Red Line Project



The Red Line commuter train system is a suburban rail project in Bangkok Metropolitan Region, Thailand.

North Line:

26.4km line from Bang Sue, located in the center of Bangkok, to

Rangsit in the north / scheduled to be open in 2021

West Line:

14.6km line between Bang Sue and Taling Chan

Master Clock System (MCS) and station clock facilities part of the project was ordered from NEC Corporation Thailand to Seiko Solutions.

State Railway of Thailand (SRT)

Contractual Relationship

MHI / Hitachi / Sumitomo

Mechanical and electrical system design & Construction contract of the project

NEC

- Communication system
- Surveillance camera system
- In-house broadcasting system and etc.

Seiko Solutions

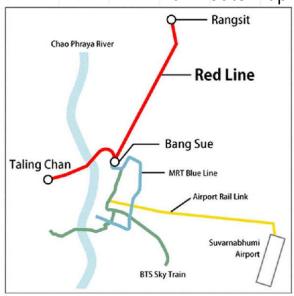
Master Clock System (MCS)

&

Station clock facilities



Train route map

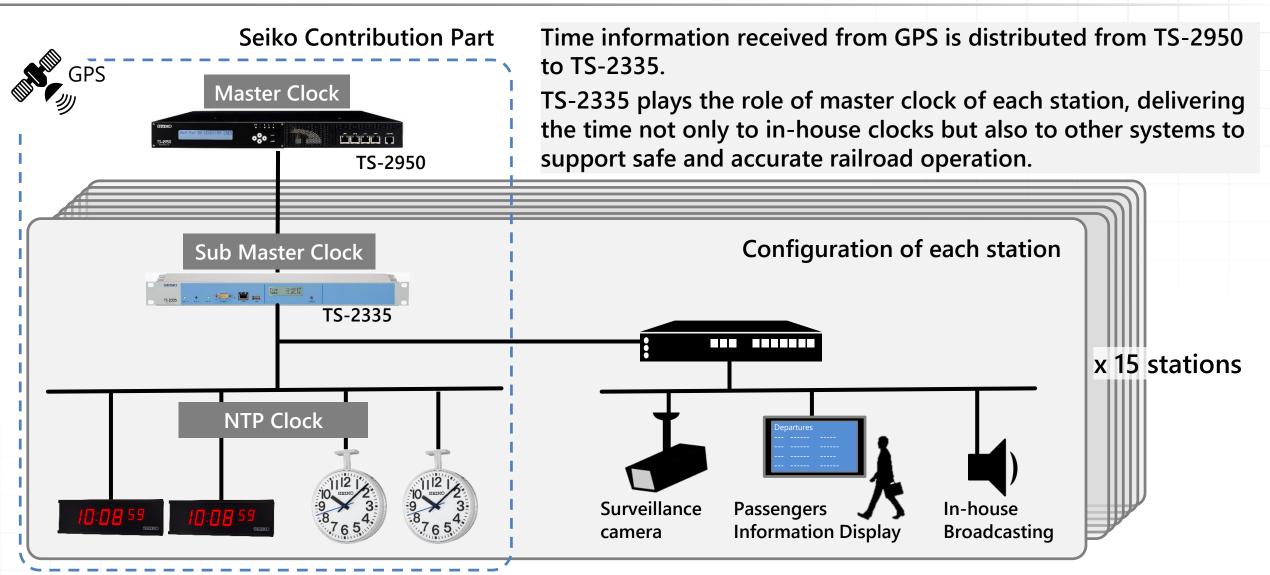


Vehicle image



SEIKO

Configuration Diagram Around Master Clock System (MCS)



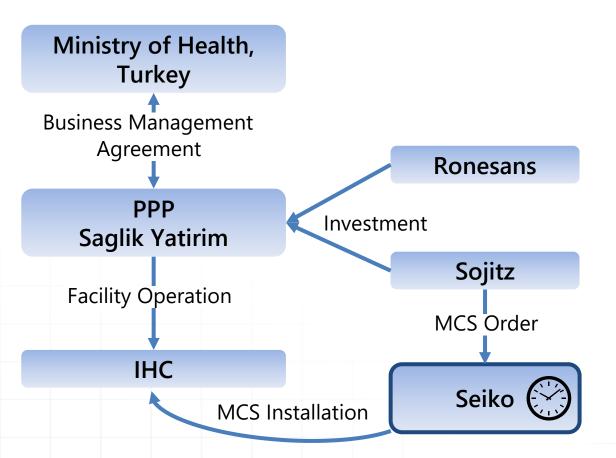
Seiko's Master Clock can continue time delivery with high precision even when it temporarily loses GPS signal.



Ikitelli Integrated Health Campus (IHC)

IHC is one of the largest hospital projects planned by the Ministry of Health of Turkey to resolve the shortage of beds by encouraging public-private partnership to establish public hospitals.

Istanbul PPP Saglik Yatirim A.S., a joint venture of Sojitz and Ronesans Group has entered into a 25 year business management agreement with the Ministry of Health. The total cost of the project is estimated at approximately 200 billion yen





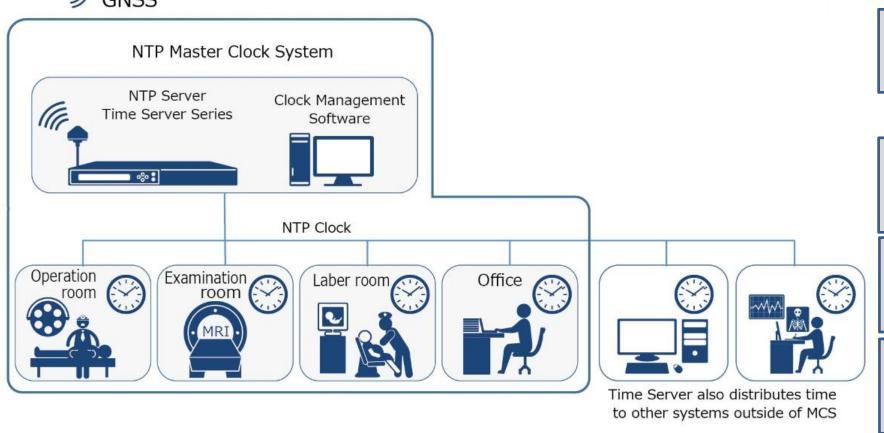
SEIKO

Configuration Diagram Around Master Clock System (MCS)

More than 2,000 units of NTP Clocks will be installed in hospital wards, operating rooms, ICUs, radiation rooms, examination rooms such as CT and MR, and labor and delivery rooms.



Time Server





NTP Clock



SCN-300 (single face)



SCN-360 (double face)



Suvarnabhumi Airport



Suvarnabhumi as an international airport in Bangkok, Thailand, covers an area of 32.4 km², making it one of the biggest international airports in Southeast Asia and a regional hub for aviation.

More than 50 NTP clocks are installed to display time received from redundant TS-2210.

