

REI Symposium

Current Status & Future Perspective Northeast Asia Supergrid

2018. 7. 23



Contents

1. Global Supergrid and NEA
2. Supergrid projects world-wide
3. Inter-Governmental Cooperation
4. Challenges and Perspective



1

Global Supergrid and NEA



“The Night View of City Lights”



“No Grid Interconnection Among C-K-J”



Korea

Japan

2

Supergrid Projects World-wide



Power Grid Interconnections World wide

Exist

North America

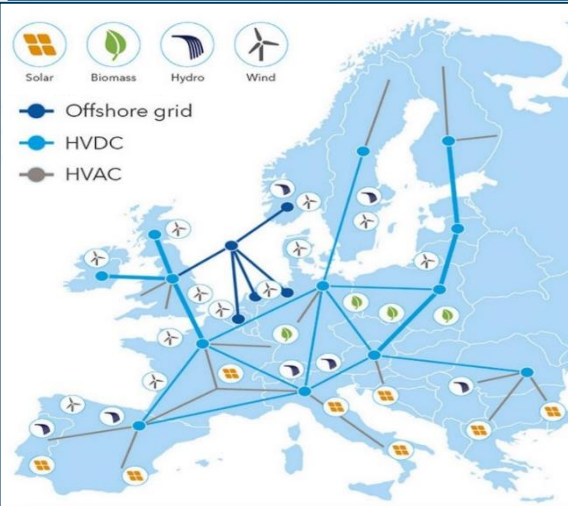
▶ USA, Canada, Mexico interconnection

Expansion

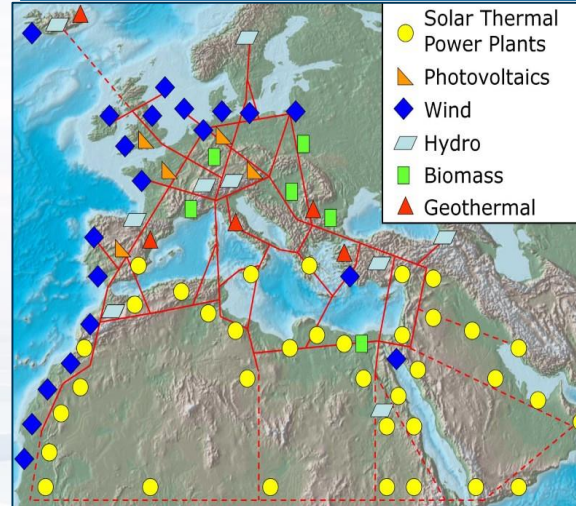
Europe

▶ Integrate diverse energy source/ Enhance the stability of power

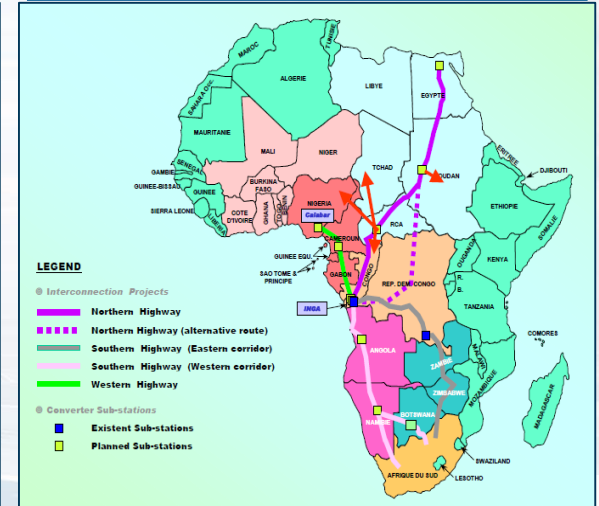
Northern Europe



Southern Europe-Maghreb



Grand Inga project

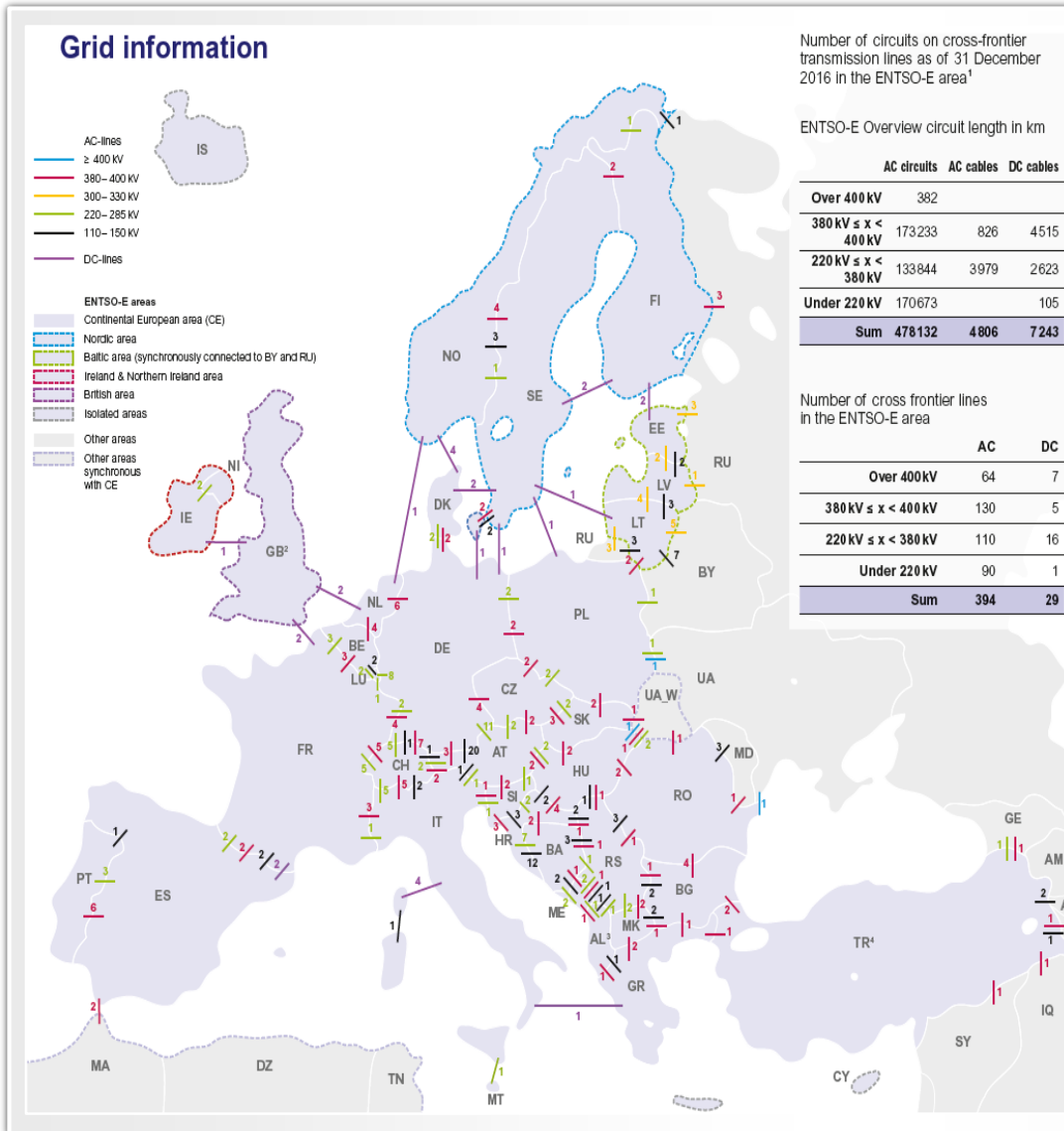


In Progress

South East Asia

▶ Project for 10 Countries (Laos, Malaysia etc.)

Interconnections in Europe



entsoe
 Reliable Sustainable Connected



36
 Countries

42
 Companies

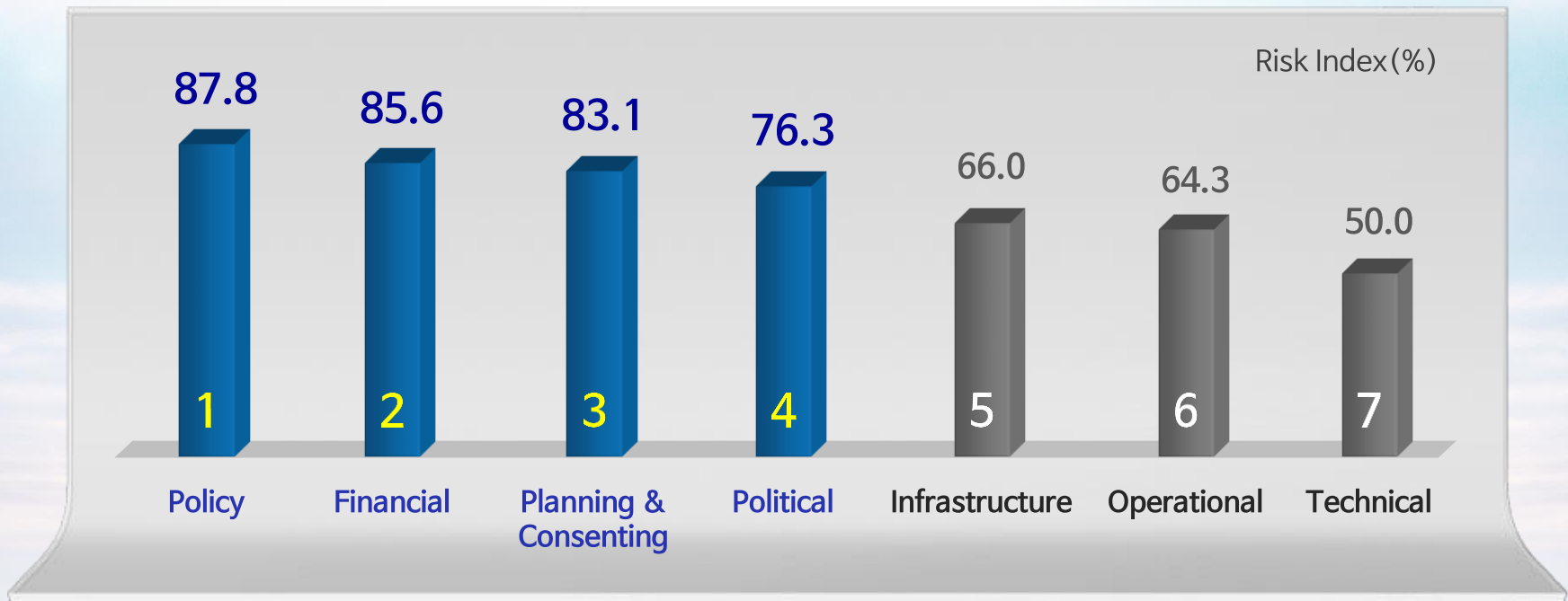
“Political · Economical · Technical”
 Inter-Governmental
 Collaboration

Interconnections
 are **actively promoted**
 by EU & ENTSO-e
 (over the 400 projects)

3 Inter-Governmental Cooperation



Potential Risks in Supergrid Project



Policy, Financial, Planning & Consenting, Political Risks are much bigger than Technical and Operational Issues

Source : Dr. McKinstry, the European Supergrid - Messiah or Pariah, 2013

Inter-governmental Cooperation Required

Cross Border Interconnection



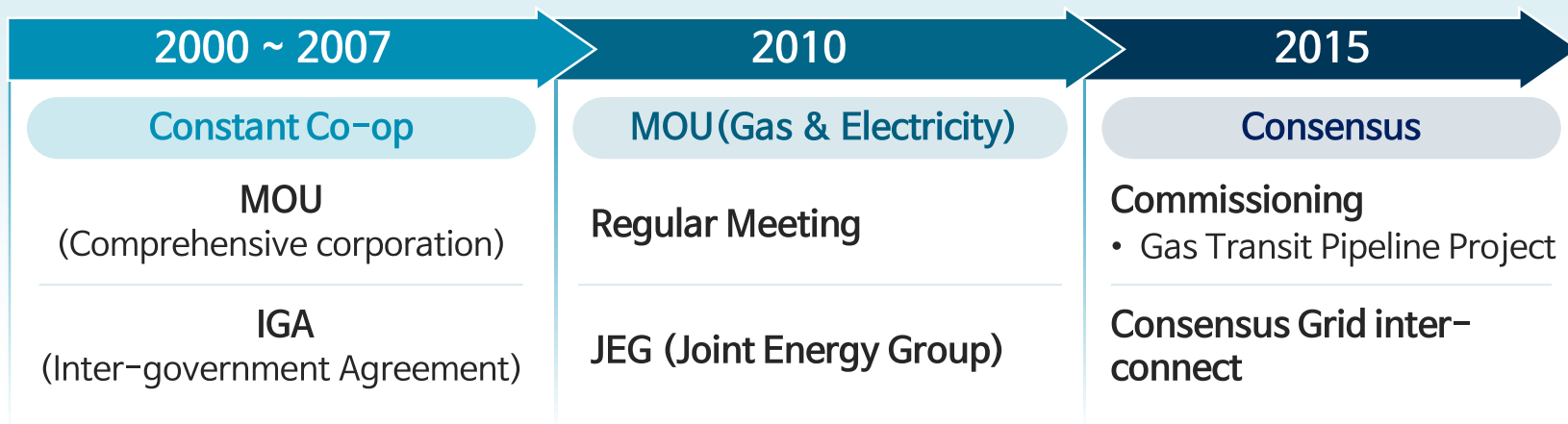
Regular exchange opinion & discussion

High Level (Prime Minister, Minister) Collaboration

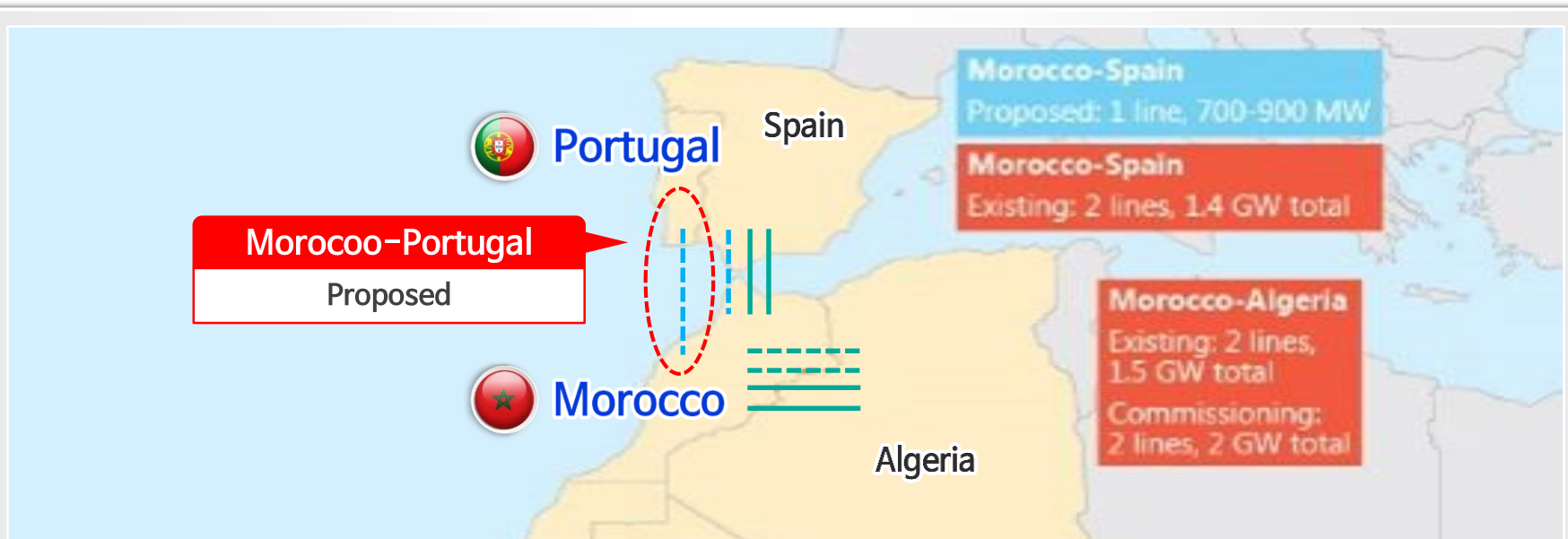
ITGI Turkey-Greece Gas Transit Pipeline



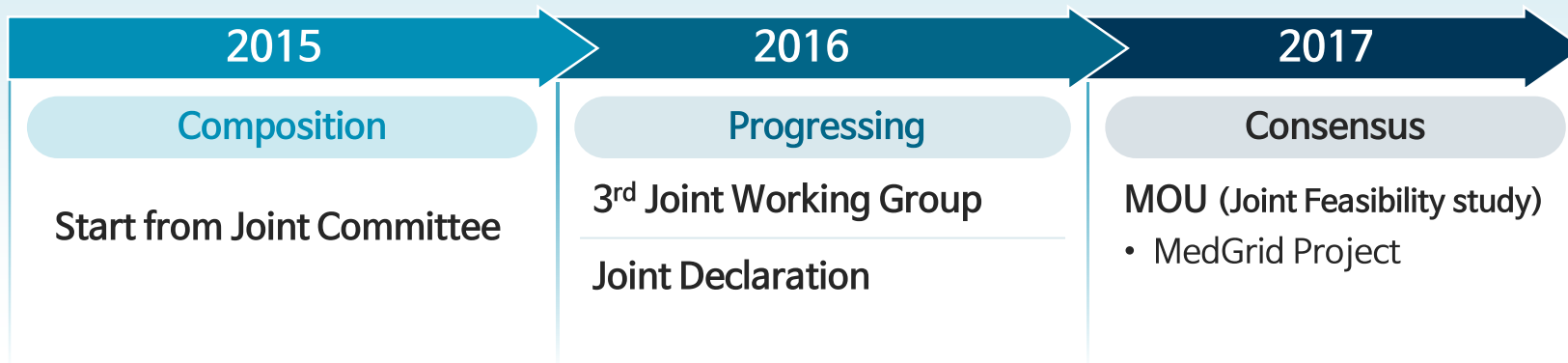
▶ Greece-Turkey, beyond Historical Disputes



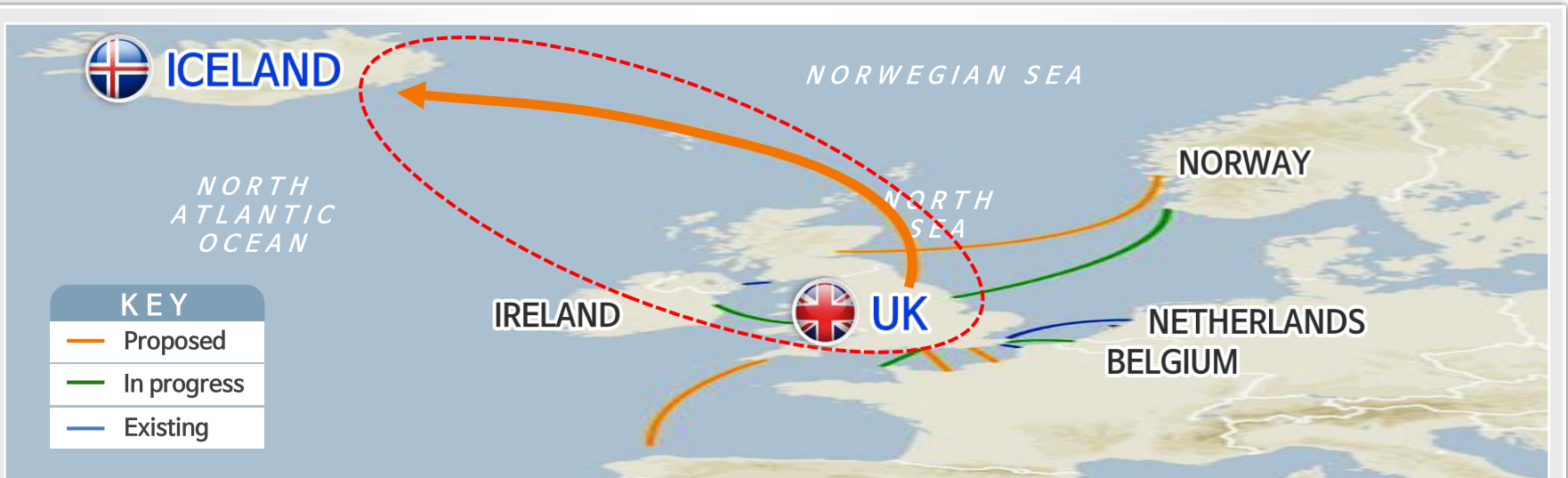
MedGrid Portugal–Morocco Interconnection



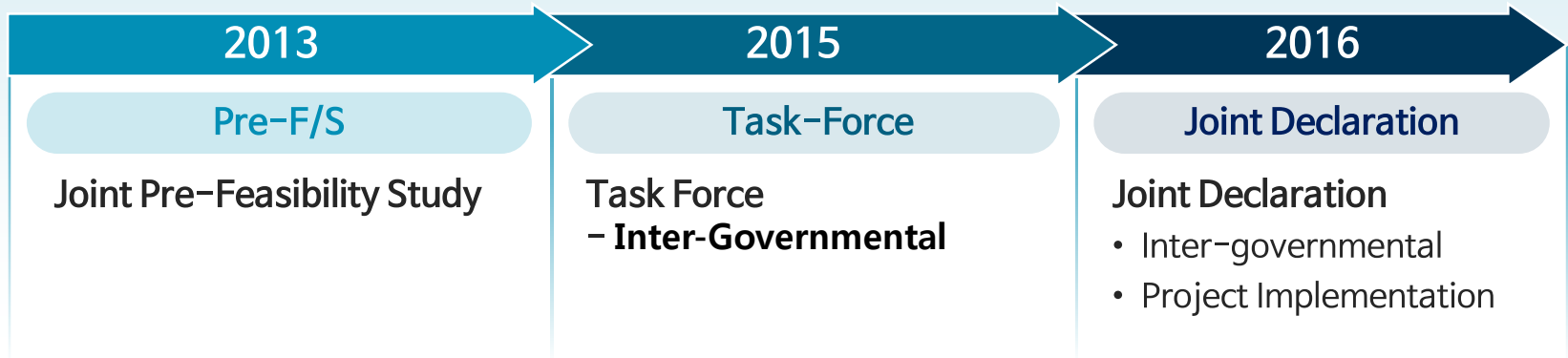
▶ Led by Joint Committee



IceLink UK-Iceland Interconnection



▶ Trading Renewable Energy, Reducing CO2 Emission & Electricity rate



'Top-Down' & 'Bottom-Up' Harmonization

Top-Down

- ▶ Cooperation of High-level government Officials & Politicians



Bottom-Up

- ▶ Cooperation between Utilities
- ▶ Joint F/S



4 Challenges and Perspective



“Northeast Asia Super Grid” Concept

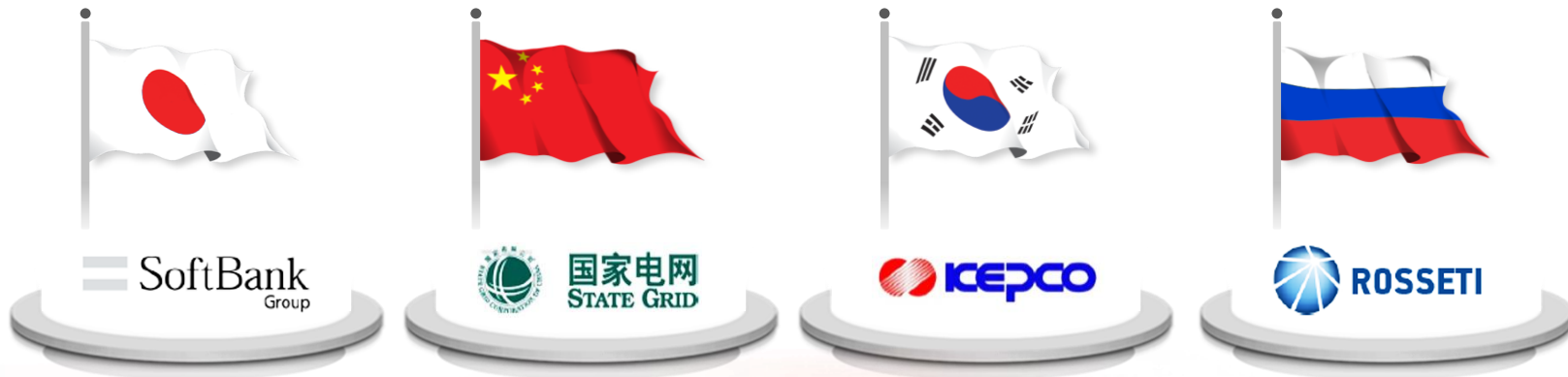


NEA Supergrid Vision

- ▶ Joint development and utilization of renewable energy in NEA
- ▶ Joint strategy for global climate change & environmental pollution
- ▶ Mutual Security and Economic Community through Energy Cooperation

C-K-J-R Super Grid Cooperation MOU

2016. 3.30,
China



C-K-J Pre-F/S Joint Study

2016. 5 ~ 2017. 3

Technically → Possible

Economically → Feasible



EEF 2017 “Energy Cooperation Talks”

2017. 9. 5,
Russia Vladivostok

President Moon, Suggested NEA Supergrid Cooperation



K-C Summit, Inter-Gov Cooperation MOU

2017. 12. 13,
China



Korea-Japan-China Summit Meeting

2018. 5. 9,
Tokyo Japan



There are many things to cooperate in energy Areas.

“I hope Supergrid Project for ‘North East Asia Energy Community’ could proceed fast through Joint Research from the private section”

President Moon, Jae-in remarked at the summit in Tokyo May 2018

K-R Summit, Inter-Gov Cooperation MOU

2018. 6. 9,
Moscow Russia

Concluded “MOU” for
”Korea-Russia Power
Grid Interconnection”
Cooperation

Next Steps for Supergrid project



Feasible & Bankable



Thank you

