

INTERCONNECTION OF REGIONAL GRIDS IN ASIA: GCC GRID – SOUTH ASIA GRID – ASEAN GRID

March 3, ISUW, 2023 Swetha Ravi Kumar, Head of FSR Global







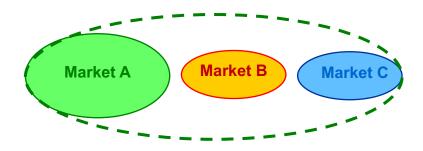
EUI FLORENCE SCHOOL OF Regional Electricity Market Integration: Many possible models

1) Extension of the market in one jurisdiction to encompass other jurisdictions

2) Establishment of a regional market, replacing existing markets, with new rules agreed by all involved jurisdictions

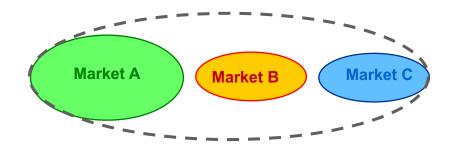
3) Superimposing a regional market on the trading arrangements in the different jurisdictions

Extension of Market A and its rules to Markets B and C



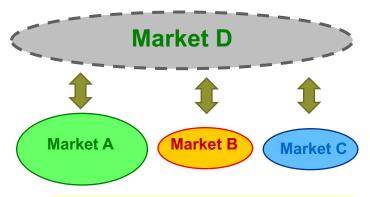
Example: Italy-Slovenia (2011) in Europe

New market and common rules for the regional market



Example: the Internal Electricity Market in Europe

Regional market, with its own rules, superimposed to trading arrangements in the different jurisdictions



Example: SIEPAC in Central America





The EU Experience - Planning

- European Network Planning performed over a two-year cycle
 - EU Ten-Year Network Development Plans EU TYNDP, separate for electricity and gas
 - Developed by the European Networks of Transmission System Operators (ENTSOs)
 - Based on:
 - Common scenarios for electricity and gas defined by the ENTSOs
 - submission by TSOs and other transmission infrastructure promoters
 - Subject to the opinion of the EU Agency for the Cooperation of Energy Regulators (ACER)
 - Discrepancies (often timing) between the EU TYNDP and the binding national TYNDPs are identified by ACER and investigated
- Projects of Common Interest (PCI)
 - The Projects of Common Interest (PCIs) are the priority projects for interconnecting the EU energy system infrastructure
 - PCIs are a subset of the projects in the EU TYNDP





The EU Experience – TEN-E Regulation

- Projects of Common Interest (PCIs)
- Cross-border Cost Allocation (CBCA)
 - PCIs can apply for Cross-border Cost Allocation (CBCA)
 - CBCA solves the problem of uneven distribution of costs and benefits, which hampered the development of beneficial infrastructure
 - Internal projects in one Member States benefitting other Member States
- CEF Connecting Europe Facility
 - CEF provide grants to project with the PCI status
 - Grants for studies
 - Grants for works
 - For PCIs to be available for CEF funding, they should have applied and obtained a CBCA decision





Key observations – CBET in SAR (EU Session)

- Shared Vision Shared Projects: But How?
 - Use existing frameworks such as BIMSTEC, SAARC, SAFIR
 - Develop a new regional institutional body (umbrella) or platforms (connecting same set of stakeholders)
- Shared Vision Shared Projects: But When?
 - Wait for market to mature till then bilateral is ok
 - In the meanwhile setup the framework for regional entity
- Commercialization is key equitable approach needed (social and economical)
 - Transmission corridors will be key to facilitating market interactions
- Economic Development a key push for G-G willingness
 - Need to present the picture looking beyond electricity to convince policy makers
 - Spill over effects need to be captured water, trade, transit ...



Open questions—Supra regional how?

- Institutional arrangement- the extended cooperation will be embedded in which regional institutions? Or will be there an Inter-regional coordination body / secretariat
- Harmonization sounds good, but how to convince the countries? All three sub-regions didn't manage the agree on an harmonization process up to now. How do we approach this process for three different sub-regions feasible?
- Political will on the highest level is key Streamlining of geopolitical and geoeconomic objectives of the major players within the sub-regions possible

Thank You

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