## **Telecommunications Services for CWG-2010**

MTNL was appointed on "nomination basis" in October 2009 for providing telecommunications services for CWG-2010, on the premise that it would follow all norms and procedures for public financial accountability. However, we found that the process of awarding the telecommunications services contract was flawed.

MTNL, with OC's agreement, pushed through a vastly more expensive technical solution (IP/ MPLS) for the Broadcast Video Network and Broadcast Audio Network, which had not been tested in previous Games and was not acceptable to the Rights Holder Broadcasters (RHBs) from different Commonwealth countries. Eventually, in addition to IP/ MPLS, the tested and existing technical solution ("point-to-point dark fibre") was provided to meet the requirements of RHBs. Even Doordarshan made use of only the dark fibre solution for its video broadcast requirements. This solution would have been vastly cheaper, with less cost to the public exchequer.

The premise of the PSU following public financial accountability norms (which was the basis for obtaining GoI approval for appointment of MTNL) was jettisoned, as the technical requirements were altered without adequate justification by MTNL to leave only one technically qualified bidder, the HCL/Cisco team; there was, thus, no financial competition. Essentially, MTNL acted as a conduit for placement of a contract, on a back-to-back basis, in a non-transparent manner.

In August 2009, Airtel made an offer to the OC for providing telecommunication services for CWG-2010. Shri Suresh Kalmadi and his associates in the OC continued to negotiate till January 2010 with Airtel, whose last offer was to provide such services at a cost of Rs. 160 crore (excluding taxes), offset by sponsorship of Rs 100 crore. For unexplained reasons, Airtel's offer, which was considerably better than that of MTNL, was not brought to the notice of the Gol.

The estimates for telecommunications services provided by MTNL at different points of time were unreliable and lacked adequate support, with the final infrastructure cost of Rs. 270.70 crore (excluding taxes) approved by the Gol being more than eight times the estimates of approximately Rs. 33 crore for Melbourne CWG-2006. Further, the contract awarded by MTNL to the HCL/ Cisco team was for Rs. 387.19 crore (excluding taxes), which was 12 times the estimated cost for similar services in Melbourne CWG-2006. Clearly, there was a substantial loss to the Gol on account of this decision. However, we are unable to quantify this loss on the basis of available records.

MTNL did not provide realistic and detailed business plans or strategies regarding the post-CWG market potential for the high speed IP/ MPLS solution obtained at considerable cost to the GoI (except for a reference in the tender documents to the requirement of network capacity to handle 1,00,000 customers each in Delhi and Mumbai). This, further, confirms the redundant nature of this expensive technical solution.

#### **29.1 Introduction**

For the successful conduct and delivery of the Games, it was necessary to put in place robust, effective and fail proof telecommunications services catering to the requirements for bulk transmission of games data, security data, High Definition TV (HDTV) broadcast video signals, and broadcast audio signals between different locations - competition and other venues, the International Broadcasting Centre (IBC), the Main Press Centre (MPC) (located at ITPO), and master control facilities. The scope of telecommunications services for CWG-2010 is summarised below:



Figure 29.1 — Telecommunications Services for CWG-2010

MTNL was formally appointed in October 2009 by MYAS as the Telecommunications Service Provider for CWG-2010.

#### **29.2 Selection of MTNL**

We found that the formal appointment of MTNL as the telecom partner by MYAS in

October 2009 was the culmination of an extended engagement process between the OC and MTNL at the highest levels, beginning March 2009 as is evidenced by the chronology of events given below:

#### **Events / Activities** Date 14 March 2009 Comprehensive presentation made by the MTNL Technology team to the OC, which indicated the cost of laying the telecommunication solution as Rs 450 crore (based mainly on rates of Cisco and HCL equipment). 26 May 2009 Meeting held between the MTNL team headed by Shri RSP Sinha, then CMD MTNL and a senior management team of the OC headed by Shri A K Mattoo, Treasurer, Shri VK Gautam, COO and other members of the OC Technology Functional Area 6 June 2009 Letter of intent issued by COO, OC engaging MTNL as the Telecommunications Service Provider for CWG-2010, subject to other terms and conditions to be finalised through detailed negotiations. June 2009 Discussions held between the OC<sup>1</sup> and MTNL's technology expert committee<sup>2</sup> to finalise the Scope of Work (SOW). 30 July 2009 SOW finalised by the OC for telecommunications infrastructure. 4 August 2009 Group of Officers (GOO)<sup>3</sup> constituted by Cabinet Secretariat to evaluate and finalize the SOW with respect to financial and technical proposals mooted by MTNL. 9 August 2009 GOO approved proposal at an estimated cost of Rs. 270.70 crore (against the proposed estimate of Rs. 343.11 crore) for telecommunications infrastructure to be funded on a wet-lease basis<sup>4</sup>, with Gol financial support of Rs. 165 crore plus duties and taxes of Rs. 17 crore to be provided to

#### Table 29.1 – Chronology of events leading to nomination of MTNL

Section - H

<sup>1</sup> Shri V.K. Gautam, COO and other members of the Technology Functional Area.

MTNL.

Gol

<sup>2</sup> GM(CPSL), Manager(CPSL), and DGM(BB).

October 2009

November 2009

- <sup>3</sup> Secretary, Sports; Addl. Secretary, MI&B; Joint Secretary, MoF; and DDG, DOT
- <sup>4</sup> The facility would be available for use during CWG-2010 and would then be handed over to MTNL for future use. 60 per cent of the capital cost would be borne by the GoI and reimbursed to MTNL.

MTNL nominated as Telecommunications Service Provider for CWG-2010 by

Proposal of GOO endorsed by the EFC and approved by the GoI.

We found that the selection of MTNL on nomination basis was justified to the Gol on the grounds of it being a Public Sector Undertaking (PSU) which would follow all norms and procedures for public accountability. Given the limited time available, the selection of a PSU for service delivery would have been understandable, if it was delivering services directly. However, the telecommunications services were actually delivered by the HCL/ Cisco team.

Essentially, MTNL acted as a conduit for placement of a contract on a back-toback basis, in a non-transparent manner on the HCL/ Cisco team, as described subsequently, and the underlying premise of a PSU following public financial accountability norms was jettisoned.

#### 29.3 Airtel's considerably better offer not brought to the notice of Gol

We found that on 28 August 2009 (when the Cabinet Secretariat had already appointed a GOO in connection with MTNL's proposals), Airtel approached the OC with a proposal to provide telecommunications services for CWG-2010 worth Rs. 100 crore as the Lead Sponsor; this proposal was validated by the technology team of the OC. Shri Suresh Kalmadi, Shri A K Mattoo and Shri T S Darbari of the OC continued to engage with Airtel on the proposal till early January 2010, during which period Airtel's offer changed from provision of telecommunications services during CWG-2010 worth Rs. 100 crore as the Lead Sponsor to an offer of telecommunications

services at a cost of Rs. 160 crore (excluding taxes) offset by Rs. 100 crore as sponsorship.

We noticed that the OC chose not to bring this considerably better offer of Airtel to the notice of the Gol or GOO anytime between August and October 2009 (when MTNL was appointed as the Telecommunications Services Provider for CWG-2010). It is also not understood why Shri Kalmadi and his associates continued to interact with Airtel, even after Gol had taken the decision to engage MTNL on OC's recommendation and thereafter, MTNL was parallely engaged in selecting a contractor to provide these services.

### 29.4 Choice of technology

MTNL suggested a technical solution based on IP/MPLS technology for all networked services viz. Security Data Network (SDN), Games Data Network (GDN), Broadcast Video Network (BVN) and Broadcast Audio Network (BAN). While for data transmission IP/MPLS was a robust solution, it was a more expensive technical solution for broadcast video and audio services and had not been tried and tested in past Games. In contrast, in the earlier Games, broadcast video/ audio telecom services had been delivered through "point to point dark fibre", which was a tried and tested solution and was also far less expensive. It may be noted that the scope of work prepared by the OC for the GOO's consideration indicated the IP/MPLS solution only for data networking and not for broadcasting, whereas MTNL, in its presentations, offered an IP/MPLS based solution for all networks. In its report, the GOO noted that it had

relied on the technical knowledge, expertise and judgement of experts from Prasar Bharati (the host broadcaster), MTNL and the OC, and accepted the projected infrastructure requirements (including IP/MPLS for broadcast video and audio services).

In October 2009, during the first World Broadcasters Meet (WBM)<sup>5</sup>, some of the Rights Holder Broadcasters (RHBs) raised concerns on the adoption of the IP/MPLS technology for video broadcasting in place of the "point-to-point dark fibre" broadcast technology. In a review meeting held on 6 January 2010, to discuss this issue, Mr. Patrick Furlong (Advisor, Broadcasting to the OC) observed that IP/MPLS technology had not been proven or tested yet on such a large scale in multi sports environment. Eventually, on the insistence of RHBs, in February 2010, MTNL agreed, in February 2010, to provide "point to point dark fibre" as the primary solution, along with the IP/MPLS based solution.

Reverting to the existing "point to point dark fibre" technology solution for broadcasting video and audio completely changed the cost dynamics:

In July 2009 itself, Mr. Brian Nourse, the Technology Consultant for the OC, had indicated that the estimated cost for providing similar services in Melbourne CWG-2006 had been only Rs. 33 crore (as against Rs. 270.70 crores estimated by the GOO) and flagged the need to engage the Host Broadcaster (Prasar Bharti) and RHBs.

- The cost of data transmisson was a fraction of the cost of audio/video transmission, as noted by ADG (Technology), OC in January 2010.
- MTNL was asked by the OC (January 2010) to provide details to rework the costs based on provision of broadcast video/ audio services on "point-to-point dark fibre solution"; however, MTNL did not do so, and merely agreed to provide "point-to-point dark fibre" solution to RHBs at no additional cost.

Clearly, MTNL, a PSU, chose not to adopt a more judicious and cost effective approach in selecting the technology solution, and the OC did not persuade MTNL to do so in the larger interest of optimal utilisation of GoI funds.

In our view, MTNL, with OC's agreement, pushed through a costlier technical solution (IP/ MPLS) for the Broadcast Video/ Audio Network, which had not been tested in the previous Games and was not acceptable to the Rights Holder Broadcasters (RHBs).

Eventually, in addition to IP/ MPLS, the tested and existing technical solution ("point-to-point dark fibre") was provided to meet the requirements of RHBs. Even Doordarshan made use of dark fibre as its primary solution for its audio/video broadcast requirements, with the IP/ MPLS solution used only for the broadcast disaster recovery site. This solution would have been vastly cheaper, with ultimately less cost to the public exchequer.

In response, MTNL indicated that the setting up of an IP/ MPLS based network was a unanimous combined decision of all

Prasar Bharti, the Host Broadcaster and the OC organized two WBMs to interact with existing and potential Right Holders Broadcasters to keep them updated on the operational preparedness of the CWG-2010. The first WBM was held from 26-28 October, 2009.

the concerned stakeholders to address the composite requirements of all applications. Point-to-point dark fibre based solution was additionally provided by MTNL to give comfort level to the RHBs. We do not agree with MTNL's views, in the light of the issues highlighted above.

### 29.5 Award of back to back contract by MTNL to HCL/Cisco

The chronology of tender and award of the telecommunication services contract by MTNL is given below:

### Table 29.2 – Chronology of events leading to selection of HCL/ Cisco

Date	Events / Activities
24 September 2009	Global tender floated by MTNL, with last date of bid submission as 27 October 2009
13 October 2009	Pre-bid meeting held (in which 18 agencies participated) and date of bid extended to 10 November 2009
3 November 2009	Last set of pre bid clarifications issued by MTNL
10 November 2009	Single bid received from HCL with Cisco as teaming partner; technical and commercial bids opened; the price quoted by HCL/Cisco team was Rs. 335.14 crore (excluding taxes)
14 February 2010	Advance purchase order issued by MTNL to HCL/Cisco team
12 March 2010	Contract awarded by MTNL to HCL/Cisco team for Rs. 387.19 crore (excluding taxes)

We found that the entire tender and award process was tailored by MTNL to ensure the success of HCL/Cisco team, as detailed subsequently.

## 29.5.1 Arbitrary inclusion of experience requirement of implementation of 60 nodes in a single network

The initial RFP prepared by MTNL, based on the scope of work, specified *"....minimum experience of implementation of at least 15 nodes (MPLS Core and MPLS Edge routers) in a single network"* as the requisite technical qualification required from the bidder. However, in September 2009, through a committee<sup>6</sup>, MTNL changed the technical qualifications for the RFP to ".....minimum experience of implementation of 60 nodes in a single network". This requirement was justified, stating that "the CWG Data Network shall contain between 120-130 MPLS routers, therefore it was decided that the prospective bidders should have at least 50 per cent of the numbers of node experience of implementation".

We found no evidence of MTNL/HCL/Cisco actually implementing 60 nodes in a single network in CWG-2010.

In our view, the experience stipulation of 60 nodes in a single network was deliberately conceived to limit competition to HCL/Cisco team.

<sup>&</sup>lt;sup>6</sup> comprising of CGM (Switching & Planning), GM (CPSL), GM(MM), GM (BB&IA) and DGM (BB-D)

Further, despite requests from the prospective bidders (and the last pre bid clarification being issued as late as 3 November 2010), the last date of submission was not extended beyond 10 November 2010. This rigidity in adhering to the stipulated date is belied by the subsequent delay of three months in actual award of the contract.

Consequently, among the 18 agencies that had evinced interest at the RFP stage, of which four had the requisite experience in Olympics/Commonwealth/FIFA Games, only one, Cisco, teaming with HCL, submitted a financial bid.

In our opinion, the bidding process was tailored to ensure that only the HCL/Cisco team's financial bid was available, thus eliminating financial competition.

On receipt of a single financial bid, Director (Finance), MTNL had advised (December 2009) short-tendering (against the option of negotiation) to ensure that best rates were secured, as the estimates were unreliable. She, further, recommended that if negotiations were to be conducted with a single bidder, the Price Negotiation Committee should have Government representatives from the DoT and the MoF. However, MTNL conducted price negotiations through an internally constituted committee, thus making the process even more non-transparent.

# 29.5.2 Reasonability of costs for providing telecommunication infrastructure

Financial competition was imperative to ensure reasonability of the rates secured. It

was particularly important in the instant case as the estimates were unreliable i.e Rs. 450 crore at the stage of the first presentation to the OC, reduced to Rs. 343.11 crore in MTNL's proposal to the GOO. The GOO anticipating a further reduction of 21 per cent through competitive bidding, reduced the estimates to Rs. 270.70 crore. After post-bid negotiations and including additional equipment worth Rs. 40.50 crore, MTNL finally placed an order of Rs. 387.19 crore on HCL/Cisco with the supplier contractually entitled to take back equipment worth Rs. 33 crore.

In our opinion, the cost of providing telecommunication services at Rs. 387.17 crore in CWG-2010 was unreasonably high for the following reasons:

- The COO, OC at the time of receiving the first estimate at the MTNL presentation in March 2009 had observed that the estimate of Rs. 450 crore was 17-18 times that of the expenditure at Melbourne CWG-2006;
- As noted by the Consultant (Technology), OC, in July 2009, the estimated comparative cost of providing telecommunication services in Melbourne CWG-2006 was Rs. 33 crore;
- Airtel had offered a technologically acceptable solution for Rs. 160 crore (excluding taxes) offset by Rs. 100 crore sponsorship;
- The inappropriate choice of IP/MPLS technology for broadcast video/ audio services at a vastly higher cost has already been discussed in this section; and

The contract awarded by MTNL to HCL/Cisco team for Rs. 387.19 crore (excluding taxes) far exceeded the GOO estimates and, in the absence of financial competition, there was no comparative check.

In response, MTNL indicated that HDTV technology required huge bandwidth of the order of 1.6 GB per channel compared to 0.27 GB per channel in SD (Standard Definition). While it is true that HDTV technology was used for the first time in CWG, this does not affect our audit conclusion as the requirement for HDTVcompatible bandwidth had been known at all stages and appropriately considered by all parties.

Clearly, there was a substantial loss to the GoI on account of this decision. However, we are unable to quantify this loss on the basis of available records.

Incidentally, we also observed that MTNL had not maintained stock registers for the assets procured under the said contract from the HCL/Cisco team, due to which we are unable to seek assurance regarding complete execution of the contract and safeguarding of assets procured at such high costs.

#### 29.5.3 Legacy plan

We had enquired from MTNL as to their long term business plans/ strategies for high speed (10 Gbps) IP/MPLS solutions for identification of the market size and potential clients, for re-deployment of the equipment purchased for CWG-2010 to ensure that it is optimally utilised post-Games.

In response, MTNL provided a one-page listing of tangible and intangible benefits/ advantages, and indicated that this network would facilitate provision of wholesale bandwidth to other operators, banks, corporate houses and various other Government agencies on lease or rental basis (without details). They also stated the equipment purchased for CWG-2010 was "being redeployed" to augment the capacity and expand the IP/ MPLS network, without, however, indicating any specific details or establishing how the equipment procured for a high speed 10 Gbps IP/ MPLS solution would be optimally used on the existing lower speed IP/ MPLS network. MTNL also drew reference to a paragraph in the tender documents, which indicated network capacity to handle 1,00,000 customers each in Delhi and Mumbai.

It would thus appear that this high cost technology was procured by MTNL, largely at GoI cost, solely for the short term purpose of CWG -2010 without any realistic and detailed long term legacy plan, which casts further doubts on the choice of this solution.