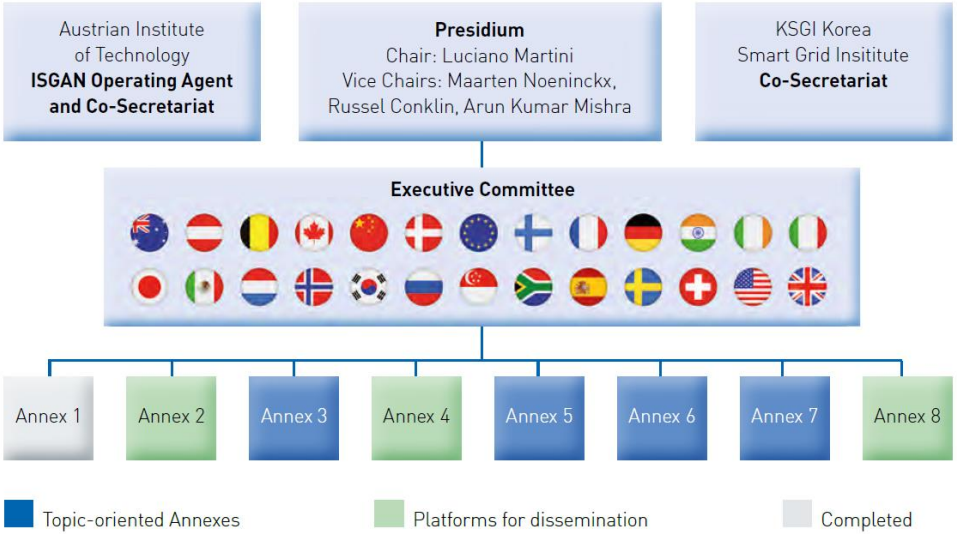
IEA ISGAN Regulatory Sandbox 2.0 –project

2nd National Workshop/Finland
31 March 2021

Background

- IEA ISGAN (International Smart Grid Action Network)



Annex	Title	Operating Agent	Country
Annex 2	Smart Grid Case Studies	Korea Smart Grid Institute – KSGI	Korea
Annex 3	Cost-Benefit Analyses	University of Cagliari	Italy
Annex 4	Synthesis of Insights for Decision Makers	Korea Smart Grid Institute – KSGI	Korea
Annex 5	Smart Grid International Research Facility Network (SIRFN)	DERLab	Germany
Annex 6	Transmission and Distribution Power Systems	Research Institutes of Sweden, RISE	Sweden
Annex 7	Smart Grids transitions	AIT Austrian Institute of Technology	Austria
Annex 8	ISGAN Academy on Smart Grids	Institute for Research in Technology IIT, Universidad Pontificia Comillas	Spain

Project aim and objective

- The aim of the **ISGAN Regulatory Sandboxes 2.0 project** is to explore in depth learning processes through sandbox programs.
- The objective of the project is to facilitate a structured and highly interactive knowledge exchange on learning through sandbox programs in different countries.
- The result of the project will form the basis for policy messages.

Participants

Israel

Zimbabwe

Netherlands

Norway

Indonesia

Austria

Spain

South Korea

Germany

Canada

Finland

Vietnam

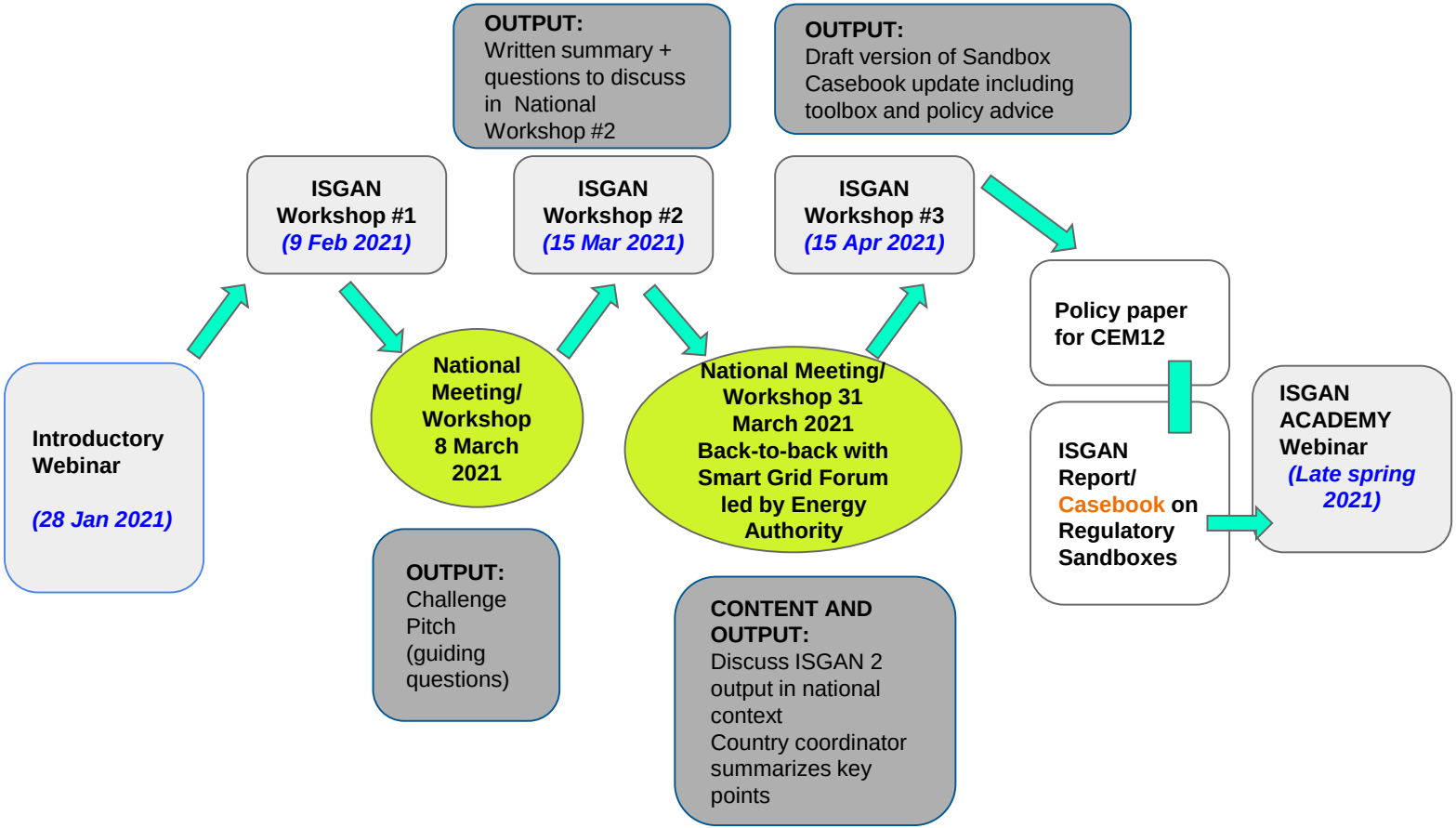
United Kingdom

Sweden

Malaysia

- Legislators (ministries and government agencies)
- Regulators
- Funding bodies
- Research actors (academia, research institutes)

Process and outputs



First national workshop

Information on workshop

- Workshop was organised 8 March 2021 10-12 (EET)
- In total 9 participants from 4 organizations: Ministry of Economic Affairs and Employment, Energy Authority, Energy Industries, VTT
- Agenda:
  - Opening, introductions & expectations
  - Presentations by Ministry and VTT
  - Introduction to ISGAN-project and questions for the workshop
  - Discussion
  - Summary and next steps
- Discussions were captured to slides that were visible to participants
- Summary was prepared and distributed to participants after the workshop

Need for regulatory sandboxes in Finland?

- What is Finland´s need for regulatory sandboxes related to energy transition?
  - Observed challenges/Specific problems
  - Possible topic/solution areas for regulatory sandboxes
  - Legal/regulatory issues related to topics
- What are current possibilities to take regulatory sandboxes forward?
- Who should participate?
- What to do next?

Our main takeaways from first national discussions

Regulatory sandbox concept is considered interesting but discussions are in early phase

- Societal goals linked to energy transition, digitalization, new actors etc. are already creating need for controlled experiments/regulatory sandboxes that facilitate learning.
- EU-level framework for electricity and gas has became increasingly detailed. National implementation has been taken forward.
- There is not yet much experience of new legislation and in practice some issues may require interpretation.
- It is considered important to have provision in national legislation for controlled experiments especially related to electricity and gas.
- Many topics have also advanced well without sandboxes.

Ideas and needs for regulatory experiments could come from various sources

- It was stated that new ideas/needs for regulatory experiments would come mainly from
  - Companies (and their customers)
  - Research (also with company participation)
  - (This means, not from authorities or ministries)
- All ideas for experiments can not be taken forward
- It is also useful to acknowledge that there can be resistance to ideas for regulatory experiments/sandboxes
  - Competitors, actors in established businesses, etc.

Some topic/solution areas were discussed

- **Energy communities:**
  - There are 3 types of communities in Finland and new legislation has been just given. Need to collect experiences.
  - Regulatory sandbox/experiments related to energy communities in broader area for research and development of new solutions?
  - Questions on
    - Costs & benefits from the perspective of network (and their distribution)
    - Balancing rights and obligations
- **District heating:**
  - Not really regulated currently – common guidelines in use.
  - Could some regulation “drive” development (e.g. like the role that regulation had in advancing smart metering)
  - Through sector integration, affects also electricity system in future

Some topic/solution areas were discussed

- **Various building types, their interfaces and digitalisation/resilience perspective**
  - Smart control systems
  - Cybersecurity
  - Investments and services to network & costs and benefits
- **Aggregators vs direct participation of also smaller actors**
  - Market rules

Summary for international workshops

Focus questions

- **FQ1: Orchestration of actor groups.** How to coordinate between different actors and stakeholders in implementing sandbox programmes and in learning?
- **FQ2: Transition strategy.** How to align sandbox programs as step in the longer term process of transformation of energy systems?
- **FQ3: Policy learning.** How to plan in advance the process for policy learning in order to change rules of the game after the sandbox program?
- **FQ4: Legal conditions.** How to come to adequate exemption laws allowing for the learning we want to achieve?

FQ1: Orchestration of actor groups

- Range of competences of national administrations varies significantly (e.g. market regulation competences in larger countries are in the responsibilities of states/provinces). This results in a wide spectrum of potential measures at country level.
- Innovation advisory offices at regulators could fast-track implementation of new solutions.

FQ2: Transition strategy

- Bottom-up/top-down: Regulatory experiments can be designed top-down or bottom-up. Top-down means the experiment is based on a regulatory option that the regulator wants to test, while bottom-up refers to market participants asking for a specific regulatory exemption. Ideally, these two perspectives should be combined.
- Experimenting for accelerating the energy transition need to be based on a transformational strategy. A basis for designing sandbox programs would be a vision of future (integrated) energy system, a strategic mission as well as clear agenda (roadmap).

FQ3: Policy learning

- Bottom-up calls often lead to requests for exemptions which are benefiting individual companies/sectors for strengthening their competitiveness, and lacking benefits for energy system transformation as a whole. Therefore unspecified bottom-up calls, only aiming at individual benefits are not recommended.
- Evaluation of rationales for permanent changes in laws/ordinances/other regulation based on results from experimenting projects should be started early. This to avoid any gap between temporary regulatory relaxations and subsequent permanent changes in regulation.

FQ4: Legal conditions

- Regulatory bodies lack explicit climate goals / competences, which reduces room for fostering transformative innovations e.g. by granting regulatory exemptions – Thus there is a need for changing legal basis for Regulatory bodies‘ (National or State agencies) climate missions.

For national discussions

- Discuss:
  - What was the most interesting insights? Why and in what way did X catch your attention?
  - From everything you have learned so far, what could be relevant for Finland? In the short term, and in the longer term?
  - What could we adopt? (e.g. advice given from countries that have already set up sandboxes)
  - What would we need to do to implement X in Finland?

VTT

beyond

the obvious

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