

Global Overview of the Urban Rail Transit and the Urgency for PPP Standard Development

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Dear Colleagues,

My name is Li Kaimeng, from the China International Engineering Consulting Corporation (CIECC). It is my great pleasure to be here joining the TOS PPP meeting, and to use this opportunity to discuss together how to develop the best practice PPP model on Urban Rail Transit to support Member States to develop a greener economy.

Here I would like to share with you my vision on the global overview of Urban Rail Transit, and the urgency for the PPP standard development in terms of the people-first principle.

Compared with traditional public transport systems, urban rail transit is a greener and environmental-friendly transport mode with energy-efficiency, land-conservation, huge traffic capacity, less pollution, convenience, safety and comfort, which is in line with the principles of sustainable development requirements, especially suitable for the public transport needs in large- and medium-size cities.

Although urban rail transit has a history of over 150 years, the urban rail transit system has only been built on a large-scale internationally since the 1970s. Until now, over 50 countries have operated subways in more than 150 cities, the gross length of which has exceeded 10,000 kilometres. It includes Metro, Light rail, Monorail, Urban fast track, tram, Maglev Train and APM.

Progress of urbanization all over the world, especially in developing countries, leads people to an increasing requirement on ecological and green urban transport. In choosing the mode of urban transportation, people pay more and more attention to land and energy saving, environment quality improvement, and passenger safety. As a result, urban rail transit has become the priority way of public transportation in large- and medium-sized cities. In Tokyo, urban rail transit has 88 per cent of the gross city passenger volume, compared to 71 per cent in London, 70 per cent in Paris and 55 per cent in Moscow. In big cities in China like Beijing and Shanghai, urban rail transit has 86.6 per cent and 89.1 per cent passenger volumes, respectively, in downtown urban areas.

Most countries in the world attach great importance to the innovation and application of new technologies on urban rail transit. They are trying to improve the innovation and application of RAMS (Reliability, Availability, Maintainability and Safety), big data, and BIM (Building Information Modelling) technologies in the area of urban rail transit, with the consideration of green, environment protection, intelligence and sustainability. For instance, in China, 7 national engineering laboratories have been built to improve the research and innovation of high technologies, including the rail transit system test, the automobile system integration, communication and the operation control of trains, technologies on transit system security assurance, transit system security and maintenance assurance, technologies on green and safe construction, and technologies on digital construction and assessment.

Urban rail transit construction not only needs huge investment and influences many stakeholders, but

also requires high construction and operation quality, which cannot solely rely on the investment and operation by public sectors, but needs the involvement of private sectors as well. PPP is regarded as a very important model for the implementation of urban rail transit projects in most countries.

It is very complex to apply the PPP model to the urban rail transit sector. Factors such as the exploitation of urban land, urban transportation network planning, business mode structure design, and the requirement of energy conservation and environment protection should all be taken into consideration.

Urban rail transit would exert very different influences on urban regions and industry, as compared to inter-city rails. Thus, it is of great significance and necessity to establish a PPP international standard which is specifically focused on the urban rail transit sector. We suggest developing a UNECE PPP standard in accordance with the best practice of urban rail transit PPP projects, so that we could promote the involvement of the private sector more effectively in the investment, construction and operation of the urban rail transit sector, and the urban rail transit projects can be developed healthily under the people-first principles and the sustainable development goals (SDGs) advocated by the UN.

At present, national urban public transport authorities and PPP policymakers of different countries, especially the developing countries in the world, are trying to develop comprehensive PPP policy systems for urban public transport, while the World Bank and the Asia Development Bank have also been actively advocating the construction of public transport systems. This standard will provide the policy framework and PPP model principles applied in urban rail transit sector, in line with the requirements of international organizations and governments.

The standard will try to standardize the operation of urban rail transit PPP projects, reduce transaction costs and attract more private capital involvement in the construction of urban rail transit projects. So it is of great importance to stimulate the innovation of the urban rail transit project implementation.

At present, China is becoming the largest PPP market for urban rail transit in the world; this provides sufficient case resources for the study and development of the PPP international standard. Under the impacts of the Belt and Road Initiative, the Asia Infrastructure Investment Bank (AIIB), the Silk Road Fund and other international initiatives, more and more Chinese enterprises have been involved in the construction of urban rail transit projects in different countries. We hope to make an effective contribution to the preparation of the urban rail transit PPP standard. The core project team will be made up of top experts in the field of urban rail transit sectors around the world. The standard will be in line with the requirements of the UN SDGs based on the summary of successful urban rail transit PPP cases in the world. We hope that the experts from all other countries can join us to develop such a significant standard together, so that we can contribute to the realization of the UN 2030 agenda collaboratively. I am looking forward to working with you in the near future!

Thank you very much!

Kaimeng Li