

Global overview for Urban Rail Transit and the urgency for PPP Standard Development

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Development of Urban Rail Transit

TRANSPORT INFRASTRUCTURE



History and Status Quo

a history of over 150 years (since 1863 in London)

built in large-scale since 1970s

10,000 km at present in operation
in more than 180 cities of over 50 countries

7 Systems

Metro

Light rail

Monorail

Urban fast track

Tram

Maglev Train

APM

Development of Urban Rail Transit

- The prior way of public transportation in large and medium-sized cities
- A high percentage of the gross city passenger volume in metropolis:
 - Tokyo: 88%
 - London: 71%
 - Paris: 70%
 - Moscow: 55%
 - Beijing: 86.6%
 - Shanghai: 89.1%

Development of Urban Rail Transit

- The innovation and application of new technologies on urban rail transit
 - RAMS (Reliability、 Availability、 Maintainability and Safety)
 - Big data
 - BIM (Building Information Modeling)
- 7 national engineering innovation labs in China
 - rail transit system test
 - automobile system integration
 - communication and operation control of trains
 - technologies on transit system security assurance
 - transit system security and maintenance assurance
 - technologies on green and safe construction
 - technologies on digital construction and assessment.

PPP: a very important model for urban rail transit projects

- Huge investments and influences + high quality of construction and operation
 - the investment and operation by public sectors
 - involvement of private sectors
- Very complex factors should be taken into consideration
 - the exploitation of urban land
 - urban transportation network planning
 - business mode structure design
 - the requirement of energy conservation
 - environment protection

Why to establish a UNECE PPP standard on urban rail transit sector?

- To exert very different influences on urban regions and industry.
- To promote the private sectors to involve more effectively in urban rail transit sector.
- To develop People-first Public-Private Partnerships and to implement UN SDGs.
- To provide policy framework and PPP model principles applied in urban rail transit sector in line with the requirement of the international organizations and governments.
 - national urban public transport authorities
 - PPP policymakers of different countries
 - the World Bank
 - the Asia Development Bank
- To standardize the operation of urban rail transit PPP projects.
- To stimulate the innovation of urban rail transit project implementation.

The Standard will make effective contribution to the SDGs

- China is becoming the largest PPP market for urban rail transit.
- Sufficient case resources of the PPP international standard from China.
 - Beijing Metro Line 4
 - Hohhot Metro Line 1
 - Fuzhou Metro Line 2
 - Hangzhou Metro Line 1
 - Shenzhen Metro Line 4
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- The summary of the best PPP practices of rail transit in the world.

Urban Rail Transit: a green and environmental-friendly transport mode



energy-efficiency

safety and comfort

land-conservation

convenience

huge traffic capacity

less pollution

Welcome the Global Top Experts Join us in Urban Rail Transit PPP Standard Development Project Team

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