemens the world's largest supplier of environmentally clean technology.

Carrying around 1,000,000 passengers per day, the underground system is the most widely used means of public transportation in Munich. The 21 new trains are to be delivered between 2013 and 2015. They will be deployed in MVG's underground network, which covers a total of about 100 track kilometers. A shorter headway is to be introduced on some inner-city route sections in future. For instance, starting 2014, trains will run at 2-minute intervals instead of the previous 2.5 minutes. MVG will need seven of the new trains to achieve this. It also plans to use 14 trains to replace old rolling stock that has been in service for over 40 years and now reached the end of its useful life. The new trains are being built in the Siemens plants in Vienna, Austria and in Munich, Germany.

More comfort for passengers

The current order for Siemens comprises 21 trains totaling 126 cars. These cars are a further development of the reliable C car design for the previous generation of vehicles, which were designed by the international known car designer Alexander Neumeister. The trains are 115 meters long and 2.90 meters wide. They resemble the latest generation of underground cars which have been in service since 2002. External changes include the front section, which features new LED lighting technology, and colored LED light strips in the edges of the doors for easier recognition of door opening and closing operations. Video cameras, passenger TV and redesigned interior lighting using LED lamps provide a higher level of comfort for passengers. Compared to the maximum speed of 80 km/h of the previous generation, the C2 car not only has a top speed of 90 km/h but can also accelerate more quickly. Other advantages of the train are its high capacity and availability. The new cars have a redesigned passenger area, a new seating concept and wider doors, so they can carry more passengers than the old vehicles they are replacing. A C2 train can accommodate 940 passengers. As separate cars have been eliminated, the train now offers passengers end-to-end accessibility.

Highly reliable technology has been used throughout the new vehicles. The systems used require very little maintenance, which lengthens maintenance intervals and increases the availability of the underground fleet for the operator.



New C2.11 type underground train (simulation)
Source: SWM/MVG

You will find a copy of this press release on the Internet at:

www.siemens.com/mobility/press/pressreleases

You will find a photo for this press release at:

www.siemens.com/mobility-pictures/muenchen

The **Siemens Industry Sector** (Erlangen, Germany) is the worldwide leading supplier of environmentally friendly production, transportation, building and lighting technologies. With integrated automation technologies and comprehensive industry-specific solutions, Siemens increases the productivity, efficiency and flexibility of its customers in the fields of industry and infrastructure. The Sector consists of six divisions: Building Technologies, Drive Technologies, Industry Automation, Industry Solutions, Mobility and Osram. With around 204,000 employees worldwide (September 30), Siemens Industry achieved in fiscal year 2010 total sales of approximately €34.9 billion.

<http://www.siemens.com/industry>

The **Mobility Division** (Berlin, Germany) is the internationally leading provider of transportation and logistics solutions. With its "Complete mobility" approach, the Division is focused on networking the various modes of transportation in order to ensure the efficient transport of people and goods. "Complete mobility" combines the company's competence in operations control systems for railways and traffic control systems for roadways together with solutions for airport logistics, postal automation, traction power supplies and rolling stock for mass transit, regional and mainline services, turnkey systems as well as forward-looking service concepts. With around 24,000 employees worldwide, Siemens Mobility posted sales of EUR6.5 billion in fiscal year 2010 (ended September 30). www.siemens.com/mobility