

An insider's look at the world's best infrastructure project: An interview with Mr. Dono Boestami, President Director of PT MRT Jakarta

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摘要 ABSTRACT

Jakarta's traffic congestion is the biggest pain for the capital's 10 million residents and a major liability to economic growth. In order to solve the traffic gridlock before it overwhelms the city, the first rail-based mass rapid transit (MRT) project in Indonesia is in progress. This megaproject comprises of urban excavation and tunnel construction. However, the challenge is not only in engineering, but also a financial and political one.

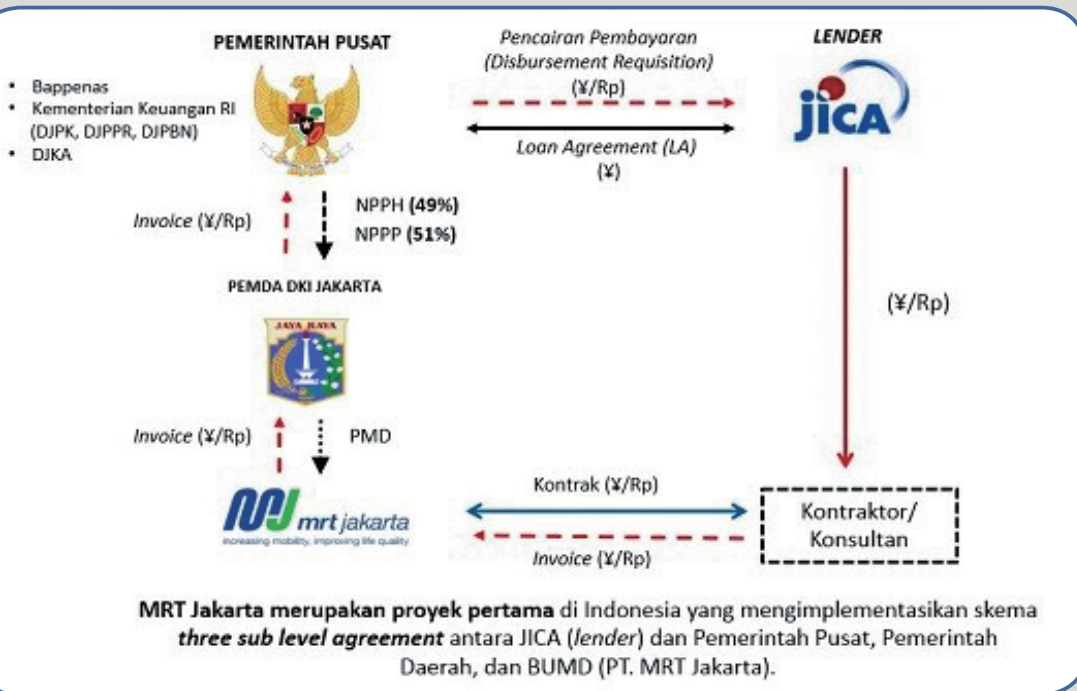
The MRT Jakarta is currently selected as one of the world's best infrastructure projects, and listed on the 16th position of the top 20 megaprojects by the World Finance (February, 2014). CECI is honored to meet the director of MRTJ, the organization that oversees MRT Jakarta, to understand the challenges and the future of this project.



Construction of MRT Jakarta in Indonesia has been discussed since 1985 and started to become a national project on 2005. Moreover, together with state budget and regional budget, Japan Bank for International Cooperation (JBIC) was the funder for the Jakarta's MRT project. The agreement between JBIC and Governor has been signed on November 28th, 2006. JBIC then has merged with Japan International Cooperation Agency (JICA) which acts as assessment team from JBIC. There is also agreement between JBIC and Governor of Indonesia to appoint one body as organization to implement the MRT project. With this in mind then PT Mass Rapid Transit Jakarta (PT MRTJ) has established since June 17th, 2008 to be responsible for engineering service, construction, operation and maintenance, as well as the business development at the MRT

stations and surrounding area. PT MRTJ is a limited liability (Perseroan Terbatas) company founded by the Jakarta Provincial Government. The shares are made up from 99% Jakarta Provincial Government and 1% PT Pasar Jaya (another Jakarta Regional-Government-Owned Company). PT MRTJ is classed as a Regional-Government-Owned-Company (Badan Usaha Milik Daerah-BUMD). MRT Jakarta is the first project in Indonesia that implement three sub-level agreement among JICA (Lender) and Central Government, Regional Government and state-owned company (PT. MRT Jakarta).

The Governor has elected Mr. Dono Boestami as president Director of the company to lead the implementation of Jakarta's MRT project. Mr. Dono finished his Bachelor in Civil Engineering and Master Degree in Project



Source: <http://www.jakartamrt.com/informasi-mrt/pendanaan-proyek/>



and Construction Management at United States. He has a notable financial background in his career from banking to state-owned enterprises. There is no wonder if he can understand the complexity of problems from beginning of MRTJ project, traffic congestion, utilities, as well as technical issues during the construction, operation and maintenance, even financial matter.

Fortunately, at Friday, January 29th, 2016, CECI has a chance to present BIM (Building

Information Model) technology to him and did brief interview at PT. MRT Jakarta. Excerpts from the interview:

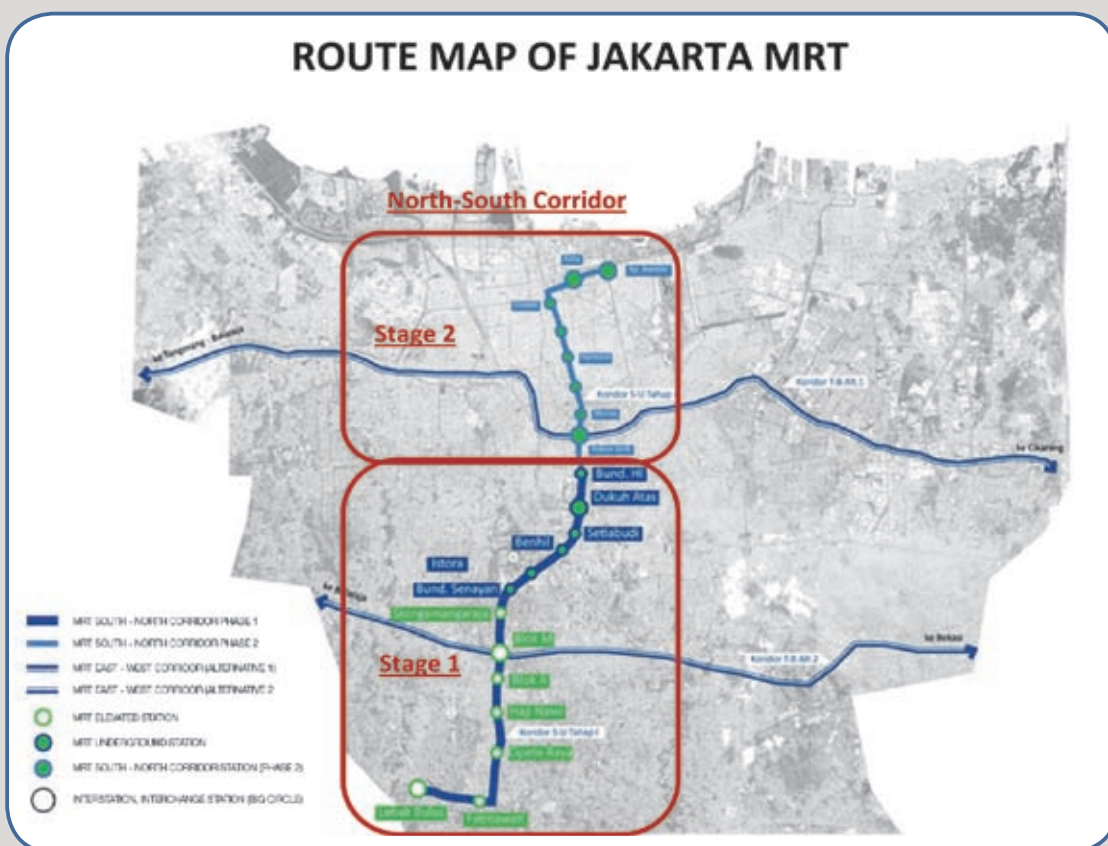
1. Vision of Jakarta Metro Operation

Jakarta MRT will stretch over ±110.8 km Jakarta roads, consists of South-North Corridor (Lebak Bulus – Kampung Bandan) and East-West Corridor with about 23.8 km and 87 km length, respectively. The construction of South-North Corridor will be carried out in 2 stages.

Stage 1 will be carried out to connect Lebak Bulus with Bundaran HI over 15.7 km railway with 13 stations (7 elevated stations and 6 underground stations). This stage is targeted to be completed on 2018 and will be operated on 2019.

Stage 2 will expand South-North Corridor

ROUTE MAP OF JAKARTA MRT



Source: <http://www.jakartamrt.com/informasi-mrt/rencana-rute-mrt-jakarta/>

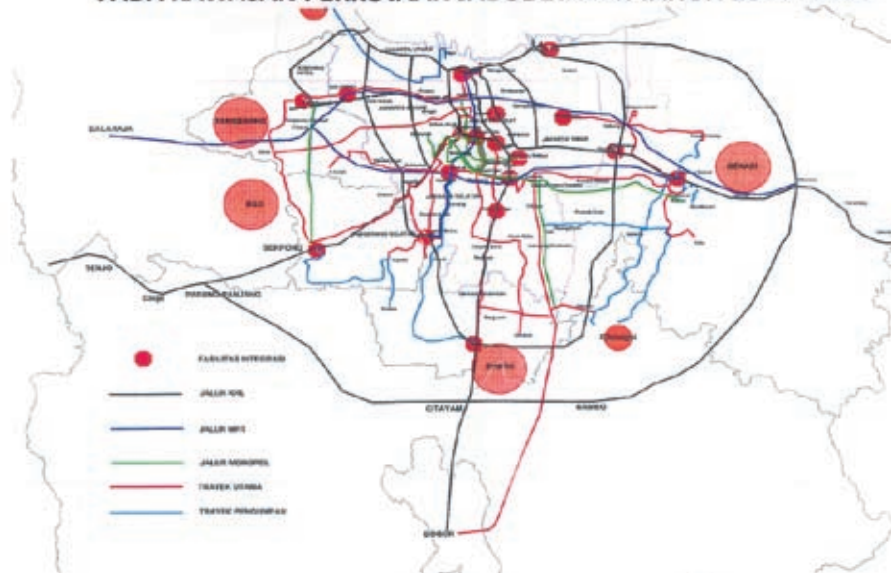
from Bundaran HI to Kampung Bandan over 8.1 km railway. The construction will have been initiated before Stage I operates and is targeted to be completed on 2020. A feasibility study is on progress for East-West Corridor, which is targeted to operate at the latest on 2024-2027.

Besides the MRT, Mr. Dono expressed the LRT project which is under construction to connect Jakarta city centre with sub-urbans in Greater Jakarta such as Bekasi and Bogor. The current development of Jakarta's LRT has its root in the cancelled monorail project. LRT was launched as the substitute to .previously abandoned Jakarta Monorail project. This LRT system will integrate Jakarta MRT, existing commuterline and planned airport monorail

based on Precedential Decree No. 54 on 2013.

This LRT system has 6 lines which divided in 2 phase of construction. The first construction phase will connect Cibubur in East Jakarta with Dukuh Atas in downtown of Jakarta with 42.1 km length and include 18 stations. The construction began on September 9th, 2015 and predicted will be finished in late 2017. The other phase will be extension of planned route. The all construction is conducted by PT. Adhi Karya based on Presidential Decree No. 98 on 2015. It is also stated there that Transportation Minister has to conduct procurement to select a body to responsible for operation and maintenance of LRT system. Since traffic conditions within Jakarta is MRTJ responsibility, MRTJ intends

RENCANA INTEGRASI JARINGAN ANGKUTAN MASSAL PADA KAWASAN PERKOTAAN JABODETABEK TAHUN 2014 - 2030



Source: Precedential Decree No. 54 on 2013

to involved on such procurement. Mr. Dono believe that Jakarta has very huge population in upcoming years later as well as massive growth in road traffic volume. He thought that this is the time to do improvement and setting a benchmark for infrastructure with the MRT project, development a new law and government regulations that support the project and finally MRT Jakarta project can be a good case study for Indonesia infrastructure project management.

2. Observation of Jakarta MRT Stage 1 works

Jakarta MRT Stage 1 works are on progress now to connect Lebak Bulus-Bunderan HI consist of 7 elevated stations with about 8.78 km length and 6 underground stations with about 6.81 km length. Stage 1 of Jakarta MRT project is a turnkey project which involved Japanese and Indonesia construction local company in join operation or join venture.

There are 6 packages for this project which can be divided as:

- (1) CP101 and CP102 are elevated station packages from Lebak Bulus to Cipete Raya Station with about 5.95 km length done by Tokyu – Wika JO.
- (2) CP103 is elevated station package from Haji Nawi to Sisingamaraja with about 3.84 km length done by OSJV JV (Obayashi – Shimizu – Jaya Konstruksi).
- (3) CP104 and CP105 are underground station packages from Bunderan Senayan to Setiabudi 3.92 km length done by SOWJ JV (Shimizu – Obayashi – Wijaya Karya – Jaya Konstruksi)

(4) CP106 is underground station packages for Bunderan HI and Dukuh Atas with 2.02 km length done by SMCC – HK JO (Sumitomo Mitsui – Hutama Karya).

This stage is targeted to be completed on 2018 and will be operated on 2019. This is caused by MRTJ still need to prepare the Term of Reference (TOR), regulation and CBCT certification related to operational of MRT in Jakarta. The regulation will be developed by referring to another country that has been started MRT operation first like Singapore, Kuala Lumpur, Taiwan, etc.

3. The outlook for Jakarta Metro Stage 2

Second stage will expand South-North Corridor from Bunderan HI to Kampung Bandan over 8.1 km railway and will pass

some heritage area in Jakarta. The engineering study has been done and MRTJ now together with Directorate General Railway and National Planning Board (BAPPENAS) are starting to prepare project funding and construction tender process. The process is targeted to be finished by 2017. The construction tender will be open bid and usually announced in The Jakarta Post, Shimbun, also MRTJ website. The tender scheme will follow Stage 1 which is turnkey project with completely underground stations. On this stage, MRTJ intended to implement BIM technology and require the bidder to provide such service. Mr. Dono believes that this technology will be benefit for future development of MRT and also whole plan of Jakarta transportation.

