

Metro One Consortium

Mitsui & Co., Ltd., Toyo Engineering Corporation, and Kobe Steel Ltd.

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Members: 82 persons (three from Mitsui & Co., Ltd., 55 from Toyo Engineering Corporation, and 24 from Kobe Steel Ltd.)

<Introduction>

This project (Jakarta MRT) is a 15.7-kilometer urban high-speed railway (MRT: Mass Rapid Transit) construction project that connects central and southern Jakarta, and includes this country's first underground section, with the aim of resolving the problem in the Jakarta metropolitan area of the Republic of Indonesia, where traffic congestion was becoming more serious due to economic and population growth.

The Government of Japan provided yen loans for the Special Terms for Economic Partnership (STEP) as construction funds, which was divided into eight packages, such as Civil packages (six packages) E&M and trackwork package and rolling stock package. It was an all-Japan urban MRT construction project, all constructed by contractors led by Japanese companies.

Metro One Consortium (MOC), including three titled companies and PT. IKPT, a local subsidiary of Toyo Engineering, received an order for E&M and Trackwork package for signal, power and mechanical equipment, and was in charge of EPC (engineering, procurement, construction) and system integration of all ground facilities and some on-board equipment.

The technical specifications are in accordance with STRASYA (Standard Urban Railway System for Asia), a standard system for urban railways for Asia, which was compiled mainly by JAPAN RAILWAY TECHNICAL SERVICE (JARTS) based on Japan's railway technology. By applying Japan's railway technology and know-how to the maximum extent, we have realized an urban railway system with extremely high safety and on-time performance. For example, a train control system using wireless technology, which has not yet been introduced in Japan (CBTC: Communication Based Train Control), Automatic Fare Collection system using FeliCa technology, which has proven track record in contactless IC cards, Platform Screen Doors for all stations, Continuous Welded Rail (CWR) covering all lines, and Anti-Vibration Sleepers for elevated sections have been adopted. This is a railway system that considers riding comfort and the surrounding environment in conjunction with Japan's state-of-the-art technology.

Since the line started its commercial service, it has been receiving good reputations from its users. The on-time performance rate has reached 99.7% and the number of passengers has reached 95,000 per day (2019 average). While the service has been established as a foothold for the citizens of Jakarta, construction has already begun to extend northward and in the future, the extension to southward and construction of the east-west line are being planned.

This is the first project in which an engineering company alliance led by Japanese companies completed the construction of an urban railway system based on the STRASYA specification, and it is significant that the participation of Japanese companies in future new railway projects, including those in neighboring countries, has become a reality.

Due to the above excellent achievements and future development, this case deserves award in the field of international contribution.

