

# Introduction of e-ASIA JRP



Friday, February 21, 2014

Osamu Kobayashi

Secretary-General, e-ASIA JRP Secretariat

Director, Singapore Office, Japan Science and Technology Agency (JST)



- 1. Outline of e-ASIA JRP
- 2. Forms of Cooperation
  - i. Joint research by Multilateral co-funds
  - ii. Information exchange (Workshops)
  - iii. Promotion of research exchange (GOJ Scholarships)



What is the e-ASIA JRP (East Asia Joint Research Program)?

### Concept

# To build a Science & Technology community

# to stimulate innovation and development and to resolve shared challenges

# in the East Asian region



### Objectives

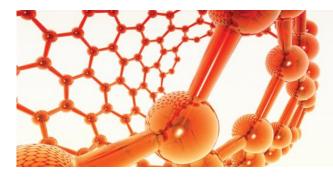
- 1. Cultivate the Asian science and technology community
- Raise the standard of science and technology in the East Asian region and realize an innovative economy and society
- 3. Pursue synergistic effects through multilateral cooperation
- 4. Respect and leverage the diversity in the East Asian region
- 5. Establish and develop equal partnerships





### East Asia Joint Research Program (e-ASIA JRP)

# **Fields of Cooperation**



Nanotechnology / Materials



**Biomass / Plant Science** 



Infectious Diseases



**Disaster Prevention** 





Advanced Interdisciplinary Research towards Innovation

Others



#### **Current Members**

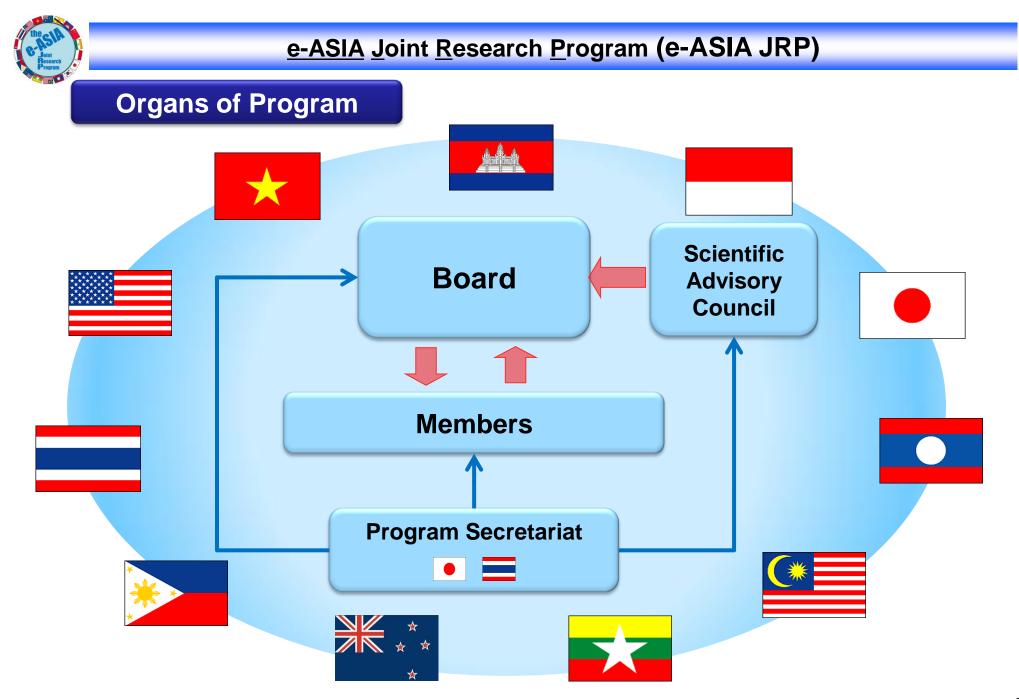
11 countries 13 organizations (as of February 2014)



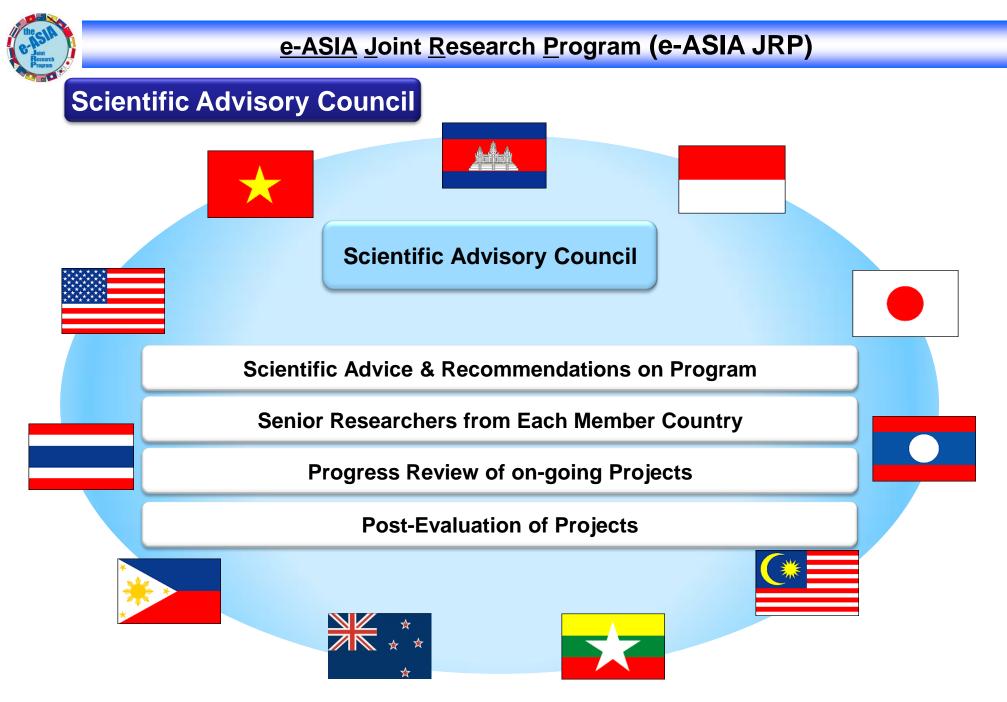
\*Quasi Member

Prospective Members: Public funding institutions in the 18 East Asia Summit (EAS) participating countries

For more details → http://www.the-easia.org/jrp/











- 1. Outline of e-ASIA JRP
- 2. Forms of Cooperation
  - i. Joint research by Multilateral co-funds
  - ii. Information exchange (Workshops)
  - iii. Promotion of research exchange (GOJ Scholarships)



### **Forms of Cooperation**

- 1. Joint research by **multilateral co-funds**
- 2. Research exchange by on-top funding
- 3. Information exchange (for example, national priorities and best practices)
- 4. Promotion of research exchange and networking among young researchers

### Mechanism

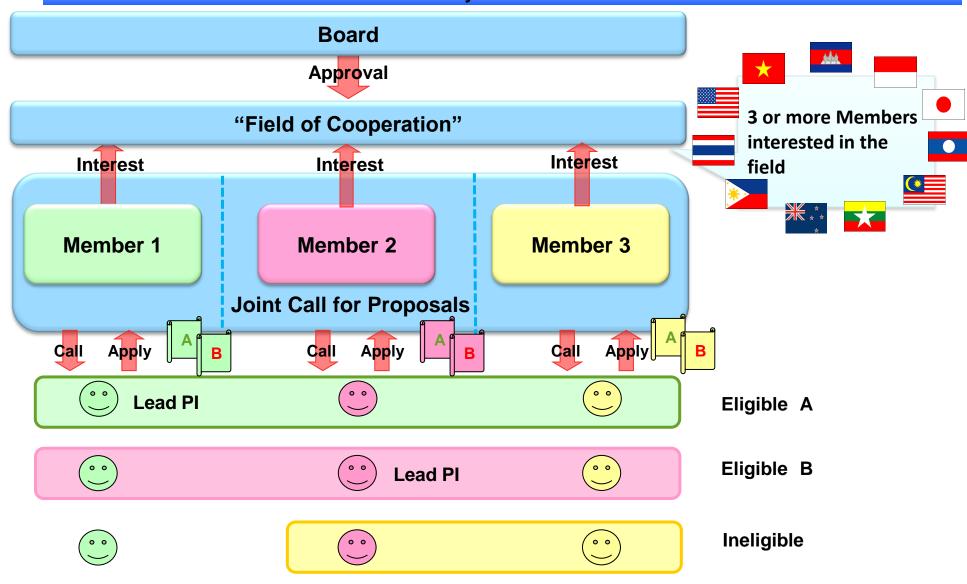
On a Call by Call basis
 Participating members will decide whether or not to participate

#### Co-funds

Members participating in each Call (min. 3) fund their own researchers: funding should not cross national borders

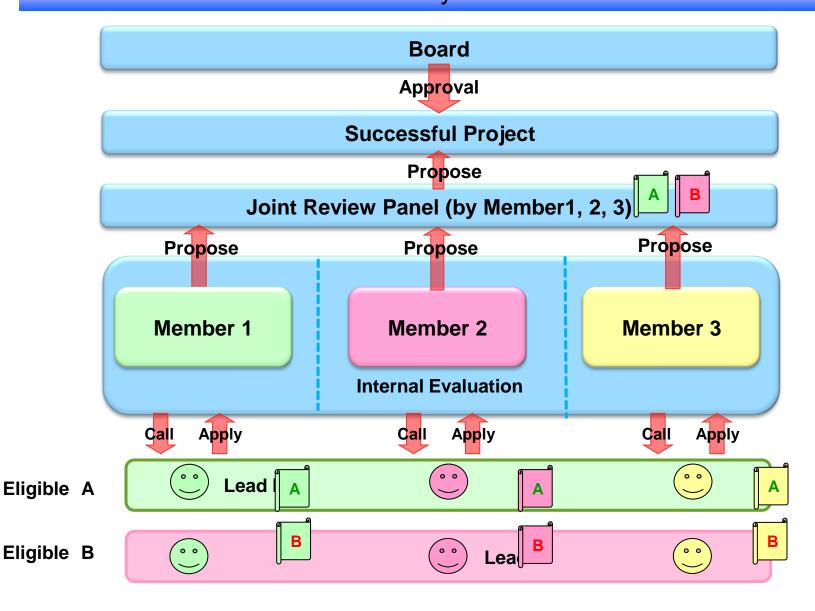


### Forms of Cooperation (Joint Call) Joint research by Multilateral Co-funds

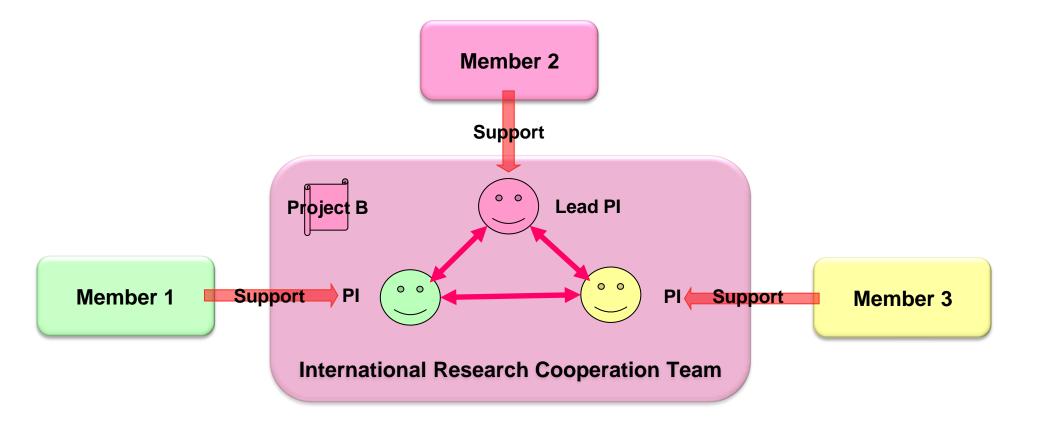


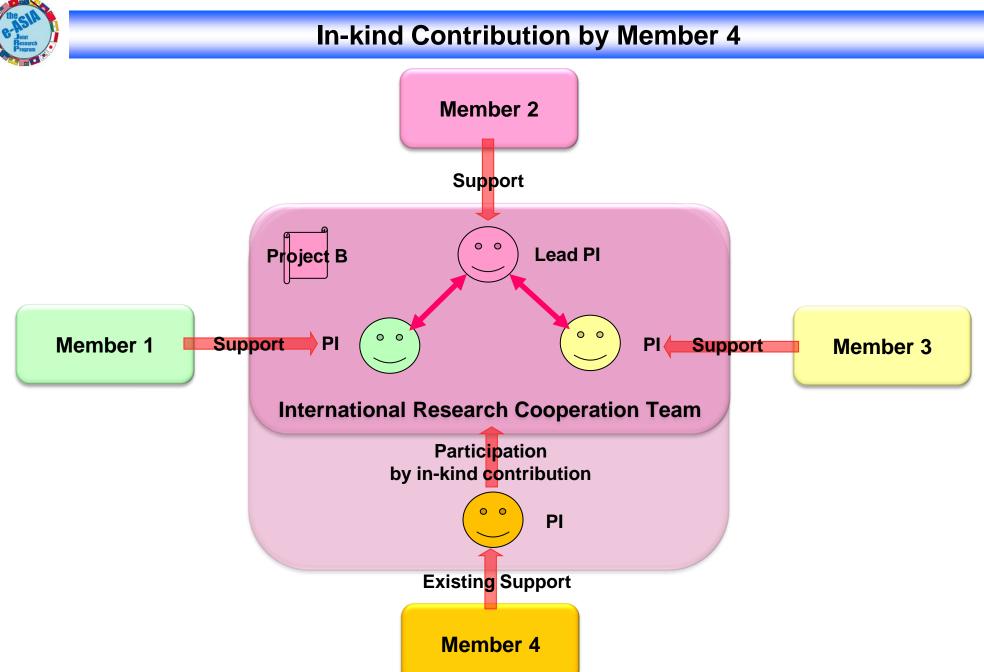


### Forms of Cooperation (Joint Review) Joint research by Multilateral Co-funds











# **1st Pilot Joint Call for Proposals**

# Participating members: JST (Japan), MOST (Vietnam) and NSTDA (Thailand)

# Fields of research:

"Nanotechnology and Materials" and "Biomass and Plant Science"

❑ Call duration: 2<sup>nd</sup> - 31<sup>st</sup> May 2012

# Outcome:



- 2 proposals approved in "Nanotechnology/Materials" (11 received)
- 1 proposal approved in "Biomass/Plant Science" (3 received)



### **1st Pilot Joint Call for Proposals**

Budget provided to each project (in total):

	Japan :	39 million JPY (roughly 390,000 USD)
★	Vietnam:	2.5-3.7 billion VND (roughly 120,000-177,000 USD)
	Thailand:	<b>2-5 million THB</b> (roughly 65,000-163,000 USD)

\*All budget items must conform to the rules and regulations of each participating member

### □ Research project duration: 3 years (36 months)

- 1. Corrosion Mapping of Structural Materials in Asian Area with Understanding Effects of Environmental Factors (Materials)
- 2. Plasmonic Bio-Sensor for Detecting Serious Diseases in Southeast Asia (Nano-tech)
- 3. Advancement of Asian Cassava Molecular Breeding by Cutting-edge Technologies (Biomass)



# 2nd Pilot Joint Call for Proposals

# □ Participating members:

JST (Japan), DOST (the Philippines) and MOST (Vietnam)

# □ Fields of research:

"Infectious Diseases"



# Call duration:

8<sup>th</sup> Feb – 15<sup>th</sup> April 2013

# **Outcome:**

2 proposals approved (8 received)



### **2nd Pilot Joint Call for Proposals**

Budget provided to each project (in total):

	Japan :	36 million JPY (roughly 360,000 USD)
	Philippines:	15 million PHP (roughly 350,000 USD)
$\star$	Vietnam:	2.5 billion VND (roughly 120,000 USD)

\*All budget items must conform to the rules and regulations of each participating member

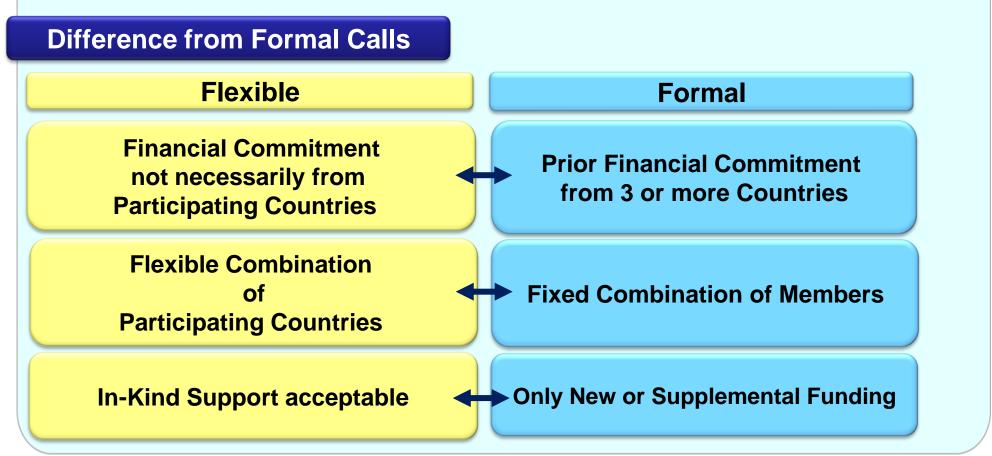
# Research project duration: 3 years (36 months)

- International study on pulmonary diseases infected with influenza virus and 1. Mycobacterium tuberculosis
- Comprehensive study on virus quasi-species and vascular permeability 2. factors in severe dengue infection in humans for innovative epidemic and clinical managements



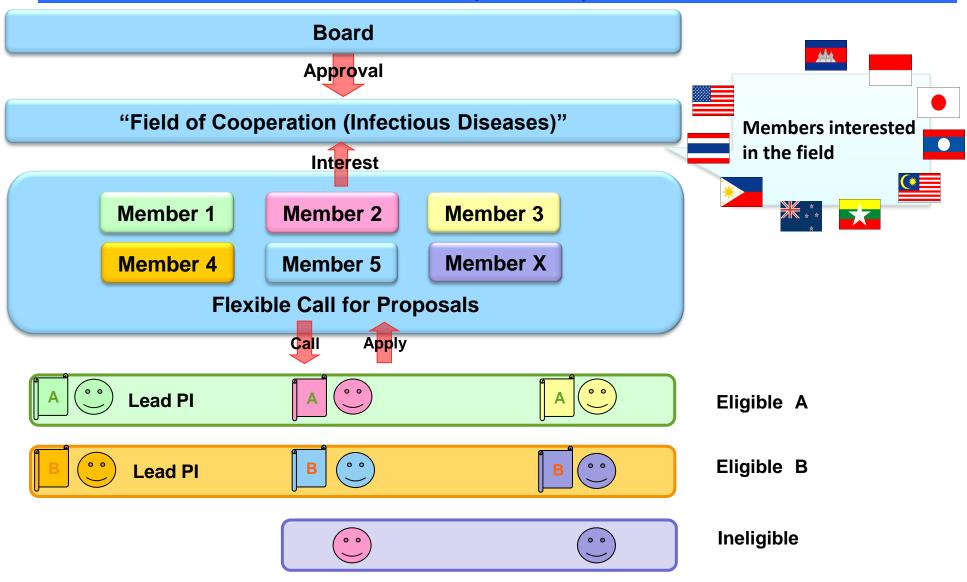
### **Flexible Call for Proposals**

- Trial basis in the field of "Infectious Diseases"
- Supplementary funds to projects or "flexible" call for proposals



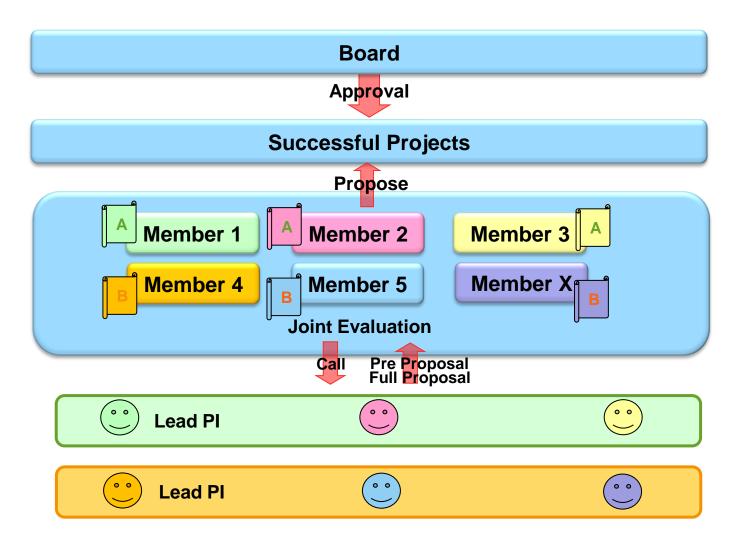


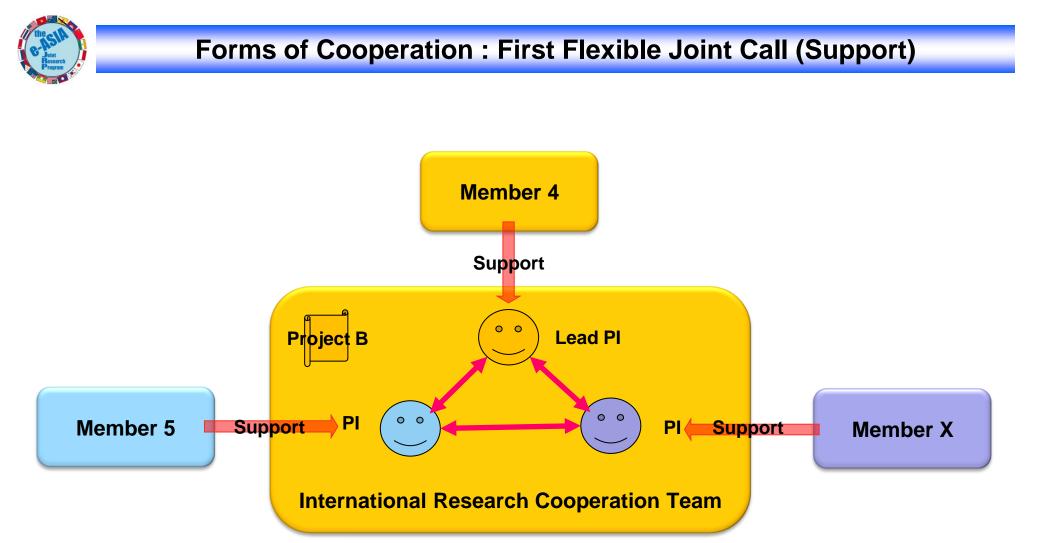
Joint research by Possibly Co-funds





### Forms of Cooperation (First Flexible Joint Call) Joint research by Possibly Co-funds





Preferably, New or Supplemental Funding for Team Researchers (1 "in-kind" researcher per project acceptable)



- 1. Outline of e-ASIA JRP
- 2. Forms of Cooperation
  - i. Joint research by Multilateral co-funds
  - ii. Information exchange (Workshops)
  - iii. Promotion of research exchange (GOJ Scholarships)





# "Disaster Prevention" Workshop

Earthquake Research for Safer Cities/ Volcano Eruption/ Flood & Landslide

June 4, 2013 @ Jakarta Indonesia

### Co-organized by: Ministry of Research and Technology (RISTEK) & JST

- Recommendations to the e-ASIA JRP
- 1. Multi-lateral collaboration to solve common problems of natural disaster
- 2. Exchanges of experiences and sharing advanced knowledge
- 3. Genuine partnerships for mutual contribution
- 4. Nurturing human resources through research collaboration and researchers' exchange
- 5. Sustainable network of researchers in the region  $\rightarrow$  Safety and Sustainability of the region

26





- Possible Themes of Cooperation:
- 1. Earthquake
- Database for tsunami early warning
- Shaking table tests and building code
- 2. Volcano
- Monitoring of activity
- Classification of eruption scenarios
- Risk assessment and preparation
- 3. Flood and Landslide
- Assessment through monitoring and simulation
- Forecast and warning





"Renewable Energy" Workshop Solar Energy and Photovoltaics/ Biomass Utilization

July 31- August 1, 2013 @ Vientiane Lao P. D. R.

- Co-organized by: Ministry of Science and Technology of Lao P.D.R. & JST Hosted by: Renewable Energy and New Materials Institute, Lao P.D.R.
- Recommendations to the e-ASIA JRP
- 1. Establish smaller amount funding for young researchers and encourage self-help efforts of each countries
- 2. Reduce sectionalism in each country which prevents active applications by prospective researchers for joint calls for proposals
- 3. Share common views on importance of human development of researchers among e-ASIA JRP member states





- **Possible Themes of Cooperation:**
- 1. Solar Energy and Photovoltaics
- Development of efficient solar thermal energy systems -Heating, cooling, thermoelectric-
- Installation of stand alone systems in rural areas and in agriculture, and investigation of its reliability, life time
- Development of new materials and new fabrication techniques for inexpensive solar energy conversion devices

# 2. Biomass Utilization

- On-site power and Heat Power generation
- Fertilizer and Feed Agricultural production, Breeding, Reduction of chemical fertilizer, crops with high product yield
- Befouls (gas, liquid and solid)
  -CH4, H2, Syngas, Ethanol, BDF, Jet fuel, BTL, Wood pellet, Solid fuel
  -Low cost production technologies
- Biomass Refineries Biofuels and Biomaterials, Social Infrastructure systems





"Intelligent Infrastructure" Workshop

December 2 - 4, 2013 @ Yangon, Myanmar

- Co-organized by: Ministry of Science and Technology of Myanmar & JST Hosted by: Yangon Technological University
- Next Step contributing to the e-ASIA JRP
- 1. Infrastructure policy should be justified by holistic "science of infrastructure"
- 2. Promoting discussion by workshop participants by mailing list
- 3. Making report of workshop summary
- 4. Publishing a book on "science of infrastructure"
- 5. Implementing this protocol to real project
- 6. Holding second workshop with same participants





#### Proceeding of Workshop:

### Session1: Survey & Analysis

Needs / Remote sensing technology applications / Current problems in Myanmar infrastructure

<u>Session2: Modeling & Simulation</u> Overview / Modeling / Modeling example : Electronic commerce / Simulation application to electric power transmission system

<u>Session3: Optimization</u> Greening of datacenter / application of optimization / optimizing algorithm

### **Session4: Implementation**

History of infrastructure / Social practice required by implementation process / Introduction of national projects: Advanced transportation system and transmission trial of electric power by wind power generation in islands region



- 1. Outline of e-ASIA JRP
- 2. Forms of Cooperation
  - i. Joint research by Multilateral co-funds
  - ii. Information exchange (Workshops)
  - iii. Promotion of research exchange (GOJ Scholarships)



**GOJ Scholarships related to e-ASIA JRP Projects 2013** 

# **Special Scholarships for e-ASIA Projects**

- □ 5 + Special Reserves
- □ for a PhD course

Provided by: Ministry of Education, Culture, Sports, Science and Technology (MEXT)



# **Requirements (Call for 2013)**

**Applicants must**:

- □ Hold a Master's Degree in the field of e-ASIA JRP projects
- □ National of e-ASIA JPR member country
- □ Born after 2<sup>nd</sup> April 1979



# **Application and Selection**

# □ Pre-screening by JST

- Applicants who pass JST screening go through the university admissions process – exams, interviews, etc. depending on the university
- □ Applicants who pass university admissions process will go to the final stage – Final Decision by MEXT



### **Further Details**

# **General scholarship details:**

www.mext.go.jp/a\_menu/koutou/ryugaku/boshu/1319066.htm

# e-ASIA JRP selected projects: www.jst.go.jp/pr/info/info922/Attachments1\_e.html



# Thank you for your attention!

If you have any questions, please feel free to contact me or Ms. Kishida (at the e-ASIA Secretariat) <u>easiajrp@jst.go.jp</u> / <u>e2kishid@jst.go.jp</u>



http://www.the-easia.org/jrp/