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Public Procurement Service (PPS) and Korea Institute of Procurement (KIP)

Public Procurement Service (PPS)

- Central Public Procurement Agency under the Ministry of Economy & Finance
- Headed by vice-minister level Administrator / 1,100 employees
- Responsible for public procurement of central government entities (mandatory), local governments and public enterprises (optional)
- Implements public procurement policies (with Ministry of Economy and Finance)

Korea Institute of Procurement (KIP)

- Established under the auspice of PPS / 80 employees
- Specializes in researches on public procurement regime, policies, programs, etc.
- Works with PPS(mainly), Ministry of Economy and Finance, Ministry of SMEs, etc., for policy measures, assessments, recommendations
- Designated as the Support Center for Innovative Public Procurement

What are Korean Innovative Public Procurement Products?

Commercialization of R&D Products

Despite increased R&D investment, there has been limitation of commercializing R&D outcomes

Limitation of **Previous Program**

Criticism on lacking of the innovativeness despite of existing public procurement programs for supporting a new products developed by SMEs



- Preference on purchasing products for existing needs rather than for new public needs
 Product quality excellency is preferred to technological innovation

Policy Change

- Emphasizing the implementation of Public Procurement Policies
 - ✓ Shifting the Paradigm in technology-related policies

Global Trend

Incorporating developed country's Innovation Procurement Programs which reflected willingness to embrace new changes





Policy Framework

Past: Technology-push



Present and Future: Demand-pull



"Demand" means = Social(public) problem

Company

- Commercialization of R&D outcomes
- Technology innovation



Government

- Discover Challenging Demands
- Present Innovative Standards(tech spec.).
- Forward purchase/ Risk taking



Citizen

Enhance living standard for citizens by innovative public service

Economic Growth

Creating new market

Advanced New **Technology Product**





Buying Innovation

Improvement of Public Services (Welfare · Environment · Safety)



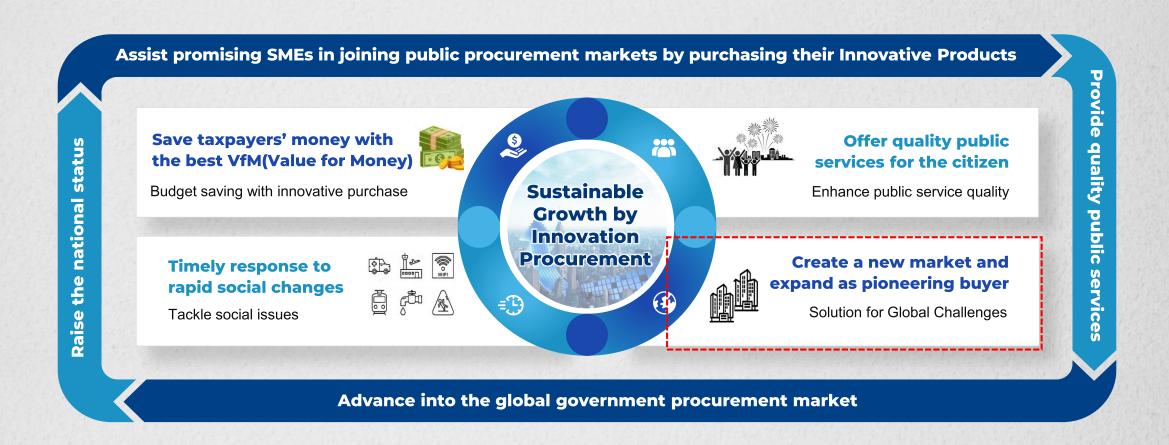
Government **Innovation**

Innovation Eco-system (Technology-Market-Public service)



The expected benefits from Innovation Procurement

Innovation Procurement was established to meet the public's expectations with the government serving as the first buyer of the Innovative Product made by SMEs, thereby lowering entry barriers to the public procurement market for them. It is also to provide innovative solutions to diverse social issues





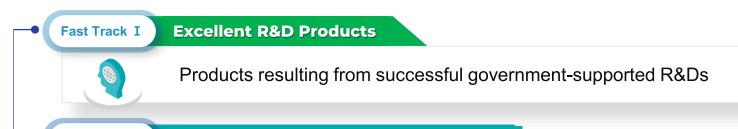
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What are Korean Innovative Public Procurement Products?

Innovative Public Procurement Products are :

- Products that are (1) technologically innovative and (2) applicable to improve public service
- **▼** Evaluated and selected by the Ministry of Economy and Finance (MoEF) and Public Procurement Service (PPS)
 - PPS is the central public procurement agency of Korea, responsible for procurement for the central government (mandatory), local governments and public enterprises (optional)
- ✓ Promoted throughout Korea's public sector to encourage technological innovation
 - Central government entities should spend 1.7% of their procurement budget for purchasing innovative products (1% for local governments)

Innovative Products are selected from:



Innovative Pre-commercial Products



Fast Track II

Pre-commercial products recognized for technological innovation

Benefits purchasing of the Innovative Product

Pilot Purchase for Innovative Prototypes

- "When identified as an innovative product, it can be connected to a trial purchase."
 - The total budget for pilot purchases in 2024 is approximately \$40 million



Purchase immunity

- The purchasing officer of a user entity is not liable for any damage caused by a purchase, unless willful or gross negligence by the officer is confirmed.
 - Paragraph 4 of Article 27 of the Government Procurement Act



Reflect the purchase in the evaluation of public agencies

Around 1% of the total purchasing volume by public institutions is allocated to innovative products, and such purchases are taken into account when evaluating government agencies.





Benefits purchasing of the Innovative Product



DFG-aided Al Surveillance Camera





- Drop Free Glass(DFG) can promptly remove contaminants on the surface with fast operation speed through novel microfluidic technologies
- Drop Free Glass has a low power consumption as the flow of current is limited by a dielectric layer
- Event detection through deep learning-based video data training in various environments and conditions

Intelligent Water Leak Management System

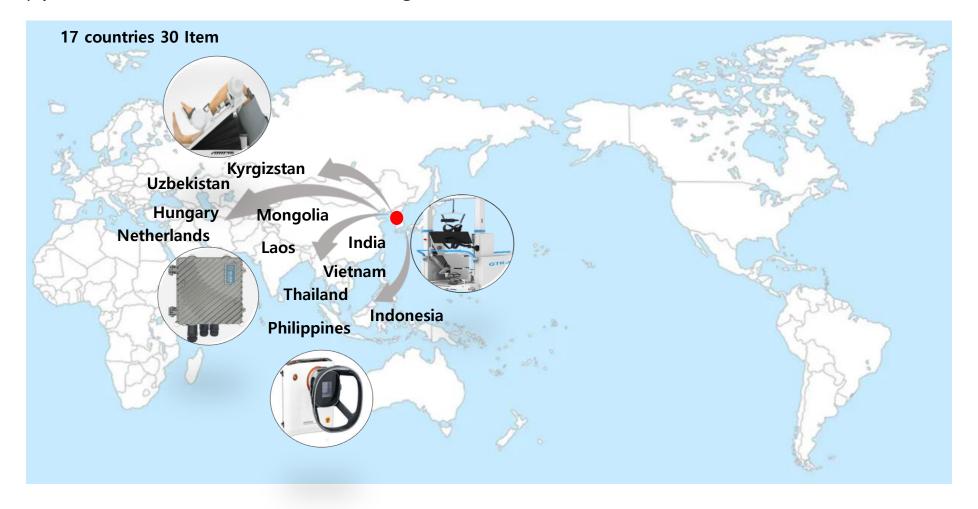


- A total water leak management system with Al, IoT, Cloud technology
- Al Model helps to identify whether it is leak or not with minimum help from expert
 - A tailored Al solution that collects and analyzes a wide range of sound and noise data using our own high-sensitivity acoustic IoT sensor and CNN-based sound data analysis Al model





The overseas pilot application program is a type of small scale ODA program(not official term) that aims to solve public(social) problems in overseas countries together





PPS operates Overseas Pilot Application Program for Innovative Public Procurement Products through cooperation with foreign public entities and non-profit organizations

Provision of Products for foreign entities

PPS purchases innovative products and provide them for foreign public entities or NGOs ("user entities")



Testing Period (3~10 months)

Foreign user entities receives the products and use them in the field

The user entity reports the products' functionality and performance

Ownership Transfer

After the user report, the products' ownership is transferred to the user entity

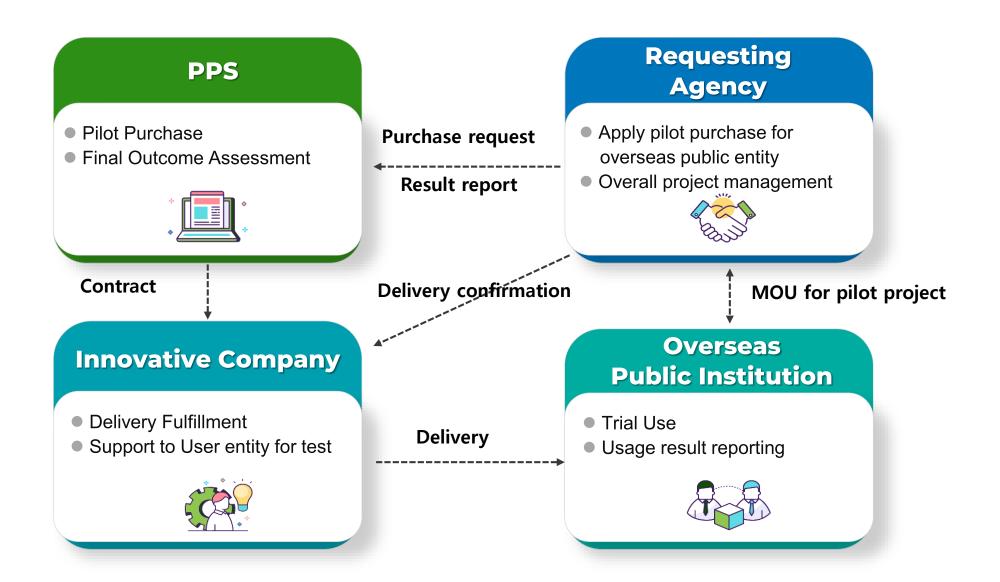
- Overseas pilot applications are usually **small-scale compared to ODA**
- Mutually beneficial cooperation
 - User entities owns innovative products cost-free
 - Developing into an ODA program(Depending on the situation and conditions)



Type of Cooperation

Type	Applying Institution	Contents
Domestic Public Cooperation	Public Organization in Korea	Demonstration purchase and verification of products that public institutions' overseas subsidiaries wish to pilot test
ODA demand connect	KOICA (Korea International Cooperation Agency)	Pilot purchase and verification of products with confirmed public sector demand in developing countries
Overseas public Demand matched by innovative solutions	KIP (Korea Institute of Procurement)	Pilot purchase and verification of products requested by foreign public institutions for overseas demonstration







Example Products

Smart Rehabilitation Solution

Kyrgizstan







- Multi-Joint Application
 - A single device for wrist, elbow, ankle, and Knee
- **✓** Wide Rehabilitation Scope
 - Applicable for treating neurological and muscul oskeletal movement disorders
- Smart Tele-Rehab Platform
 - Seamlessly review treatment data and communicate with patients for more efficient rehabilitation management

Ultra-portable X-Ray Camera

Philippines



- Hand-held high quality X-ray imaging device for portable use
- Applicable to all parts of human body (chest, abdomen, hands and feet, facial parts, etc.
- User friendly with minimal radiation
 - Set up in 1 minute, image acquisition in 3 seconds, LED and laser guided beam for accuracy



Example Products



- Electric orthopedic training device used to induce working rehabilitation of patients
- Rebuild muscles, recover and improve the function of joint motion by turning the foot fixture by rotating a crankshaft with the kinetic energy of an electric motor
- Automatic stride adjustment function



- A total water leak management system with Al, IoT, Cloud technology
- Al Model helps to identify whether it is leak or not with minimum help from expert
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Innovation Procurement

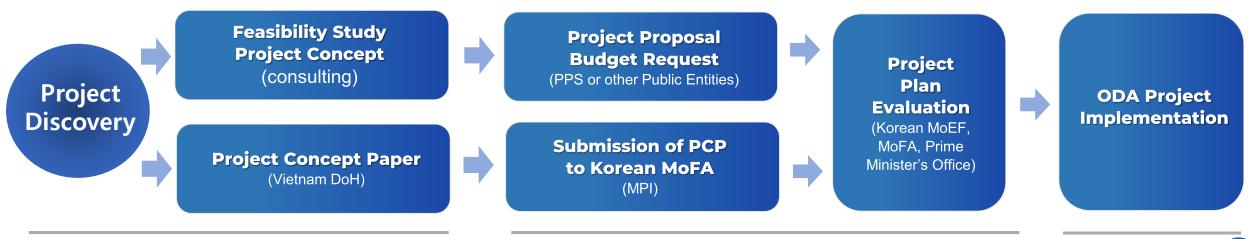
Developing into an ODA projects

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Developing ODA Projects with Innovative Products

- PPS is preparing a plan for a new ODA project on the provision of Innovative Product packages for ODA partners
 - In alignment with Korean government's objective of "ODAs that drive innovation and technical development"
 - Humanitarian assistance, public health, environment, general public service, etc.
- Developing an ODA project requires bilateral coordination



Case study of the Philippines

Feasibility Study









Project concept

















Letter of Intent



Department of Health, Republic of the Philippines ayuman, Sta. Cruz, Manila Philippines 1003 / doh.gov.pl

March XX, 2024.

Administrator of Public Procurement Service.

Republic of Korea.

Subject: Request of supporting for the establishment of a portable tuberculosis screening system through innovative products

Dear Mr. Lim,..

Since the onset of the COVID-19 pandemic, the Philippines has encountered challenges in accurately estimating the number of tuberculosis (TB) cases. Moreover, the disparity between the annual estimated TB cases and the officially reported figures has grown over time. In addressing this societal concern, the Philippine government has made concerted efforts to screen potential TB cases, particularly among vulnerable populations, within a short timeframe, and to provide them with appropriate medical care...

Following a preliminary feasibility study for an Official Development Assistance (ODA) project conducted by the PPS in the Republic of Korea, the Department of Health (DOH) has acknowledged the effectiveness of several innovative products for TB screening, notably a portable X-Ray and AI diagnostic software. Consequently, the DOH kindly requests the support of the PPS through an ODA project to establish a sustainable TB screening system, with a focus on vulnerable groups affected by TB in the Philippines...

It would be greatly appreciated if you could advise the DOH on the next steps to be taken for the implementation of the ODA project, as supported by the government of the Republic of Korea...

Teodoro J. Herbosa. Secretary of Department of Health Republic of the Philippines.

PCP(Project Concept paper)





Support for the establishment of a portable tuberculosis screening system through innovative products

> (2025-2027/ 2.0 million USD) Republic Philippines

Project/Program Concept Paper

29, February, 2024

Applicant Information		
Name		
Position		















