This is a new section of the Public-Private Partnership Resource Center website and is currently in draft form. Your feedback is welcome: If you would like to comment on the content of this section of the website or if you have suggestions for links or materials that could be included please contact us at ppp@worldbank.org.

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Next Generation Nationwide Broadband Network, Singapore

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On this page: *A case study on Next Generation Nationwide Broadband Network, Singapore. Find more at the Municipal Public-Private Partnership Framework - Project Summaries section for brief summaries of around 100 projects from around the world, examples of successes and challenges, as well as innovative ideas on solutions, or visit the Guidelines on Innovative Revenues for Infrastructure section.*

Project Summary:

Background

To enhance Singapore's global competitiveness and meet its future economic and social needs, the Singapore Government decided to develop a new Next Generation Nationwide Broadband Network (NBN). The NBN involved a Fibre-to- Anywhere network project offering open access, competitively-priced ultra-high-speed broadband access from 1Mbps to 1Gbps for consumers and businesses. To this end, the Singapore Government decided to pursue a PPP to leverage the private sector's innovation and competencies and to optimally allocate the risks, rewards, and responsibilities between public and private sector.

Project Structure

Using a two-stage competitive bidding process, the Government selected the OpenNet Consortium as the Network Company (NetCo) responsible for the passive infrastructure of the Next Gen NBN (e.g., the fiber optic cable) and, in 2009, Nucleus Connect as the Operating Company (OpCo) responsible for the active infrastructure of the Next Gen NBN (e.g., routers, switches, and network access equipment). NetCo would receive financial support from the Government of up to SD 750 million (USD 550 million), while OpCo would receive financial support of up to SD 250 million (USD 184 million). The private partners would need to cooperate to design, build, and operate the all-fiber optic network, to connect every home, office, and institution in Singapore.

Under this PPP scheme, the Government is responsible for facilitating timely disbursements of public funds and establishing an appropriate regulatory framework for the Next Gen NBN to support market investments. The private partners are responsible for implementing a sustainable business model for the Next Gen NBN over the longer term, deploying technological solutions and technical expertise, and understanding and meeting the needs of end-users.

Lessons Learned

The Next Gen NBN began commercial operations in August 2010. Since then, the competitivelypriced fiber broadband services have become available for businesses and private consumers through more than 12 different service providers and over 40 fiber-optic based broadband access plans. The project benefits not only individual consumers and businesses but also info communications (infocomm) companies. In particular, individuals benefit from richer mobile and wireless services, businesses benefit from ready access to a robust network that supports data-intensive transactions, and the infocomm companies benefit through the expanded infocomm market. The expanded market can open up new revenue streams and business opportunities.[1]

With the government's commitment to an open, transparent, and competitive procurement process and having a well-prepared study, the project was able to be delivered at a low cost without compromising the efficiency and effectiveness of the infrastructure. Key efforts in this respect included conducting studies of overseas deployments and engaging and consulting with the private sector closely and early in the process to better understand the project's impact and implication and, at the same time, to understand the type of government support required to incentivize the industry.

Footnote 1: Source(s): http://www.itu.int/net/ wsis/stocktaking/docs/ activities/1291981845/ Towards%20 a%20Next%20 Generation%20 Connected%20Nation_ Singapore.pdf accessed 17 February 2019

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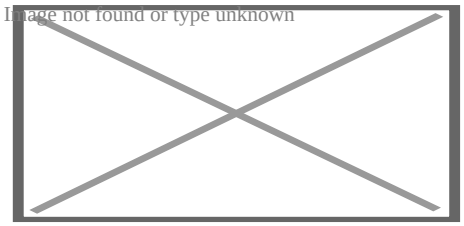

The Guidelines on Innovative Revenues for Infrastructure (IRI) is intended to be a living document and will be reviewed at regular intervals. They have not been prepared with any specific transaction in mind and are meant to serve only as general guidance. It is therefore critical that the Guidelines be reviewed and adapted for specific transactions.

To find more, visit the Innovative Revenues for Infrastructure section and the Content Outline, or Download the Full Report. For feedback on the content of this section of the website or suggestions for links or materials that could be included, please contact the Public-Private Partnership Resource Center at ppp@worldbank.org.

