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Academic-Industrial Cooperation to Develop Ports in Developing Countries

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1. Current Status of Port Development Projects for Developing Countries

1.1 Overview of Overseas Port Development Projects

- Performing overseas port development projects through ODA since 2008

Background

Port development assistance for developing countries(ODA)



Support Korean companies to find overseas markets

Support to develop new markets;
resources, offshore plant, etc.

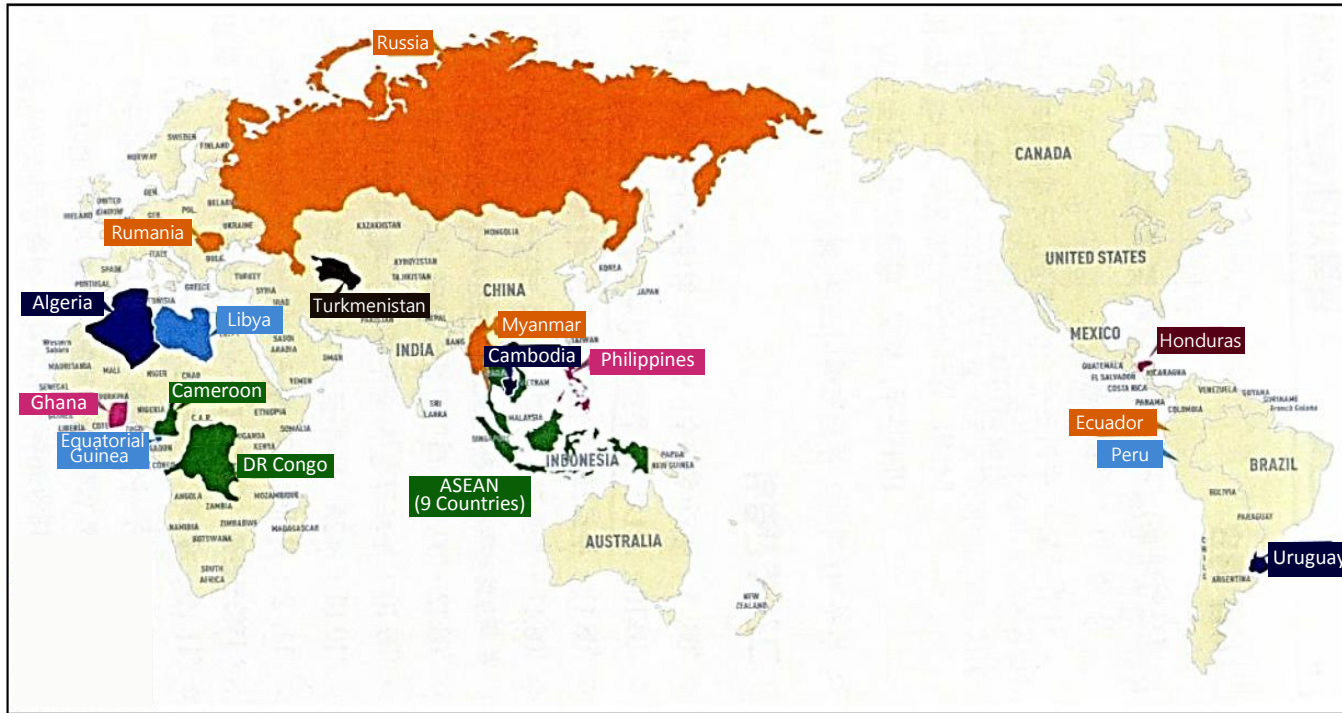
Activities

- Free assistance for master plan and feasibility study to develop ports in developing countries
- Supporting Korean companies to obtain orders from the countries which have business potential, by dispatching government agency for building partnerships
- Promoting cooperation through the invited training programs for public officials

1. Current Status of Port Development Projects for Developing Countries

1.2 Cooperation Performance(1/2)

• Cooperation Countries and Results(2008~2014)



*Sources: Ministry of Oceans and Fisheries (2014). A Master Plan for Overseas Port Development Cooperation; MOF Homepage

[2008]

-Turkmenistan: Feasibility Study(F/S) to modernize the Turkmenbasy Port

[2009]

-DR Congo: F/S to develop the Banana port
-ASEAN: Roadmap for integrating marine traffic (47 ports in 10 countries)

[2010]

-Cameroon: F/S to develop the Limbe port
-Peru: F/S and Master Plan(M/P) to develop ports

[2011]

-Ghana: M/P to develop ports
-Philippines: F/S to develop ports
-Honduras: F/S and M/P to develop ports

[2012]

-Uruguay: M/P and F/S to develop ports
-Cambodia: F/S to develop ports
-Algeria: F/S and M/P to develop ports

[2013]

-Equatorial Guinea: F/S and M/P to develop ports
-Libya: F/S and M/P to develop ports

[2014]

-Myanmar, Philippines, Russia, Guatemala, etc.:
Launching cooperation projects

1. Current Status of Port Development Projects for Developing Countries

1.2 Cooperation Performance(2/2)

- Types and Characteristics of Cooperation Projects

Request from foreign governments;
DR Congo, Ghana, Cameroon, Equatorial Guinea

Cooperation with international organization
(ASEAN MTWG); Philippines, Cambodia

* ASEAN: Association of South-East Asian Nations
* MTWG: Maritime Transport Working Group

Proposal from the Korean government;
Algeria, Libya

Request from Korean agency of international
port construction; Peru, Honduras, Uruguay

Request from the corporate sector;
Turkmenistan

As of 2013,

- 50% of total 12 projects were found by cooperation between governments
- Project(s) requested from the corporate sector: Turkmenistan(1)
- Budget scale for 12 development projects : KRW 76.467 billion (on the proposals)

*Sources: Ministry of Maritime Affairs and Fisheries (2014). A Master Plan for Overseas Port Development Cooperation

2. Problems of Port Development Projects

2.1 The Existing Cooperation Process and Participants(1/2)

- Cooperation Process and Participants



*http://www.molit.go.kr/USR/mof_policyData/m_35302/dtl?id=506, Modified

2. Problems of Port Development Projects

2.1 The Existing Cooperation Process and Participants(2/2)

[The Existing Cooperation Process]

[Problems]

<ul style="list-style-type: none"> • Consultation of cooperative intension and scope 	Prior Consultation	<ul style="list-style-type: none"> • Difficult to collect information from targeted countries • Difficult to find business opportunities in the private sector
<ul style="list-style-type: none"> • Contracting MOU between responsible port departments • For preparing the ground for cooperation 	MOU Contract	<ul style="list-style-type: none"> • Delays in consultation and approval of developing countries • End users' opinions are not reflected • Different negotiation organizations by cooperative project
<ul style="list-style-type: none"> • Open competitive bidding to Korean engineering companies for M/P, F/S, etc. 	Project Order/ Performance	<ul style="list-style-type: none"> • Difficult to collect port data in developing countries • Conflict of opinion on project between Korean companies • Difficult communication in Arabic, Spanish, etc.
<ul style="list-style-type: none"> • Reporting the progress of projects to local governments; practical negotiations, final report, etc. 	Practical Consultation	<ul style="list-style-type: none"> • Lack of understanding on port development • Frequent and extempore requirements
<ul style="list-style-type: none"> • Deciding construction project types • Promoting investment attraction, financing, etc. 	Commercial-ization	<ul style="list-style-type: none"> • Fail to find follow-up projects • Weak will of cooperative government • Lack of reliability for commercialization

*Sources: Ministry of Maritime Affairs and Fisheries (2014). A Master Plan for Overseas Port Development Cooperation

2. Problems of Port Development Projects

2.2 Major Tasks to Improve Cooperation Projects

[Major Tasks]

[Considerations]

[Strategic Approach]



3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.1 Establishing a Specialized Organization(1/5)

- Problems and Required Functions

[Problems]

Difficult to find cooperation projects in the private sector

No existence of the objective evaluation system

No existence of the consistent project management system

Lack of counterparts' will to promote cooperative projects



[Required Functions]

Find private-sector-driven projects through the diverse supports to academic-industrial cooperation

Consistent cooperation projects and performance management

Increase reliability of Korean port development projects

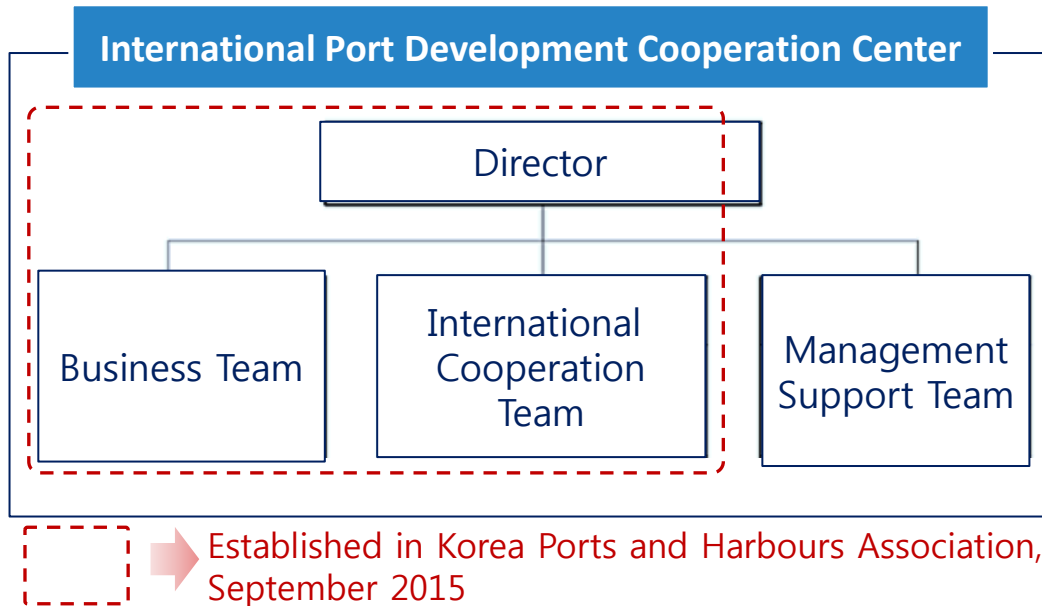
Strengthen networks with governments, private and international organizations

Develop and assist demand-driven cooperation projects

3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.1 Establishing a Specialized Organization(2/5)

- Structure of Organization (Type 1)



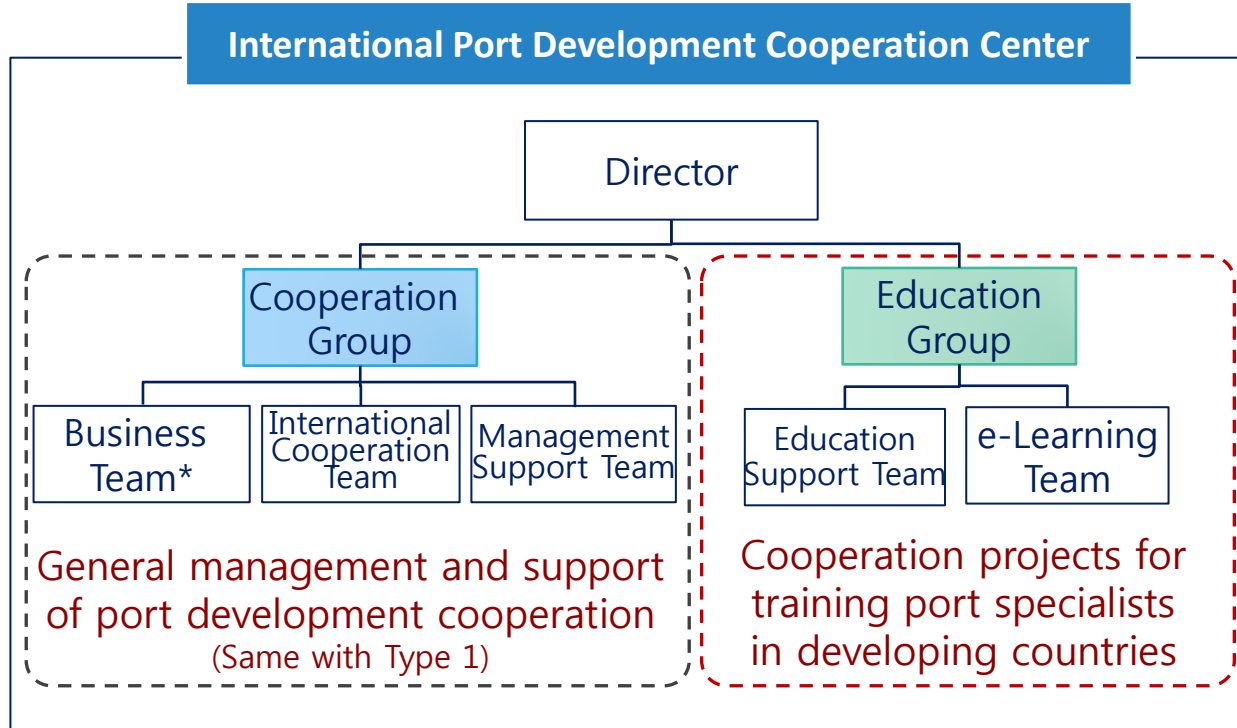
- Already Established Organization
 - Director: General management
 - Business Team: Project management, evaluation, new project development, commercialization support of Korean companies, etc.
 - International Cooperation Team: Building a network of public officials and private companies, public relations, etc.
 - Management Support Team: Training, seminar, publication, administrative service, etc.

*Sources: Ministry of Maritime Affairs and Fisheries (2014). A Master Plan for Overseas Port Development Cooperation

3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.1 Establishing a Specialized Organization(3/5)

- Structure of Organization (Type 2)



Cooperation Group

- **Business Team**
- Increasing reliability of feasibility survey
- Capability of developing business models by strengthening research capability
- **The Other Teams:** Same with Type 1

Education Group

- **Education Support Team**
- Developing and supporting degree courses(Master, PhD) for port specialists in developing countries
- Developing and supporting training courses for port policy and education experts
- **e-Learning Team:** Developing e-Learning solutions (systems, contents) and service, provisioning e-Learning solutions to developing countries

3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.1 Establishing a Specialized Organization(4/5)

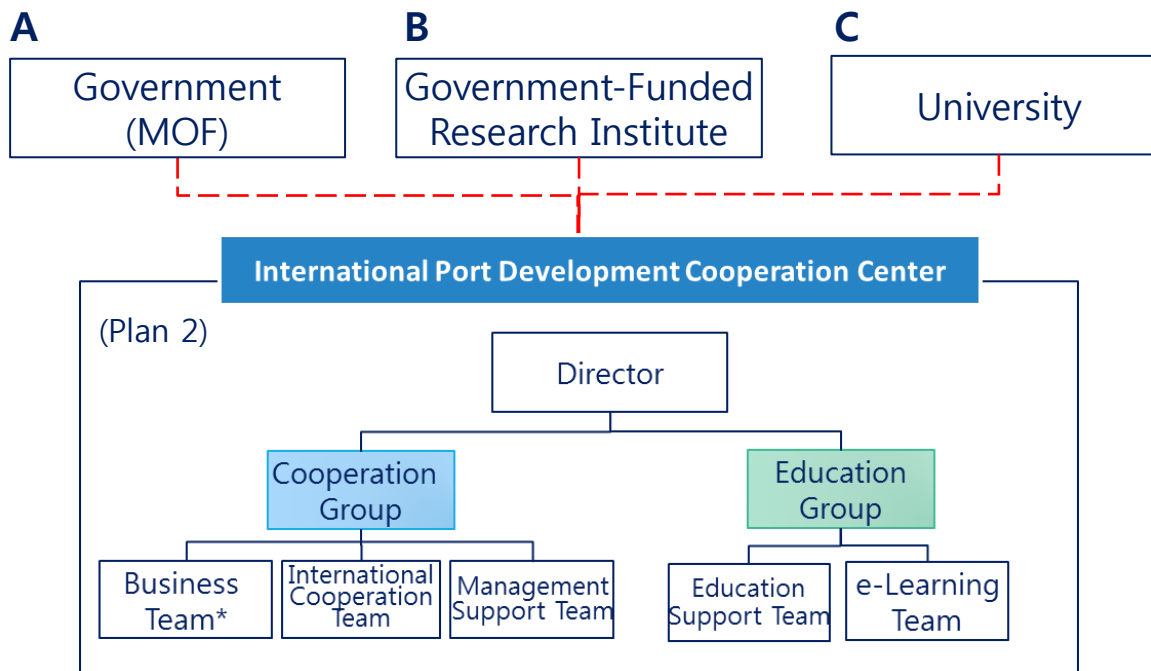
• Synergy Effects by Adding Educational Functions



3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.1 Establishing a Specialized Organization(5/5)

- Which organization to be affiliated?



- **A(Government-Affiliated Type)**

- Easy to cooperate with governments and international organizations,
- Good at large-scale and top-down projects
- Difficult to find bottom-up projects from the private sector

- **B(Institute-Affiliated Type)**

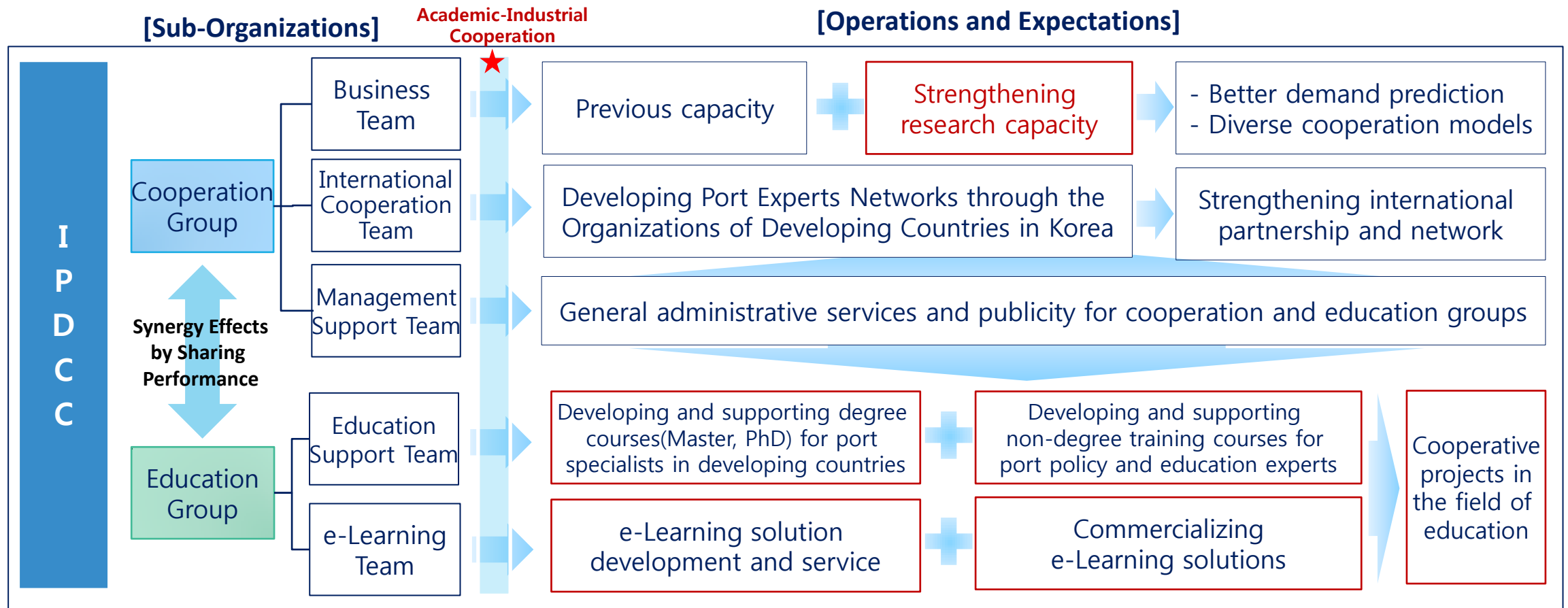
- Relatively less bureaucratic,
- Facilitate diverse cooperation in the private sector
- Good at middle up-down type

- **C(University-Affiliated Type)**

- Excellent capabilities of education and research,
- Lack of management capacity for international cooperation projects large-scale

3. Improvement Plans: Focusing on Organization Establishment and Academic-Industrial Cooperation in the field of Education

3.2 Operation Plan



4. Conclusions

- Lots of knowledge for port development and operation has been accumulated.
- The way to effectively deliver such knowledge to the developing countries should be found.
- To activate port development cooperation projects with developing countries,
 - Cooperation between government and private sectors
 - Establishing specialized organization concentrating the capacities and efforts are required.
- Especially, adding educational functions to the existing organization brings various synergy effects.

Thank You for Your Attention