

Subject: Report on Negotiation Framework for bilateral package with Japan under STEP Programme for Multi Modal Transport Projects.

Reference: Comments received via email from DMRC and Ministry of Railways

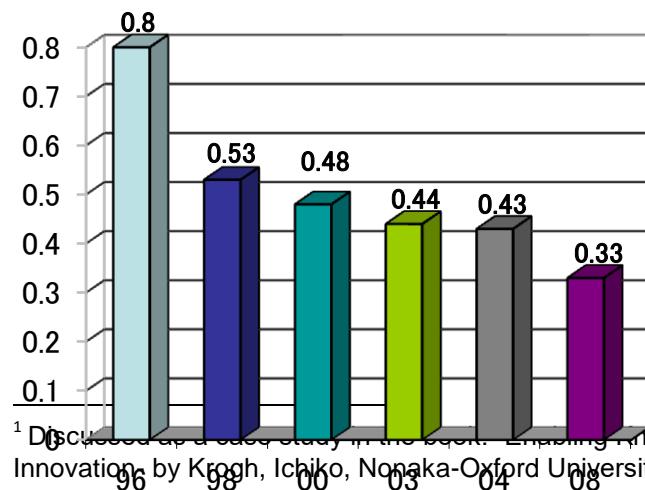
The matter under consideration is finding resources to fund infrastructure projects in the country, with particular reference to funding a few, say 6-7, of the more than 20 new Metro Rail projects. As of now, funds have posed the foremost constraint in rolling out Metro projects and such huge resources are not forthcoming from domestic private participants. Scarce Government resources have competing demands and limited funds can be made available for Metro rail, Intercity Rail projects. Most State Governments are keen on posing Metro projects for ODA assistance from Japan based on DMRC model. However, it is now informed that Japan is offering a STEP loan for such projects. The rate of interest is low (0.1%), moratorium period long (30-40 years) and 30% goods / services are to be sourced from Japanese companies. In this backdrop, the points for strategic consideration of Government Ministries engaged in this Committee are:

1. Can India fund these projects through other means if STEP loan from JICA is to be kept as last resort?
2. Is Japan willing to withdraw STEP loan conditions?
3. Under the STEP loan conditions, is Japan ruling out open international competitive bidding (OCB), for procurement of rail based projects, amongst various Japanese companies operating in Japan and other countries? Is this not an issue that intelligent and effective negotiation can resolve? After all, even in OCB, for Metro projects in India, Japanese companies are competing with each other in partnership with other MNCs. Does, this not ensure a fair competitive environment for price discovery? Thus STEP loan, does not necessarily preclude price discovery on competitive basis, through competitive bidding, amongst companies as defined by STEP conditions. ,
4. Why are DMRC and Ministry of Railways opposing Transfer of Technology? Why should India not pursue a positive takeaway benefit from JICA loan, through negotiation for transfer of technology, through collaboration/ Joint ventures with Japanese Rolling Stock and Signalling companies? Would this not give a fillip to India's efforts to develop indigenous design and manufacturing capabilities for not only Metro Rail projects but also other intercity trainsets and HSR trainsets and signalling systems? Will ToT not facilitate faster indigenous vendor development in MSME manufacturing sector with more engagement of domestic private capital, and support India's Make in India program? **Are we to be a Buyer Nation or a Maker Nation?**
5. The Metro projects have spurred some MNCs to set up Assembly and Fabrication Shops in India. If the STEP loan is pursued with the added ToT package and lends itself to setting up more JVs in India, with Japanese companies gaining adventitiously, would it not increase competition in the country. Does the STEP loan and ToT package preclude continued investment by MNCs of all countries on FDI route in India?

6. Does the current bilateral package with JICA under consideration prevent State Governments / Railways locating alternate sources of finance to pursue Metro / Intercity Rail projects, with the existing buy off the shelf approach?
7. Can current procurement regime of Metro Rolling Stock, claim to have triggered development of an indigenous manufacturing capability as is the case for Indian Railways rolling stock? Railways Production Units- CLW, DLW and ICF that have provided for practically the entire railway locomotive and coach stock, based on ToTs undertaken at different times since 1950s. During the last 20 years, it is through indigenisation and localised innovations that India upgraded their locomotives from 2800 HP to 5000 HP before obtaining technology transfer from ABB in 1995-96 to further upgrade to 6000 HP. Even now we are availing STEP Loan from Japan for Western Dedicated Freight Corridor (DFC), wherein MoR has agreed to import the much needed 9400 HP Freight Locomotives. Whether Technology Transfer has been properly negotiated is not clear.
8. Can the current provision for phased localization through contracts of procurement for Metro coaches, including spares, claim cost reduction to match what a carefully negotiated, government backed ToT package can achieve. DMRC may substantiate to match what MoR may like to confirm. These are results, presented below showcase the absorption of ABB loco technology and its' indigenisation-praised internationally in a book¹ written by foreign experts.

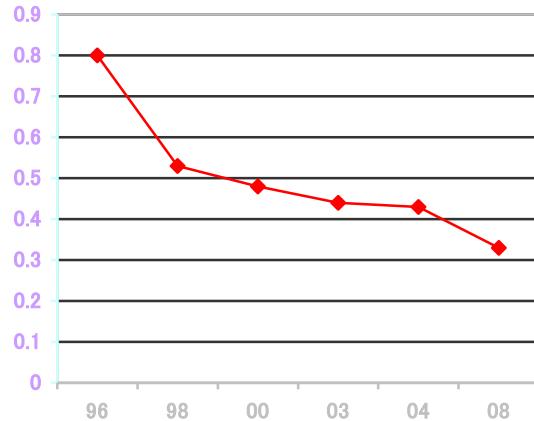
Traction Convertor

Cost Reduction
(Million €)*



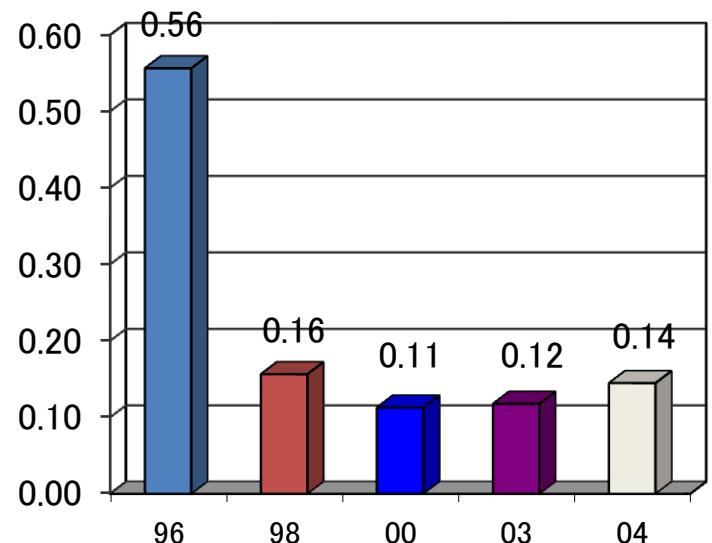
¹ Discussed as a case study in the book "Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation" by Kogha, Ichiko, Nonaka-Oxford University Press"

**Price excluding taxes*

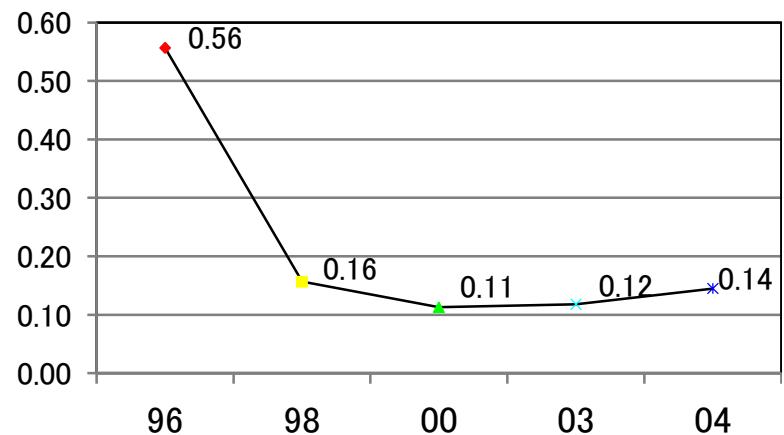


Traction **Converter:**
Reduction % of Imported Cost
(Million €)

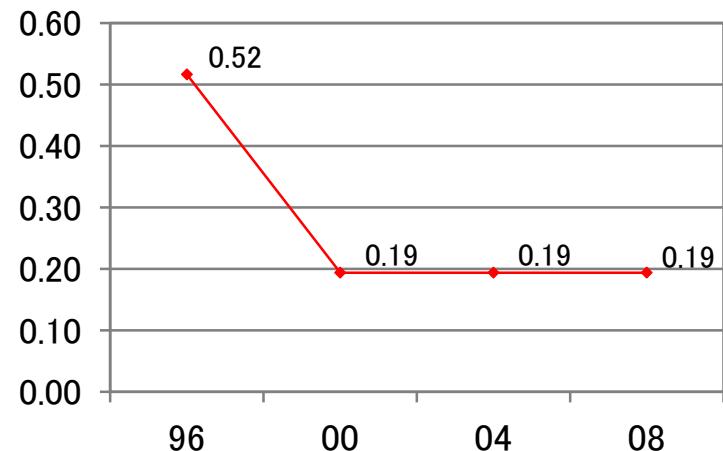
Transformer: Cost Reduction Million €



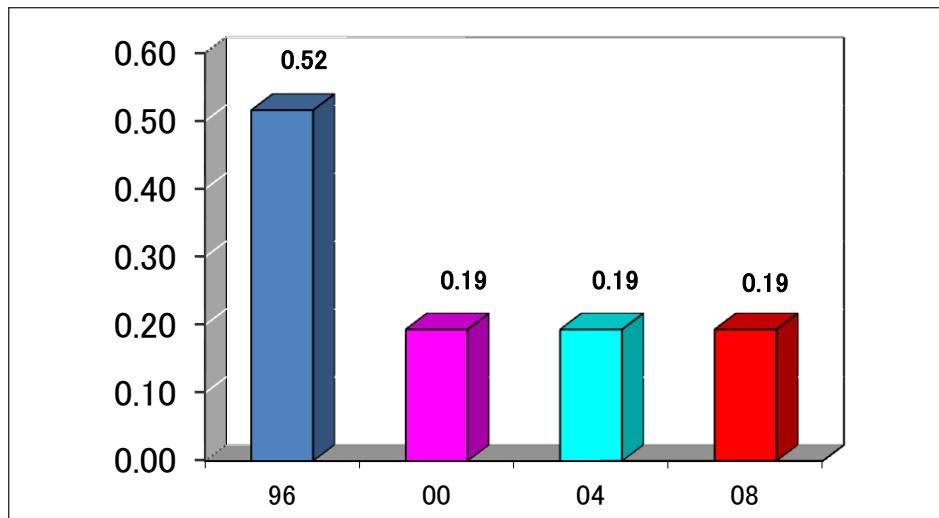
Transformer : Cost Reduction % of Imported Million €



Traction Motor: Cost Reduction % of Imported Million €



Traction Motor: Cost Reduction Million €



9. There is also a strategic reason for perseveringly and persuasively insisting on Technology Transfer. This will prove an invaluable stepping stone for assimilating technology of faster intercity services, and HSR.

Having highlighted strategic issues for consideration, a few comments are warranted on the slant of the remarks received. Comments received from DMRC and Ministry of Railways (in consultation with Metro Projects of various States) only justify the business as usual approach of procuring Metro projects. Several unsubstantiated opinions have been extended to support this. Further, statements like “factually incorrect” are liberally deployed without context. Therefore, it is necessary to set the record straight. Strangely, there are no comments on Para 21- Advantages for India. It would have been nice if DMRC and M/oR had come up with suggestions on how to achieve these advantages, through an alternate approach, duly backed by funds and technical capabilities.

The table below juxtaposes para wise comments of DMRC and Ministry of Railways on Draft Report circulated on 31.12.2014, via email, to notified members of the Committee chaired by Additional Secretary DIPP. A few issues raised are clarified below.

- 1) **Contesting “fragmented” procurement of Metro projects**- The MoR representative has mistaken the intent of the phrase. It is not geo-spatial fragmentation that the Report highlights. The six to seven Metro projects in various stages of implementation are all standalone projects with unique specifications offering no economies of scale or standardization. This has already led to allegations on rigging of specifications- as in the case of coach width for Kochi Metro, which resulted in rejection of award of tender by Board of Directors, in the first round of bidding. Efforts at standardization quoted in Para 13 have been after repeated directions of PIB, wherein it was observed that each Metro project is facing different specifications and rising costs.
- 2) **Satisfaction on Cost reduction through MNC driven localization** - Metro coaches posed in DPRs for consideration of PIB is rising. Even after bid of Rs 8.4 cr per coach in Kochi Metro, the Pune DPR prepared by DMRC, projects a cost of Rs 10 cr per coach. Why? Cheapest in the world is hardly a substantiated statement without comparing quality and specifications of Metro coaches abroad.
- 3) **Transfer of Technology** – Localization will eventually take place and can be pushed through contracts and policies. However, the knowledge that ToT is more beneficial lies with MoUD/DMRC too, given the effort made to get ToT through BEML. The success of BEML has been limited. The ToT has not plunged costs enough for it to compete against MNCs that have set up plants in India. The competition is welcome. However, Transfer of Technology, negotiated by a sovereign entity has an altogether different dimension. There is an added release of this technology to both domestic industry, through transparent measures and to Academic Institutions to internalize the higher end knowhow. The past records of IR are being bandied rather dismally, without context. India's current decline in technology leadership is because sustained support to Technology Development was not planned. Where it has been planned- Department of Space- the results are very encouraging. The incremental achievements in Indian Railways, based on past ToTs have ensured a low cost mass transport system that works. If funds were freely available, India could aspire for state of the art in all spheres. For the present, periodic Transfers of Technology are inevitable. However, we need to learn from international experience (South Korea and China) to develop further on this technology base.