For: Recruitment of Short-Term Local Consultant

Terms of Reference for a Short-Term Consultancy with the World Bank
Quality Infrastructure Investment (QII) Japanese Case Studies

The World Bank Group's Vision and Strategy

The global development community is at an auspicious turning point in history. Thanks to the success of the past few decades and favorable economic growth, developing countries now have an unprecedented opportunity to end extreme poverty within a generation. This is the vision of the WBG: to eradicate extreme poverty by reducing the number of people living on less than $1.25 a day to 3 percent by 2030 and promote shared prosperity by fostering the income growth of the bottom 40 percent in every country.

To achieve this vision, the WBG Board of Governors has approved a strategy with three components: (1) maximizing development impact by engaging country clients in identifying and tackling the most challenging development challenges; (2) promoting scaled-up partnerships that are strategically aligned with the goals; and (3) crowding in public and private resources, expertise and ideas. The architecture underpinning the strategy and instrumental to its success is the establishment of fourteen Global Practices and five Cross-Cutting Solution Areas that, in concert with the WBG Regions, will design solutions that address clients' most pressing developmental challenges, and ultimately, enable the WBG to meet its twin goals of eliminating extreme poverty and boosting shared prosperity.

The Urban, Disaster Risk Management, Resilience and Land Global Practice (GPURL)

Urbanization is occurring at an unprecedented pace. Cities generate 80% of global GDP and are crucial to job creation and the pursuit of shared prosperity. Yet one billion city residents live in slums today, and by 2030 one billion new migrants will arrive in cities. This concentration of people and assets will exacerbate risk exposure to adverse natural events and climate change, which affects the poor disproportionately.

The WBG brings a combination of lending ($7-8 billion in annual lending to cities), analytical and advisory services (e.g., urbanization reviews, Sendai dialogue), its growing portfolio of reimbursable advisory services, its convening power (e.g., understanding risk and the land conferences), its leveraging capacity (e.g., guarantees and risk mitigation), and its ability to work with the private sector to tackle the challenges at scale and to effect.

Urban, Disaster Risk Management, Resilience and Land Global Practice (GPURL) covers a wide gamut: (i) developing green, inclusive, competitive and resilient cities; (ii) enhancing urban and rural development through supporting and managing the urban-rural transition, assisting local development through developing land tenure, management, and information systems; (iii) assisting in disaster risk management through issues of risk assessment, risk reduction, disaster preparedness, risk financing, and resilient reconstruction.

Tokyo Development Learning Center (TDLC)

The Tokyo Development Learning Center (TDLC) program is a partnership between Japan and the World Bank launched in June 2004. The program is managed by the Urban, Disaster Risk Management, Resilience, and Land Global Practice (GPURL) under the oversight of a Steering Committee comprising representatives from the Ministry of Finance, Japan (MoF), and the World Bank.

The Program works to identify and unpack innovations and development solutions from Japan of relevance to developing countries. TDLC positions itself for the global dissemination of just-in-time development solutions. Key features of the Phase 3 program include broadened geographic coverage, closer links to and integration with operational programs, and introduction of a new City Partnership component focused on working with selected Japanese cities and institutions. The thematic area of focus includes (i) urban planning - compact city development, land readjustment, land use planning, public space management, transit-oriented development, (ii) urban service provision - solid waste management, water supply management, sewage management, street lighting, (iii) urban management - metropolitan planning, ICT for municipal management, municipal organization structures, legal
frameworks for urban/municipal management, project planning and management, (iv) accessibility, aging population, (v) municipal finance - financial management, revenue management, intergovernmental finance, local tax system, and (vi) disaster risk management (DRM) collaborating with Tokyo DRM Hub - flood risk management, seismic risk management. The program aims to continue its activities in Phase 4, with similar functionalities with scaling up activities around operationalizing Japanese urban development stories.

TDLC is seeking to contract with Short-Term Consultants to serve as a Research Consultant of the TDLC team. The consultant will be based in Tokyo and will work under the supervision of the Lead Urban Specialist of the GPURL.

**Background**

Infrastructure is a driver of economic prosperity and provides a solid basis for sustainable and robust development. At the same time, infrastructure investment is critical for promoting global, national, and local development priorities. Nonetheless, the world still faces a massive infrastructure gap which could generate a severe bottleneck to economic growth and development as well as to the provision of secure and reliable public services. As such, there is a need to mobilize private investments, which calls for new and innovative thinking on financial instruments and project origination, for example, by constructing and promoting infrastructure as a tradable asset class.

In this vein, the G20 adopted Principles for Quality Infrastructure Investment at the Osaka Summit 2019, consisting of the following: 1) maximizing the positive impact of infrastructure to achieve sustainable growth and development, 2) raising economic efficiency in view of life-cycle costs, 3) integrating environmental considerations in infrastructure investments, 4) building resilience against natural disasters and other risks, 5) integrating social considerations in infrastructure investment, and 6) strengthening infrastructure governance.

In developing these principles, the G20 Infrastructure Working Group (IWG) played a significant role by identifying the critical elements for infrastructure growth in the "Roadmap to Infrastructure as an Asset Class" while coordinating inputs of G20 Development Working Group (DWG) to ensure connectivity enhancement towards sustainable development. The expectation is that the G20 will advance the discussions on promoting QII while adhering to these principles, under the Presidency of Saudi Arabia. The G20 QII Principles are in many ways reflected in the infrastructure operations supported by World Bank Group, and the QII principles are composed of the six pillars (Annex A: the QII Principles.)

The World Bank (WB) and the Government of Japan (GoJ) established the QII Partnership to raise awareness and scaling-up attention to QII through financial support for project preparation and implementation, and through knowledge dissemination. The Infrastructure, PPP, and Guarantees (IPG) Group in the WB Infrastructure Vice Presidency manages the QII Partnership, primarily component 1: Project Grants to enhance QII in operations; and Tokyo Development Learning Center supports the knowledge and dissemination of the QII related works.

**Scope of Work**

The consultant will (i) present the general evolution of quality dimensions in infrastructure construction in Japan, and subsequently, (ii) identify and develop two strategic case studies showing how G20 QI principles have incorporated quality aspects in urban infrastructure financed in Japan. The case studies will focus on two dimensions of quality: (a) economic efficiency and (b) infrastructure governance.

**Task 1 The Evolution of the QII developments in Japan**

This note will describe the evolution of quality aspects in infrastructure development projects in Japan. The consultant will present the approach Japan took, and is taking, to aspects of quality over the last decades, highlighting

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1 The Preamble of G20 Principles for Quality Infrastructure Investment agreed at the Osaka Summit in June 2019
2 Morten Lykke Lauridsen, Principal Economist, Thought Leadership Unit, IFC (WB blog)
their efficient results. While generally presenting all six principles identified by the G20 with regards to QI, the review will focus on the principles of economic efficiency and governance. The outline and details of this study will be agreed between the TTL upon the provision of an inception report (a report of about 15-20 pages).

Task 2 Presentation of the QII case studies

The development of two case studies, from existing cases, that will assess how selected urban infrastructure development projects in Japan have embodied/incorporated the QII principles. Each case study will demonstrate clear linkage between the aspects of quality and overall results. They will illustrate that life cycle considerations which are combined with strong infrastructure governance (details below) can reduce the costs of constructing and maintaining infrastructure over the long run (its life cycle). The consultant will review and analyze the angles of Economic Efficiency in View of Life-Cycle Cost and Strengthening Infrastructure Governance.

Sub-categories of the Raising Economic Efficiency in View of Life-Cycle Cost (Principle 2)

Japan has achieved excellence in designing, constructing, operating and maintaining urban infrastructure, providing economically efficient and systematically sustainable urban services. To review will conduct an assessment of the project’s capital expenditures (CAPEX) and the operational expenditures (OPEX) over its assets’ life-span. Based on the specific case reviewed, the consultant will analyze the dimensions of how quality contributed to increases and decreases of in different segments of costs and benefits.

Sub-categories of the Strengthening Infrastructure Governance (Principle 6) Japan's excellence is also due to efficient processes in preparing and bidding out projects. Some of these include: (i) minimizing costs during design phase; (ii) a competent and efficient procurement process; (iii) an efficient construction and supervision industry; (iv) competent logistics and management capacity; and (v) close cooperation between national and local government. The set of these management skills make a shared system capable of executing complicated urban infrastructure development projects. It provides trust among the stakeholders and ensures active private sector participation. The consultant will analyze the contribution of the above elements to the overall success of the projects. The case studies will also document the lessons applicable to the World Bank clients aiming to strengthen their governance structure.

2-1 Selection and scoping of the case studies

The task team and the consultant will agree on the two relevant cases, that each illustrate both dimensions of quality described above. The consultant will liaise with TDLC closely on touching base with the studies’ cities. The assignment is short and should therefore leverage on existing cases studies accumulated by TDLC, building on connections established with cities. The case studies draw on lessons from national or local projects implemented in Japan. The types of topics could include but not limited to the following:

- Transit-oriented Development (TOD) leveraging the effective intersection of mobility and urban;
- Urban services such as solid waste management, water, sewage and wastewater management;
- Urban regeneration including universal design, public asset management;
- Affordable housing;
- And other public facilities;

2-2 Development of the case studies

The consultant develops the full case studies to the task team, and the task team conducts the team review and the peer review. The consultant then compiles all the comments and finalize the draft. Each case study will be ten pages long and will follow the outlines below;

1. **Background**: The project context of how the case is relevant for WB client countries and cities.
2. **Operationalization of QII principle**: The documentation of how the project operationalized the QII principles, based on the analysis of the sub-categories.
3. Results, challenges, opportunities, and lessons learned: The applications to the WB client countries and cities.

S/he will need to interface with the respective cities and the central government, including the following; the Ministry of Finance (MoF), the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT), the Urban Renaissance Agency (UR), Fukuoka City, Kitakyushu City, Kobe City, Kyoto City, Osaka City, Tokyo Metropolitan Governments and its wards, Toyama City, Yokohama City, other relevant agencies. S/he will gather data and information from them and ensures excellent communication with them, having the supervision from the task team leader and with coordination with the TDLC team.

2-3 Presentation material

S/he completes short notes based on the case studies, and one crisp PPT presentation material upon completion so that the GoJ can present in the upcoming G20 forum.

Outcomes and Timeline

S/he completes this assignment by the end of June 2020. The following is a suggested schedule for the delivery.

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<tr>
<td>Task 1</td>
<td>Documentation of the QII evolution</td>
<td>Conduct the background research; provide the first draft and finalize the draft</td>
<td>Late-May, 2020</td>
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<td>Task 2-1</td>
<td>Selection and scoping of case studies</td>
<td>Propose rationales and stories for the cases to the task team and collect supplementary information.</td>
<td>Mid to late May, 2020</td>
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<td>Task 2-2</td>
<td>Development of case studies</td>
<td>Provide the first draft and finalize the draft</td>
<td>Late May to mid-July 2020</td>
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<td>Task 2-3</td>
<td>Provide presentation material and a guiding note</td>
<td>Draft and complete a summary note and a slide presentation</td>
<td>Mid-July to early August 2020</td>
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Notes: All final deliverables are required to have TDLC team review and peer review, and to be written/conducted in English. WBG/TDLC will be the principal owners of the report, with authorship acknowledgment to the research team and its team members.

Level of Effort

The work will be carried out through a collaboration of two consultants, one leading the write up and providing the analytical analysis of the cases (with 25 years of experience) and the other (with 15 years of experience) providing technical assistance, research, and overall write up of the cases.

A consultant that is expected to work on this assignment for 30 days each.

Reporting

The consultants will report to Paul Kriss, Lead Urban Specialist, GPURL, WBG

Requirements

The consultant will have, at a minimum, a MA in economics, economic policy, public policy, or urban development. S/he will be capable of producing concise cases and stories in English. The consultant will have an excellent
interfacing capacity with MOF, MLIT, GoJ, relevant agencies, and respective cities. S/he will be capable of conducting fundamental econometric analyses or spatial analysis in case needed. S/he will be enthusiastic about QII potential and the possibility to contribute to shaping this new business line for the World Bank. S/he will be someone collaborative, proactive, and able to balance self-direction as well as work with guidance from a multi-disciplinary team. S/he will have strong writing skills too. Japanese language skill is an asset.
Principle 1: Maximizing the positive impact of infrastructure to achieve sustainable growth and development

- Setting off a virtuous circle of economic activities - The aim of pursuing quality infrastructure investment is to maximize the positive economic, environmental, social, and development impact of infrastructure and create a virtuous circle of economic activities while ensuring sound public finances. This virtuous circle can take various forms. New jobs are created during construction, operation, and maintenance of infrastructure, while positive spillover effects of infrastructure stimulate the economy and lead to more demand for jobs. Advanced technology and know-how may be transferred voluntarily and on mutually agreed-upon terms. This can result in better allocation of resources, enhanced capacities, skills upgrade, and improvement of productivity for local economies. This impetus would improve the potential for economic growth, leading to the widening of the investor base, crowding-in more private investment, and resulting in further improvement in economic fundamentals. This would facilitate trade, investment, and economic development. All these expected outcomes of the investment should be considered in the project design and planning.
- Promoting sustainable development and connectivity - Infrastructure investment should take into account economic, environmental and social, and governance aspects, and be guided by a sense of shared, long-term responsibility for the planet consistent with the 2030 Agenda for Sustainable Development, national and local development strategies, and relevant international commitments, and in the spirit of extensive consultation, joint efforts and shared benefits. The facilities and services of infrastructure should have sustainable development at their core and need to be broadly available, accessible, inclusive, and beneficial to all. A virtuous circle of economic activities would be further secured through enhancing accessibility to, and national, regional, and global connectivity of, infrastructure, based on consensus among countries. Domestic resource mobilization is critical to addressing the infrastructure financing gap. Assistance for capacity building, including for project preparation, should be provided to developing countries with the participation of international organizations. Quality infrastructure investment also needs to be tailored to specific country conditions and consistent with local laws and regulations.

Principle 2: Raising Economic Efficiency given Life-Cycle Cost

- Quality infrastructure investment should attain value for money and remain affordable concerning life-cycle costs, by taking into account the total cost over its life-cycle (planning, design, finance, construction, operation and maintenance (O&M), and possible disposal), compared to the value of the asset as well as its economic, environmental and social benefits. Using this approach helps choose between repairing or upgrading existing infrastructure or launching a new project. Project preparation, as set out in the G20 Principles for the Infrastructure Project Preparation Phase, is crucial in this regard.
- Also, Infrastructure investment should consider economic, environmental and social, and governance aspects, and be guided by a sense of shared long-term responsibility for the planet consistent with the 2030 Agenda for Sustainable Development, national and local development strategies, and relevant international commitments, and in the spirit of extensive consultation, joint efforts and shared benefits. The facilities and services of infrastructure should have sustainable development at their core and need to be broadly available, accessible, inclusive, and beneficial to all. A virtuous circle of economic activities would be further secured through enhancing accessibility to, and national, regional, and global connectivity of, infrastructure, based on consensus among countries. Domestic resource mobilization is critical to addressing the infrastructure financing gap. Assistance for capacity building, including for project preparation, should be provided to developing countries with the participation of international organizations. Quality infrastructure investment also needs to be tailored to specific country conditions and consistent with local laws and regulations.
- The life-cycle costs and benefits of infrastructure investments should be taken into consideration in ensuring efficiency.
- Infrastructure projects should include strategies to mitigate the risks of delays and cost overrun, and those in post-delivery phases
- Innovative technologies should be leveraged through the life-cycle of infrastructure projects, where appropriate, to raise economic efficiency for existing and new infrastructure.

Principle 3: Integrating Environmental Considerations in Infrastructure Investments
Both positive and negative impacts of infrastructure projects on ecosystems, biodiversity, climate, weather and the use of resources should be internalized by incorporating these environmental considerations over the entire process of infrastructure investment, including by improving disclosure of these environments related information, and thereby enabling the use of green finance instruments. Infrastructure projects should align with national strategies and nationally determined contributions for those countries determined to implement them, and with transitioning to long-term low emissions strategies while being mindful of country circumstances.

- These environmental considerations should be entrenched in the entire life-cycle of infrastructure projects.
- The environmental impact of infrastructure investment should be made transparent to all stakeholders.

**Principle 4: Building Resilience against Natural Disasters and Other Risks**
Given the increasing number and heightened magnitude of natural disasters and the slow onset of environmental changes, we face the urgent need to ensure long-term adaptability and build the resilience of infrastructure against these risks. Infrastructure should also be resilient against human-made risks.

- Sound disaster risk management should be factored in when designing infrastructure. A comprehensive disaster risk management plan should influence the design of infrastructure, the ongoing maintenance, and consider the re-establishment of essential services.
- Well-designed disaster risk finance and insurance mechanisms may also help incentivize resilient infrastructure through the financing of preventive measures.

**Principle 5: Integrating Social Considerations in Infrastructure Investment**
Infrastructure should be inclusive, enabling the economic participation and social inclusion of all. Economic and social impacts should be considered as an essential component when assessing the quality of infrastructure investment and should be managed systematically throughout the project life-cycle.

- Open access to infrastructure services should be secured in a non-discriminatory manner for society.
- Practices of inclusiveness should be mainstreamed throughout the project life cycle.
- All workers should have equal opportunity to access jobs created by infrastructure investments, develop skills, be able to work in safe and healthy conditions, be compensated and treated fairly, with dignity and without discrimination.

**Principle 6: Strengthening Infrastructure Governance**
Sound infrastructure governance over the life cycle of the project is a key factor in ensuring long-term cost-effectiveness, accountability, transparency, and integrity of infrastructure investment. Countries should put in place clear rules, robust institutions, and good governance in public and the private sector, reflecting countries' relevant international commitments, which will mitigate various risks related to investment decision-making, thus encouraging private-sector participation. Coordination across different levels of governments is needed. Capacity building is also crucial in ensuring informed decisions and the effectiveness of anti-corruption efforts. Furthermore, improved governance can be supported by good private sector practices, including responsible business conduct practices.

- Openness and transparency of procurement should be secured to ensure that infrastructure projects value for money, safe and effective, and so that investment is not diverted from its intended use.
- Well-designed and well-functioning governance institutions should be in place to assess the financial sustainability of individual projects and prioritize among potential infrastructure projects subject to available overall financing.