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## *The Real Score:*

# **The National Broadband Network Project:**



As early as the 1980s, a unified telecommunications system was already seen as critical to the operations of various government agencies such as the Meteorological Telecommunications System of PAGASA and the Maritime Communications Project of the Department of Transportation and Communication.

Even then, each agency tried to establish an efficient and reliable communications facility to improve their administrative operations and the delivery of services to the public. This resulted in individual, unconnected, and uncoordinated telecommunications infrastructures of these agencies.

This situation was noted during a series of Infrastructure Committee (INFRACOM) meetings of the NEDA Board on the formulation of the Comprehensive and Integrated Infrastructure Program.

As a result, the INFRACOM decided that a “single platform system” with multiple applications be established that will integrate government ICT/telecommunications

networks for optimal use, greater economies of scale and to facilitate seamless transfer of knowledge and information. Furthermore, the proposal to implement a nationwide broadband project was also conceptualized and prepared in view of the President’s call for a National Cyber Corridor program, which was particularly highlighted in her July 2006 State of the Nation Address (SONA) that envisions to fast track national ICT development. This led to the conception of the National Broadband Network (NBN) Project with DOTC/CICT as the project proponent.

### **Sectoral Program Context**

The NBN project is consistent with the MTPDP (2004-2010) goals, namely: (a) rationalizing existing government network infrastructure to enable sharing and interconnection of network resources; (b) developing digital infrastructure to provide public access points for delivery of e-government services; and (c) adopting Voiceover Internet Protocol (VoIP) that could reduce the cost of connectivity. It is also included in the updated Medium-Term Public Investment Program or MTPIP and the CIIP.



## **Project Objectives/Description**

The NBN project aims to build a fully integrated single platform nationwide broadband network to: (a) allow seamless connectivity with government agencies or intranet; (b) enhance delivery of basic services; and (c) host multiple government information communication technology (ICT) applications and/or services.

Through the NBN project, it was envisioned that the government would be able to: (a) establish an IP-based national broadband network; (b) provide a single platform infrastructure network for ICT services (i.e., data, voice, video, videoconferencing, and Intranet with Internet gateway); and (c) upgrade the existing TELOF network/facilities to become an integral part of the network. The intended beneficiaries of the project are the 2,295 major government agencies and offices and 23,549 barangay/municipal offices.

The NBN project has two main components. The first is the NBN Physical Infrastructure which includes the following: (a) Network Transmission Backbone; (b) WiMAX Network Cluster (last mile distribution); and the (c) Integrated Data Center. The second component is the Network Application Systems/Services that include the following: (a) VoIP System; (b) Intranet capacity; (c) Internet access; (d) Video Conferencing System; and (d) Network Support and Management Subsystems.

## **Costs and Benefits**

The NBN project is estimated to cost PhP16,474.07 million which is proposed to be sourced from a concessional loan from the People's Republic of China. The Philippine government will not provide any counterpart fund for the project.

The indicative terms of the loan call for a 5-year grace period and 15-year repayment period. The loan interest is assumed to be maximum of 3 percent per annum.

The project's economic benefits include savings in communication expenses, Internet access, Intranet process, operations and maintenance (O&M) and utilization of existing government telecom facilities, among others. Based on the review/evaluation of the NEDA-Investment Coordination Committee (ICC) Secretariat, the project will result in total annual government net savings estimated at PhP3.6 billion. Considering such benefits, the project was deemed economically viable with a net present value or NPV of PhP11,056.77 million and economic internal rate of return or EIRR at 29.6 percent.

A sensitivity analysis was also conducted where the economic investment cost was increased by 25 percent and economic benefits reduced by 25 percent. The result found the project still economically viable. In general, the review showed that the loan amount for the project can be paid through savings in government communication subscription and operating costs.

The primary merits of the project as a result of the evaluation are on its technical soundness, economic viability and concessionality of ODA loan.

Without the NBN Project, the government will still have to spend in terms of telecom expenses/bills and may even continue investing in new and uncoordinated infrastructure networks for information access. However, with the establishment of NBN, the government is expected to capitalize the current expenses in a more cost effective manner and even has the potential to bring down the cost of government communication expenses to realize immense savings in telecom expenses, while providing a great opportunity to improve the delivery of government services to the people.

