

MURD FOLLOW-UP RETRAINING PROGRAM IN KOREA

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CONTENT

Background

Aim of the Post-Master Retraining Program

Course Modules, Discussions & Related Filed Visits

Key Learnings

Field Visits

Background

- ❑ Completion of Master's Degree program in Urban and Regional Development conducted by the University of Seoul (UOS), Korea since 22nd August 2016 to 27th December 2017 under the Scholarship Program of Korea International Cooperation Agency (KOICA)
- ❑ Selection to follow a short course on “**Urban and Regional Development Post-Master Retraining Program**” conducted during Jan 20 – Feb 1, 2019 by UOS & KOICA



Aim of the Post-Master Retraining Program

Aim

To provide further knowledge in the area of urban and regional development and enhance international cooperation potential

Learning Objectives

- A. To develop capacity to contribute to enhancing the standards of living in cities and regions through effective public investment
- B. To take part in the international development network

Course Modules, Discussions & Related Filed Visits

Module	Discussions	Field Visits
Module 1. Urban and Regional Development: <i>Latest Innovations</i>	Latest development in Media City development, water resource development and management, road and transport facility development and management	<ul style="list-style-type: none">• Paju Reuse of Treated Waste Water• Sangam DMC (Digital Media City)• Metropolitan Power Plant LFG• Incheon Bridge
Module 2. Public Private Partnership (PPP) Specialized Training	Lectures on PPP and Public Investment Management (PIM) in Korea	
Module 3. International Corporation (IC) Clinic	Discussions on obstacles to International Cooperation might be overcome	

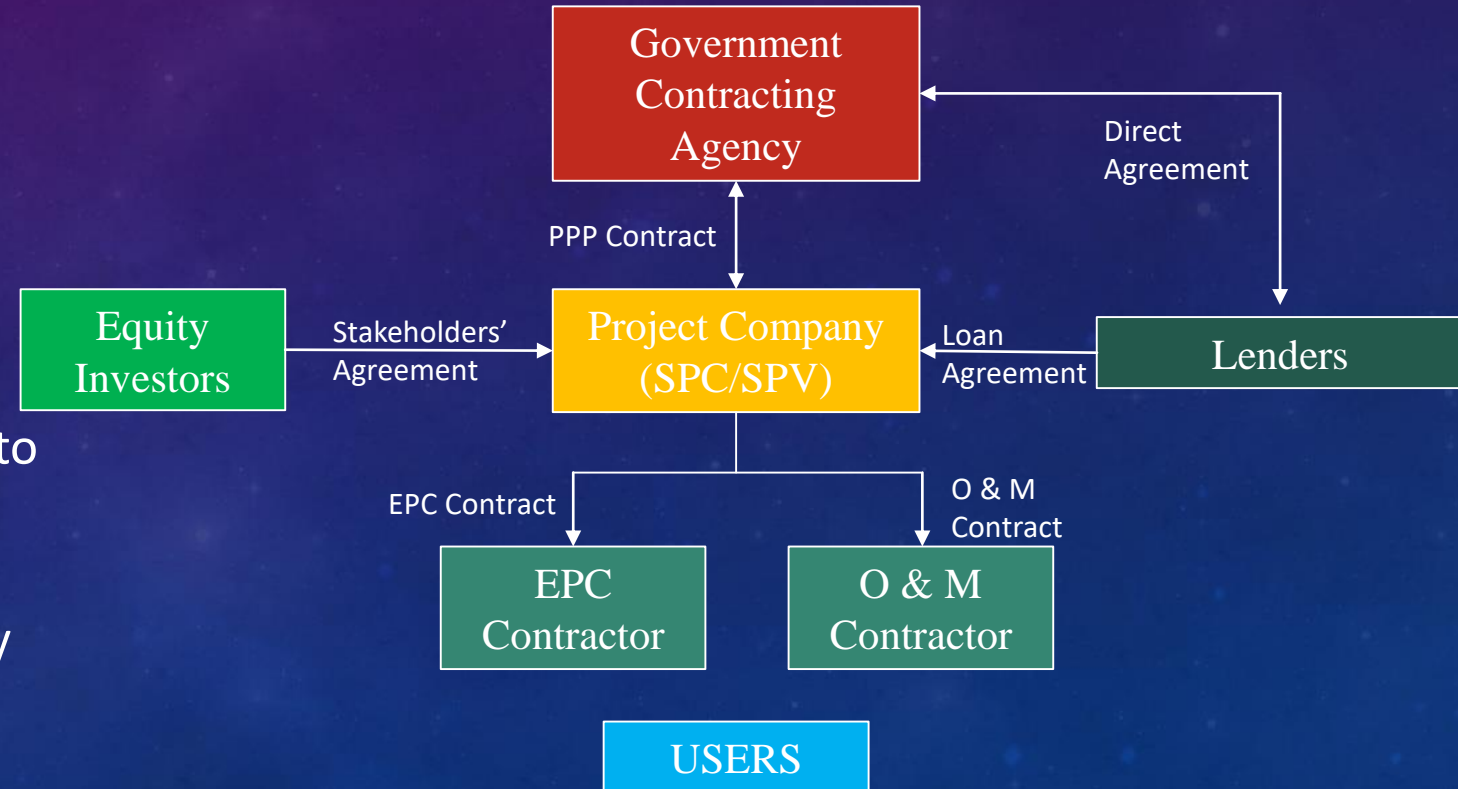
The background is a gradient of dark blue and purple, speckled with white dots resembling a starry sky. On the left side, there are several overlapping circular elements. A large, semi-circular scale with tick marks and numbers (140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) is visible. Other circles include dashed lines, solid lines, and arrows indicating clockwise or counter-clockwise rotation. The overall aesthetic is technical and futuristic.

KEY LEARNINGS

PPP as a Vital Tool for Project Implementation

- PPP is a Contract that allocate responsibilities, rights and risks between public and private parties
- Government can take PPP as a financial option to fill the infrastructure gap timely
- Minimize Life Cycle Cost (LCC) by integrating Design-Build-Financing-Operation (DBFO) works into a single contract
- Risk allocation to a party who is better able to handle it
- Provide expertise and experience not readily available in public agencies
- Improve fiscal efficiency as well as expand fiscal space

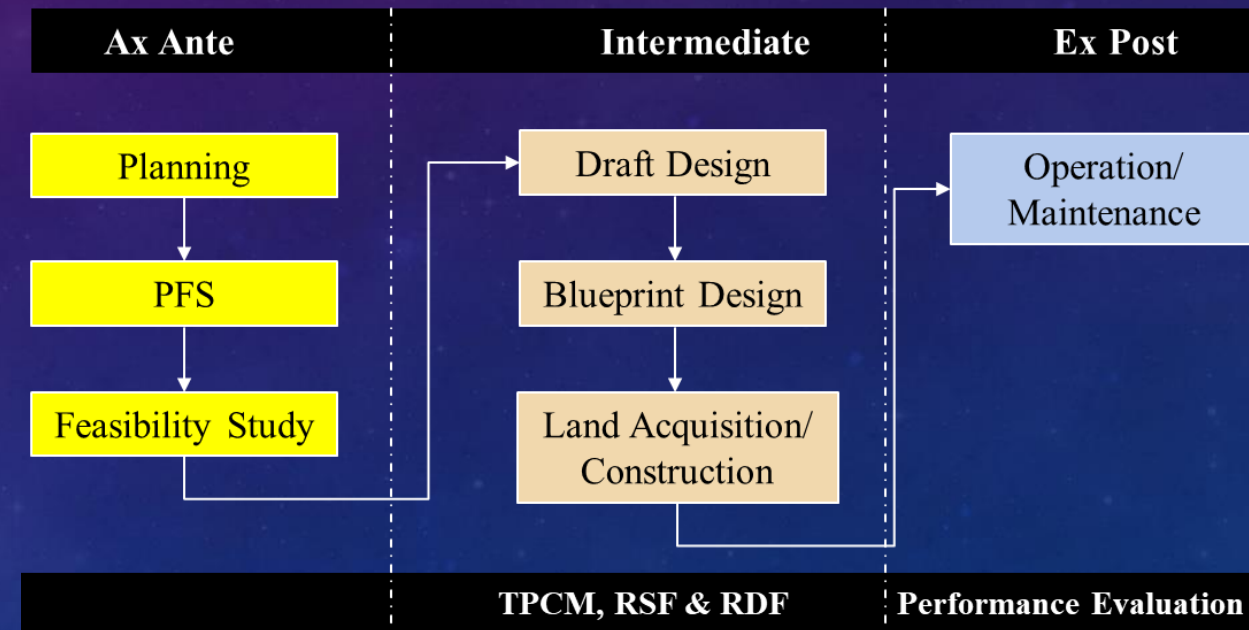
Figure 1. Typical PPP Project Structure



PIM in Korea

- Public Investment: Gross public fixed capital investment of general government sector. Output of public investment is infrastructure
- Weak PIM results for cost overrun, time overrun and corruption
- PIM should cover life cycle of a project: ex ante, intermediate, and ex post phases of a project
- PFS is the short and brief appraisal of a project to produce information for budgetary decision
- The National Finance Act of 2006 provides the legal basis of PFS

Figure 2. Infrastructure Project Implementation process in Korea

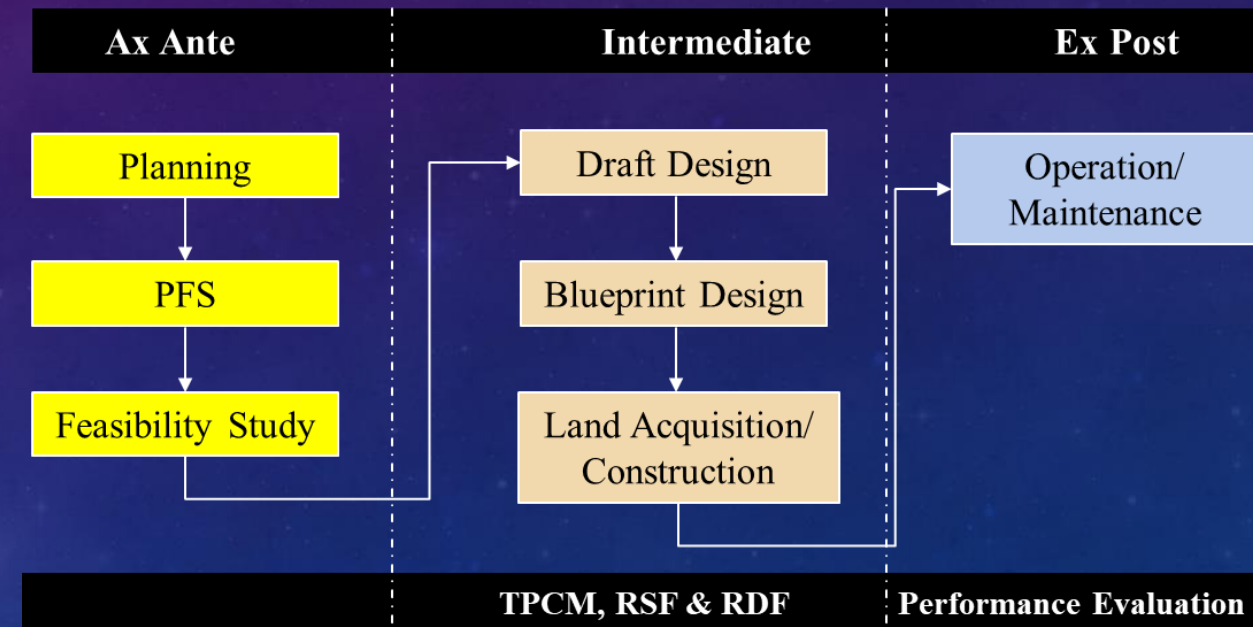


PIM in Korea...Cont.

PFS shall cover three main components;

- 1. Economic Analysis:** Demand Analysis; Cost-Benefit analysis; and Sensitivity analysis shall be performed
- 2. Policy Analysis:** Consistency with higher-level plans and policy directions
- 3. Balanced Regional Development Analysis:** Regional Backwardness Index analysis and regional economic Impacts analysis

Figure 2. Infrastructure Project Implementation process in Korea





FIELD VISITS

DIGITAL MEDIA CITY (DMC)

Project Period : 2002 – 2014

Location : In Northwest Seoul

Extent : 570,000 m2 (140 Acres)

Project Objective : World-Class Digital Technology Cluster and the Best Business Centre in Northeast Asia

Target Industry : Media & Entertainment + IT Service/Software

Development Method: Leading Investment by Seoul City + Participation by Public/Private Sector



Target 5 major M&E industries:
Broadcasting, Game, Movie/Animation,
Music and Cyber Education

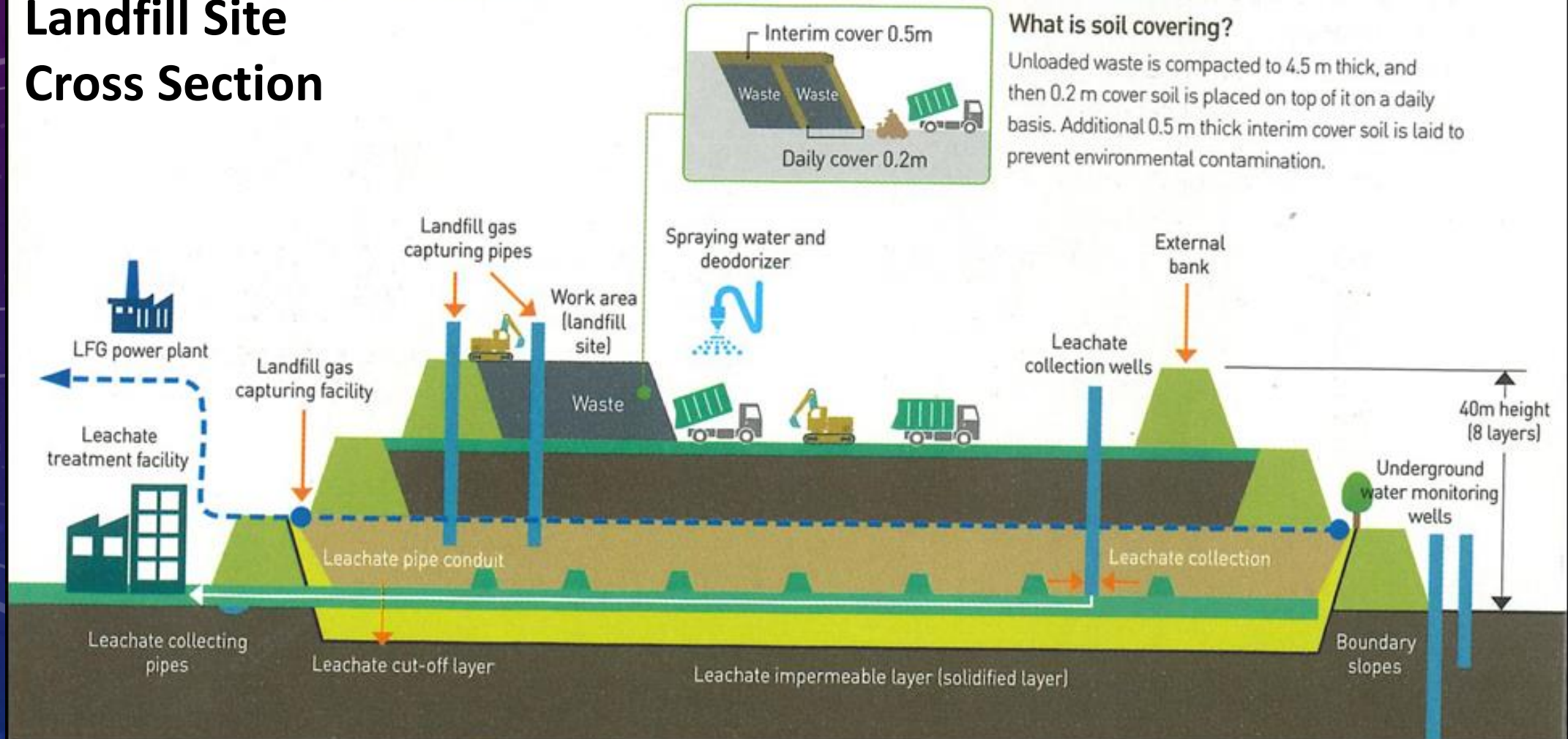


B. WASTE TO RESOURCES, LANDFILL TO DREAM PARK

Two Components: 1. Utilizes waste for Energy Production;

2 Transforms the landfill site into Dream Park

Landfill Site Cross Section



- ❑ Metropolitan area waste around 9000 tons/per day buried at landfill site
- ❑ The world's largest 50Mw power plan that produces electricity using landfill gas generated at the landfill



Dream Park as an Environmental and Cultural Theme Park

Dream Park is an eco-friendly project to restore the nature of the completed landfill site and create an environmental theme park while maintaining the functions of landfill facilities.

A resting place for local residents, citizens in the metropolitan area and global visitors: Golf court, swimming pool, camping sites, horseback riding, nursery greenhouse, sports park is some of key activities operating in the Park.



C. Paju Reuse of Treated Waste Water

Purpose: Stable water supply according to extension of LG Display's P10 plant

Competent Authorities: Paju City Government

Project Management: Korea Environment Corporation

O&M Contractor: Paju Greenhub Corporation (SPC)

Construction/EPC Contractor: LG-Hitachi Water Solutions, Wooho Construction, SK E&C

Construction Period: 17.5 months

O & M Period: 20 years



Supply of sewage treatment water		
위 치	금촌하수처리장	운정하수처리장
Capacity	44,000 m ³ /day	60,000 m ³ /day
Inflow	27,000 m ³ /day	30,000 m ³ /day

Non-Pressure flow 161m

Pressure flow 3.2km

Water reuse treatment facilities	
Rate of inflow	57,000 m ³ /day
Reuse facilities	40,000 m ³ /day
Waste water disposal	17,000 m ³ /day

Supply pipe L=10.4km

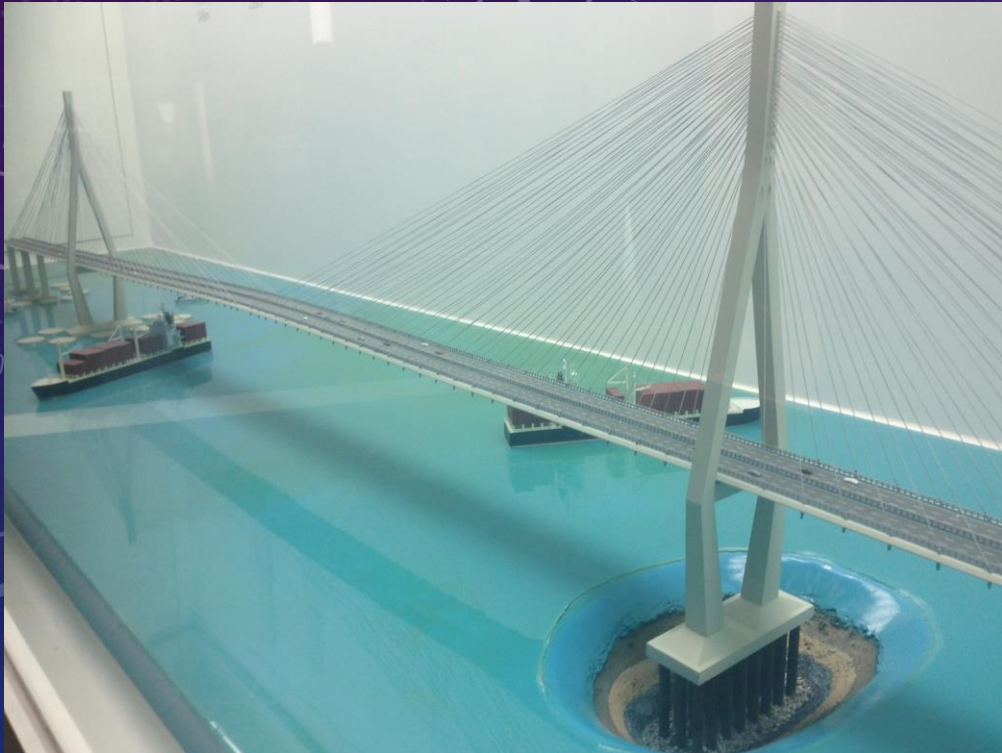
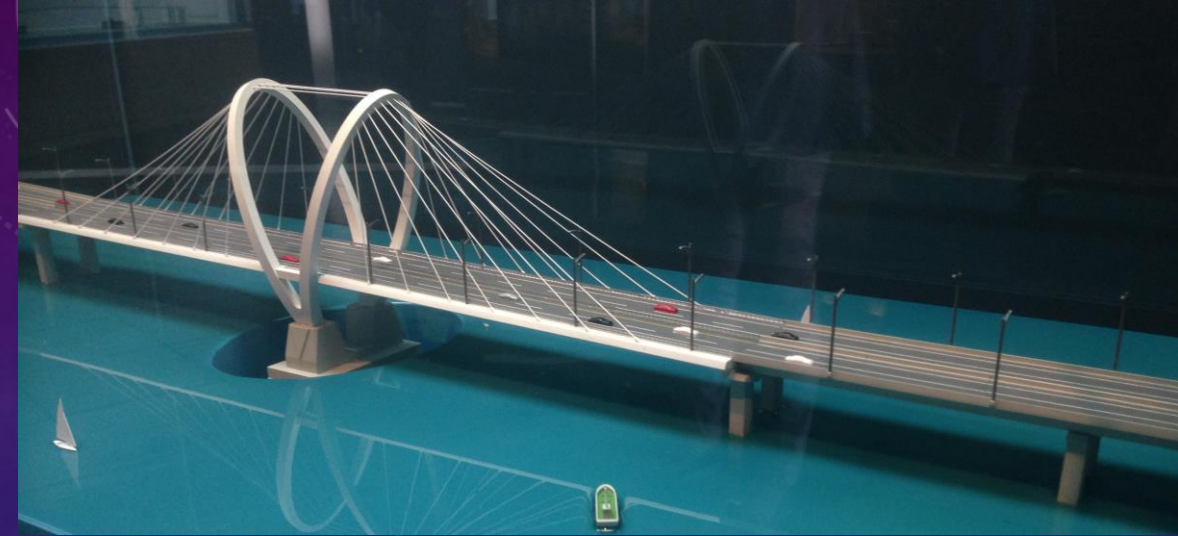
Supply	
LG-Hitachi water solutions and other	Capacity 40,000 m ³ /day

D. Incheon Bridge Construction Project

Project Length: 21.38 Km (Bridge Length – 18.38Km)

Project Section: Song-do International City to Yeongjong Island

Construction Period: July 2005 – Oct 2009



Recommendations

Focus R & D for the advancement of technologies in Development Sector with the collaboration of Private & Public Sector

- Energy efficient and cost-effective buildings
- Urban Resilience
- Water Management
- Alternative energy sources
- Waste Management

Private sector participation in DRR through mainstreaming DRR into Development

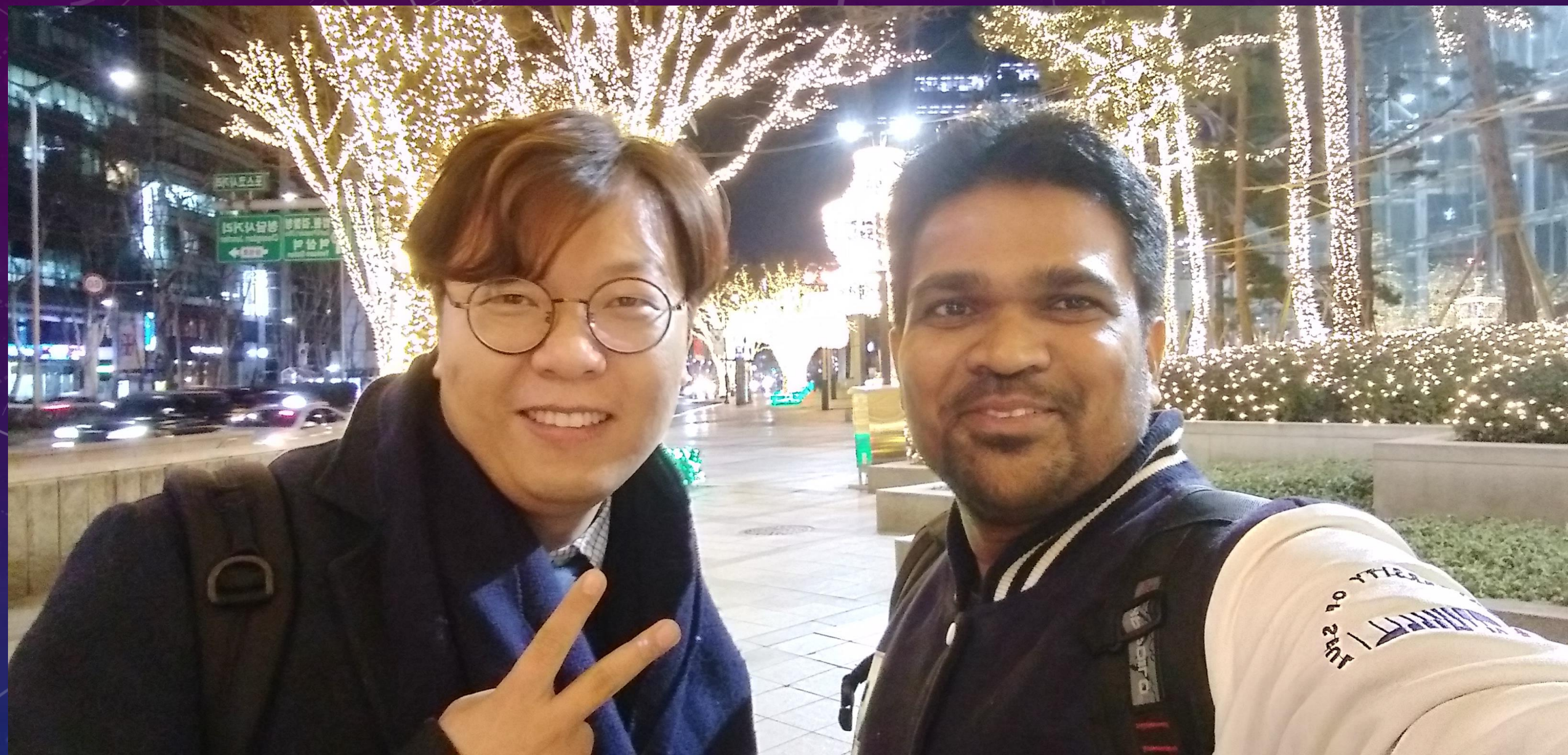
Pre-Feasibility and Feasibility Studies as compulsory components in developing project proposals

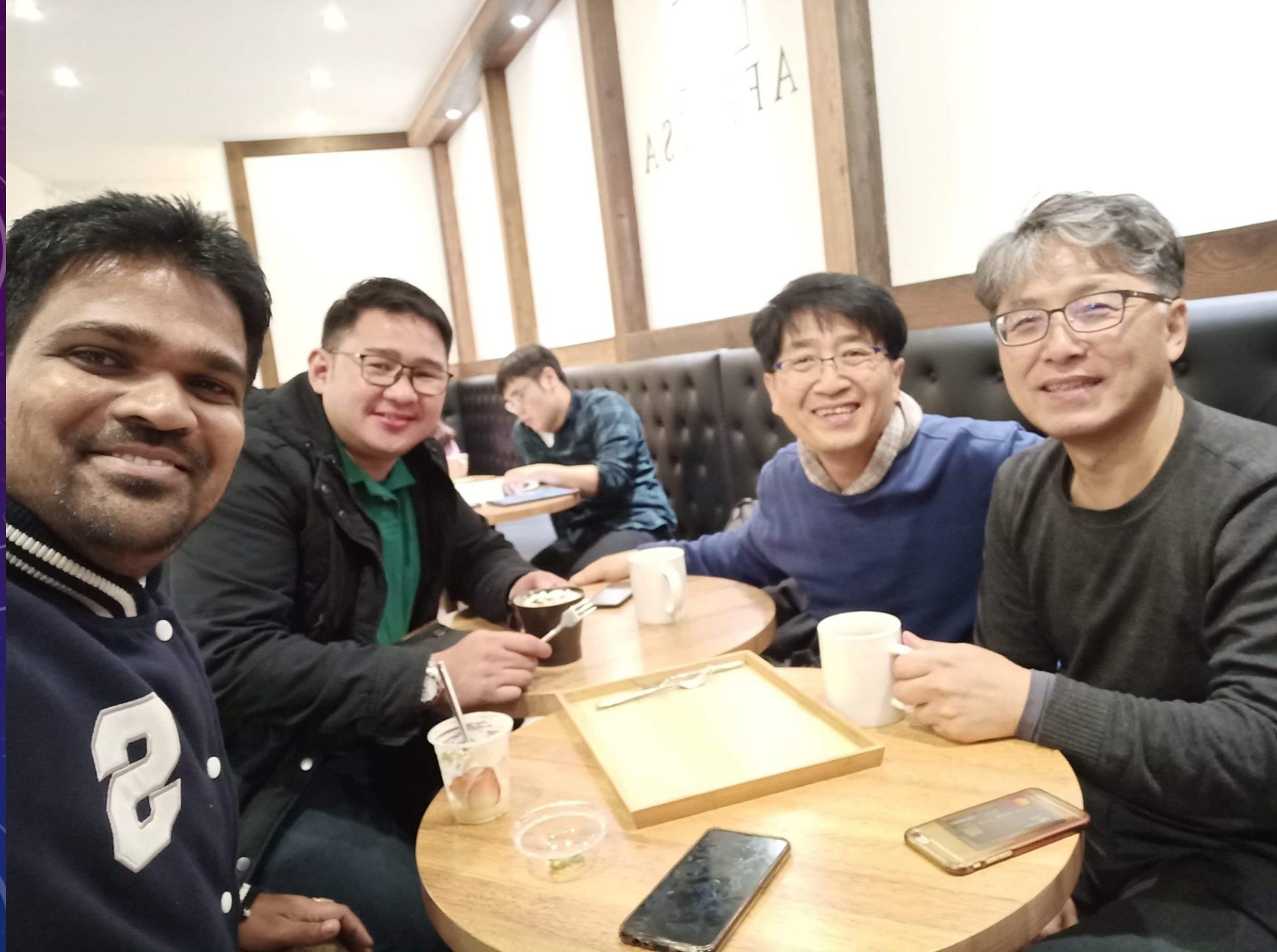


Designed Speed – 430 Km/hr












KOICA
Korea International
Cooperation Agency

2019 KOICA-UOS Follow-up Training Completion Ceremony


JANUARY 31, 2019


서울시립대학교
UNIVERSITY OF SEOUL





Built For *Your Future*



A white, three-dimensional rectangular block is positioned on the right side of the frame, partially obscuring the text. It has a clean, modern design with sharp edges.



THANK YOU.....