



Report and Recommendation of the President to the Board of Directors

Project Number: 49116-001
June 2015

Proposed Loan and Administration of Technical Assistance Grant Ooredoo Myanmar Limited Nationwide Telecommunications Project (Myanmar)

This is an abbreviated version of the document approved by ADB's Board of Directors that excludes information that is subject to exceptions to disclosure set forth in ADB's Public Communications Policy 2011.

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 1 May 2015)

Currency unit	–	kyat/s (MK)
MK1.00	=	\$0.001
\$1.00	=	MK1,090

ABBREVIATIONS

ADB	–	Asian Development Bank
ICT	–	information and communication technology
PSOD	–	Private Sector Operations Department
SDCC	–	Sustainable Development and Climate Change Department
TA	–	technical assistance

NOTE

In this report, "\$" refers to US dollars.

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I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan in the amount of \$450 million, comprising (i) an A-loan of up to \$150 million; and (ii) a B-loan of up to \$300 million to be funded by participating financial institutions, to Ooredoo Myanmar Limited, for the Nationwide Telecommunications Project in Myanmar.¹ The report also describes the proposed technical assistance (TA), to be funded by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by the Asian Development Bank (ADB), for Renewable Energy for the Nationwide Telecommunications Project, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the TA.

II. THE PROJECT

A. Project Identification and Description

1. Project Identification

2. Universal access to information and communication technology (ICT) is critical in fostering a country's socioeconomic growth by improving business opportunities and trade facilitation; reducing urban–rural and gender gaps; and enhancing the delivery of public services such as health, education, and security. After decades of isolation, Myanmar remains one of the poorest and least-connected countries in Southeast Asia. The lack of investment in ICT infrastructure was apparent in the low penetration level of telecommunication services—in 2013, only 7 in 100 persons had access to a mobile phone, 0.5 in 100 had fixed-line telephone access, and 0.7 in 100 had a broadband internet subscription. Due to lack of investment and competition, the cost of having a mobile connection was prohibitively expensive for the average citizen, and coverage was biased toward larger cities even though the majority of the population lives in rural areas. A digital gender gap also exists in terms of basic access and usage of mobile phone and internet services. This disparity denies women the significant benefits and opportunities from participating in today's global information society. As part of its wide-ranging reforms, the Government of Myanmar has prioritized the availability, affordability, and quality of basic ICT infrastructure throughout the country to support inclusive socioeconomic growth and poverty reduction.

3. With assistance from the World Bank Group, the government has undertaken significant ICT reforms such as organizational restructuring of the incumbent operator and regulator, introduction of competition, and opening-up of the sector to foreign investment. In February 2014, following one of the most competitive international tenders with over 90 applicants, the government awarded a telecom operating and associated spectrum license to both Qatar's Ooredoo Group and Norway's Telenor Group.² The licenses were awarded based on several factors such as the bidder's technical and financial capability of rolling out a telecom network across the country under a tight time frame, and its commitment to offer affordable prices to the population. The ambitious targets under the licenses have been set to expand universal access to over 90% of the population, which will result in an estimated 35 million people in Myanmar connecting through mobile services for the very first time.

¹ The design and monitoring framework is in Appendix 1.

² Telenor Group is one of two international telecom operators in Myanmar.

4. ADB and the International Finance Corporation identified the opportunity to help fund the substantial ICT infrastructure costs required to build Ooredoo's nationwide telecom network. Multilateral support is needed given the capital-intensive nature of building a greenfield telecom network and the lack of international banks willing to lend into Myanmar at this time. Through the B loan program, ADB will also lead in catalyzing commercial cofinancing during Ooredoo's rollout phase.

2. Project Design

5. The project consists of rolling out an advanced third-generation³ mobile telecommunication network across the country. The rollout has already begun in several major cities and townships, and Ooredoo officially launched its services in August 2014 as the first international operator to begin commercial operations. With the third generation, Myanmar will leapfrog several generations of mobile technology by ensuring greater speed and capacity for data transfer and thus enabling mobile broadband internet, e-mail, and enriched mobile applications in addition to conventional voice and text services.

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In addition, Ooredoo will also develop several mobile applications for banking, agriculture, and health, which will enhance access to basic services for the people of Myanmar. The project will be developed under a 15-year operating and associated spectrum license on a build-own-operate basis that authorizes Ooredoo to provide a full range of fixed and mobile telecom services nationwide. To supplement the nationwide network rollout, ADB has also designed a TA project to help the borrower and other industry stakeholders reduce reliance on diesel generation by adopting renewable energy technologies for telecom towers and thereby avoid carbon emissions.

3. [Ooredoo QSC] and Borrower

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The Ooredoo Group is a leading international communications company delivering mobile, fixed, and broadband internet services to a customer base of more than 107 million people across 15 countries in Asia, the Middle East, and North Africa.⁴ The shares of [Ooredoo QSC] are listed on the Qatar Exchange and the Abu Dhabi Securities Exchange, and the [Ooredoo QSC] was named Best Mobile Operator of the Year at the World Communication Awards in 2013.

7. [Ooredoo QSC] has distinguished itself from other global telecom operators through its commitment to reducing the digital gender divide across its global operations. It is a partner of the World Economic Forum's Gender Parity Programme, a member of the Groupe Spéciale Mobile Association's⁵ Connected Women Programme, and works closely with the Cherie Blair Foundation for Women. In addition, the company's chairman is a member of the World Bank Group Advisory Council on Gender and Development, a major global body dedicated to promoting gender equality around the world.

³ Better known as 3G

⁴ Ooredoo Group has a presence in markets such as Algeria, Indonesia, Iraq, Kuwait, the Lao People's Democratic Republic, the Maldives, Oman, Palestine, the Philippines, Qatar, and Tunisia.

⁵ Better known as GSMA

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B. Development Impact, Outcome, and Outputs

9. **Impact.** The impact of the project will increase access to quality telecommunication services, and develop the required ICT infrastructure in Myanmar that will facilitate inclusive growth and poverty reduction. The project will specifically advance inclusive sustainable development by promoting the use of ICT in support of gender equality and women's empowerment. In today's global information society, women are coming online later and more slowly than men, and are therefore missing out on the substantial new digital opportunities arising from mobile and internet access. ICT gender gaps go beyond basic access. Women are given fewer opportunities for ICT skills training, are offered proportionally less-senior and lower-paying ICT jobs and fewer business opportunities, and online gender content is lacking. The project aims to reduce the gender gap by increasing basic access, promotion, training, employment, health services, and greater online content for women (footnote 1).⁶

10. **Outcome.** The project's outcome is provision of affordable mobile telecommunication services improved and gender inclusiveness increased, with targets set for women's access, employment, and business opportunities.

11. **Outputs.** The project's outputs involve (i) third-generation, nationwide, telecommunications network extended; (ii) developing and making available to end users mobile applications for health (including maternal), banking, and agriculture services; and (iii) supporting and delivering conferences and an ICT community group that reduce the digital gender gap.

C. Alignment with ADB Strategy and Operations

12. **Consistency with ADB's Strategy 2020.** ADB's assistance for the project is aligned with its Midterm Review of Strategy 2020, which identifies infrastructure as one of the five core areas to improve and maximize development impact.⁷ Under the Midterm Review of Strategy 2020, ADB's infrastructure operations also emphasize private sector engagement, investment in communication connectivity, and inclusive growth especially for rural areas.

13. **Consistency with the country strategy.** The assistance is aligned with ADB's interim country partnership strategy, 2012–2014,⁸ which has been extended to 2016.⁹ The project enhances connectivity and improves access to markets and basic services. It promotes private sector development, creates opportunities and jobs, improves rural livelihoods, and will boost domestic and cross-border trade and investment.

D. Project Cost and Financing Plan

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⁶ Gender Action Plan.

⁷ ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

⁸ ADB. 2012. *Interim Country Partnership Strategy: Myanmar, 2012–2014*. Manila.

⁹ ADB. 2015. *Country Operations Business Plan: Myanmar, 2015–2017*. Manila.

E. Implementation Arrangements

16. Table 3 summarizes the implementation arrangements.¹⁰

Table 3: Summary of Implementation Arrangements

Aspects	Arrangements
Regulatory framework	With assistance from the World Bank Group, the Post and Telecommunications Department, under the Ministry of Communications and Information Technology, will transition into an independent regulator called the Myanmar Telecommunications Commission by the end of 2015. A new Telecommunication Law was passed in October 2013 and fulfills the basic elements of a liberalized telecommunications regulatory framework set out by the World Trade Organization. The state-owned telecom operator, Myanmar Post and Telecommunications, will be restructured into a commercial entity and privatized. The project will be developed under an initial 15-year operating and associated spectrum license on a build–own–operate basis.
Management	The project will be managed by Ooredoo Group, a leading international telecommunications company that delivers mobile, fixed, and broadband internet services to a customer base of 107 million across 15 countries in Asia, the Middle East, and North Africa.
Implementation period	CONFIDENTIAL INFORMATION DELETED
Network rollout	CONFIDENTIAL INFORMATION DELETED
Energy supply	Poor electricity supply and transmission infrastructure is a huge challenge for a telecom network that needs to operate 24 hours a day throughout the year. The country has an electrification rate of less than 30%, one of the lowest in Asia, and in rural areas only 16% of the population has access to the electrical grid. Telecom operators heavily depend on diesel generators at their tower sites for running core network equipment. This exposes them to fuel price volatility and logistical transport issues, and causes greenhouse gas emissions. To mitigate the risk and associated emissions, the Asian Development Bank is proposing technical assistance to help the borrower and other industry stakeholders reduce reliance on diesel generation by adopting renewable energy technologies.
Revenue structure	CONFIDENTIAL INFORMATION DELETED
Performance monitoring	The borrower will report key performance indicators, including output and outcome indicators.

Sources: Asian Development Bank and Ooredoo Myanmar Limited.

F. Projected Financial and Economic Performance

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III. THE PROPOSED ADB ASSISTANCE

A. The Assistance

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19. The assistance also includes TA of up to \$1 million from the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility, administered by ADB. The TA is a joint effort by PSOD and the Sustainable Development and Climate

¹⁰ Details of Implementation Arrangements.

Change Department (SDCC) aimed at building the capacity of private and public sector stakeholders for increased adoption of green power solutions for telecom towers in rural Myanmar, through pilot projects, workshops, and knowledge products. The assistance will provide tangible transfer of technology, knowledge, and skills to Myanmar and help the country overcome cost hurdles and risks associated with deploying renewable energy technologies.

B. Value Added by ADB Assistance

20. The presence of strong international private sector companies such as Ooredoo in the telecommunications sector will have a transformational impact because it will ensure sound development of the sector, provide significant opportunities in associated areas and sectors (e.g., finance and energy), and be an important driver for continued reform in support of the fundamental socioeconomic transformation the country is undertaking.

21. ADB's assistance will support the government's reforms and the country's overall transformation to a more liberalized economy by providing financial support to one of the first private telecom operators in the country. Multilateral support is needed given the capital-intensive nature of building a greenfield telecom network and the lack of international banks willing to lend into Myanmar at this time.

22. ADB will provide a perspective on many issues and challenges associated with building a network in Myanmar, e.g., weak environmental and social regulation, lack of physical transport infrastructure, shortage of electricity supply and transmission, and insufficient skills and institutional capacity.

23. Through its B loan product, ADB's assistance will help catalyze international commercial bank financing for the network rollout that otherwise would not be available due to the perceived political risks and limitations of investing in Myanmar.

24. ADB's TA will help build the capacity of private and public sector stakeholders to implement green power solutions for telecom towers in rural Myanmar, helping overcome one of the major barriers to the network rollout while avoiding significant greenhouse gas emissions.

C. Risks

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D. Technical Assistance

31. Currently, telecom operators depend heavily on diesel generators at most telecom tower sites in Myanmar for running core network equipment. These diesel generators consume an estimated 25 million liters of diesel annually, and this is expected to increase to 116 million liters by 2017, which represents over 300,000 tons of carbon dioxide emissions.¹¹ The Capacity Development TA for renewable energy associated with the proposed project will tackle this issue by helping build the capacity of private and public sector stakeholders to adopt renewable energy solutions at tower sites to ensure the long-term sustainability of the industry. The TA is a joint effort of PSOD and SDCC and will be financed on a grant basis of up to \$1 million by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing

¹¹ Groupe Spéciale Mobile Association. 2014. *Sizing the Opportunity: Green Telecoms in Myanmar*. London.

Partnership Facility and administered by ADB. The commercial feasibility of renewable energy for telecom towers will be demonstrated through several pilot projects utilizing different types of renewable technology in different regions of the country. One of the pilots will be a community access project that capitalizes on a unique rural electrification opportunity to provide clean energy to a remote village by using excess power from a telecom tower.¹² The TA will transfer skills and build capacity through the development of pilot project case studies, training workshops, and knowledge products. The overall objective of the TA is to deploy renewable energy solutions to at least 1,500 rural sites in Myanmar to reduce diesel-burning generation and avoid 10,000 tons of carbon dioxide emissions per year.¹³ The TA will be implemented between June 2015 and December 2016.

IV. POLICY COMPLIANCE

A. Safeguards and Social Dimensions

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In compliance with ADB's Safeguard Policy Statement (2009), the project is classified as category B for environment and category C for involuntary resettlement and indigenous peoples impacts. The potential environmental and social impacts have been identified, and effective measures to avoid, minimize, mitigate, and compensate for the adverse impacts are incorporated in the safeguard reports and plans.

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The borrower commits to establish and maintain an environmental and social management system to screen, assess, and manage environmental and social impacts and risks in line with the requirements of ADB's Safeguard Policy Statement.

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36. Measures to benefit women or facilitate their involvement in the project have been incorporated in the project design in accordance with ADB's Policy on Gender and Development (1998).¹⁴ The borrower will comply with national labor laws and, pursuant to ADB's Social Protection Strategy (2001), will take measures to comply with the internationally recognized core labor standards.¹⁵ The borrower will report regularly to ADB on (i) its and its contractors' compliance with such laws, and (ii) the measures taken. Information disclosure and consultations with affected people are conducted in accordance with ADB requirements.

¹² The TA will coordinate with the off-grid energy access project of ADB's Southeast Asia Department—ADB. 2014. *Technical Assistance to the Republic of the Union of Myanmar for the Off-Grid Renewable Energy Demonstration Project*. Manila (TA 8657-MYA)—which has similar objectives: (i) to support the installation of clean energy-based systems to provide energy access (mostly solar photovoltaic and biomass-based systems) to schools and other public infrastructure in at least 25 villages; (ii) to develop geospatial least-cost energy access plans and an investment plan for select states and regions in the country; and (iii) to strengthen the capacity of government institutions and the private sector to manufacture, install, operate, and maintain small-scale clean energy systems.

¹³ Technical Assistance.

¹⁴ Gender Action Plan.

¹⁵ ADB. 2003. *Social Protection Strategy*. Manila (adopted in 2001).

B. Anticorruption Policy

37. The borrower was advised of ADB's policy of implementing best international practice relating to combating corruption, money laundering, and the financing of terrorism. ADB will ensure that the investment documentation includes appropriate provisions prohibiting corruption, money laundering, and the financing of terrorism, and remedies for ADB in the event of noncompliance.

38. ADB's review of the borrower does not give ADB cause to believe that such entity has been established, or is being used for cross-border tax evasion, money laundering, or terrorism financing in the jurisdictions involved in the project.

C. Investment Limitations

39. The proposed loan is within the medium-term, country, industry, group, and single-project exposure limits for nonsovereign investments.

D. Assurances

40. Consistent with the Agreement Establishing the Asian Development Bank (the Charter),¹⁶ ADB will proceed with the proposed assistance upon establishing that the Government of Myanmar has no objection to the proposed assistance to the borrower. ADB will enter into suitable finance documentation, in form and substance satisfactory to ADB, following approval of the proposed assistance by the Board of Directors.

V. RECOMMENDATION

41. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of up to \$450,000,000 comprising (i) an A loan of up to \$150,000,000 from ADB's ordinary capital resources; and (ii) a B loan of up to \$300,000,000 to Ooredoo Myanmar Limited for the Nationwide Telecommunications Project in Myanmar, with such terms and conditions as are substantially in accordance with those set forth in this report, and as may be reported to the Board.

Takehiko Nakao
President

8 June 2015

¹⁶ ADB. 1966. *Agreement Establishing the Asian Development Bank*. Manila.

DESIGN AND MONITORING FRAMEWORK

<p>Impacts of the project is aligned with:</p> <p>Increased access to quality telecommunication services^a</p> <p>Development of required ICT infrastructure in Myanmar that will facilitate inclusive growth and poverty reduction^a</p>
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Results Chain	Performance Indicators with Targets and Baselines	Data Sources and/or Reporting Mechanisms	Risks
<p>Outcome Provision of affordable mobile telecommunication services improved and gender inclusiveness increased</p>	<p>CONFIDENTIAL INFORMATION DELETED</p>	<p>a–e. Annual development effectiveness monitoring report from Ooredoo</p>	<p>Prices partly subject to market forces such as inflation, exchange rates, interest rates, and competition beyond borrower’s control</p>
<p>Outputs</p> <p>1. Third-generation, nationwide telecommunication network extended</p> <p>2. Mobile applications in health (including maternal), banking, and agriculture developed and available to end-users</p> <p>3. Conferences and an ICT community group</p>	<p>CONFIDENTIAL INFORMATION DELETED</p>	<p>1a–b, 2a–c, 3a–b. Annual development effectiveness monitoring report from Ooredoo</p>	<p>Underdeveloped transport infrastructure, port congestion, monsoon rains, land acquisition through leasing, and lack of government capacity for processing permits and registrations</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and/or Reporting Mechanisms	Risks
that reduce the digital gender gaps delivered and supported			
<p>Key Activities with Milestones</p> <p>1. Third-generation telecommunication network rolled out nationwide</p> <p>CONFIDENTIAL INFORMATION DELETED</p> <p>2. Mobile applications in health (including maternal), banking, and agriculture developed and available to end-users</p> <p>CONFIDENTIAL INFORMATION DELETED</p> <p>3. Programs such as conferences and the ICT communication group that reduce the digital gender gap supported and delivered</p> <p>CONFIDENTIAL INFORMATION DELETED</p>			
<p>Inputs</p> <p>ADB A loan: \$150 million</p> <p>Commercial banks (ADB B loan): \$300 million</p> <p>International Finance Corporation Loan: \$150 million</p> <p>CONFIDENTIAL INFORMATION DELETED</p> <p>Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility (grant): \$1 million</p>			
<p>Assumptions for Partner Financing</p> <p>Not applicable</p>			

ADB = Asian Development Bank, GEN= gender equity, ICT = information and communication technology, km = kilometer, MK = Myanmar kyat, N/A = not applicable.

a Ministry of Communications and Information Technology (Telecommunications Operator Tender Evaluation and Selection Committee). 2013. *Information Memorandum*. Nay Pyi Taw.

Source: Asian Development Bank.