ERA-Net Smart Energy Systems

JOINT PROGRAMMING CONFERENCE 2020
SMART ENERGY SYSTEMS

Minutes Connectathon for MICall20:

regional innovation ecosystems for clean energy transition

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© ERA-Net SES Support Team

Gotzinger Str. 48

81371 München

office@eranet-smartenergysystems.eu

www.eranet-smartenergysystems.eu

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1 Connectathon for MICall20: regional innovation ecosystems for clean energy transition

The Connectathon was the co-creation session of the Joint Programming Conference 2020 Smart Energy Systems open to project participants, associated partners, members of the Living Labs and Digital Platforms Providers as well as any interested potential applicant. The objective of the session was to allow to the more than 200 registered participants to meet and draft together general project outlines on the topic of the upcoming Joint Call 2020 (MICall20) for project proposals on digital transformation for green energy transition.

The session built on the results of the 5th Mission Innovation Ministerial Side Event hosted by the Joint Programming Platform ERA-Net Smart Energy Systems (JPP SES).

The slides of the Connectathon for MICall 2020 are available for download on expera.

2 Session roll-out

The session was split into a plenary with updates on the upcoming Joint Call 2020 (MICall20) and JPP SES Digital Platform Providers & Living Lab and Testbed Network introducing offers for MICall20. The second part of the session was an interactive session with co-creation among all participants.

Time	Focus
14:00	Opening and introduction to the session
14:10	Aim of Joint Call 2020 (MICall20)
14:20	Who can make clean energy transition happen?
14:30	JPP SES Digital Platform Providers & Living Lab and Testbed Network introducing offers for MICall20
15:00-16:30	Working in groups along the four dimensions of MICall20 digitalization **1.1** **Technical Operation 1**, Moderators: Ludwig Karg, Julia Chenut **1.2** **Technical Operation 2**, Moderators: Laura Börner, Julio Alterach **2** **Business Operation**, Moderators: Jatta Jussila, Dorothea Brockhoff **3** **Market Operation**, Moderators: Iva Maria Gianinoni, Anna Stetter **4** **Communication**, Moderators: Minna Näsman, Franziska Wirth
16:30	Joint wrap-up
17:00	End of session

3 Main results from the Connectathon

The moderators **Jatta Jussila** and **Ludwig Karg** of the JPP SES Support Team welcomed the participants to the Connectathon and introduced the session's aims and structure. Then the objectives of the **MICall20** were presented by **Fredrik Lundström** from the JPP SES Call Management. The MICall20 invites project consortia to:

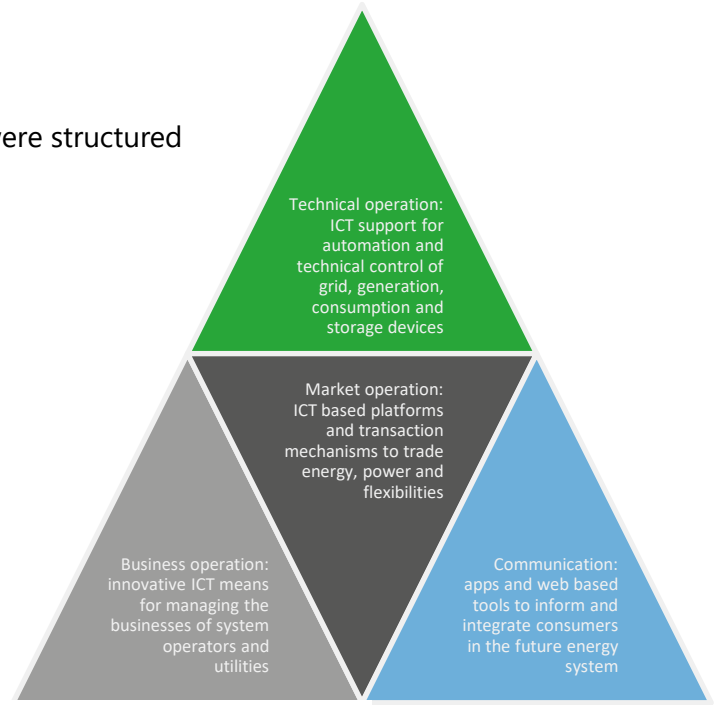
- Advance the green energy transition in all sectors of the energy system while ensuring security of supply
- Shaping new transnational business and investment opportunities by sector coupling and development of new value chains in innovative and cost-effective energy solutions, thereby creating new employment opportunities and contributing to the development of an environmentally sustainable financial growth
- Ensuring social sustainability and coherence with digitalisation in other sectors in the progression of the green energy transition

Projects are expected to address key challenges and opportunities relating to the main objectives such as social sustainability, energy and ICT infrastructure, energy marketplaces, business models and communication.

Ludwig Karg, from the Support Team presented the four areas of digitalization identified for the call along the question: "Who can make clean energy transition happen at the local field level?":

1. Technical operation
2. Business operation
3. Market operation
4. Communication

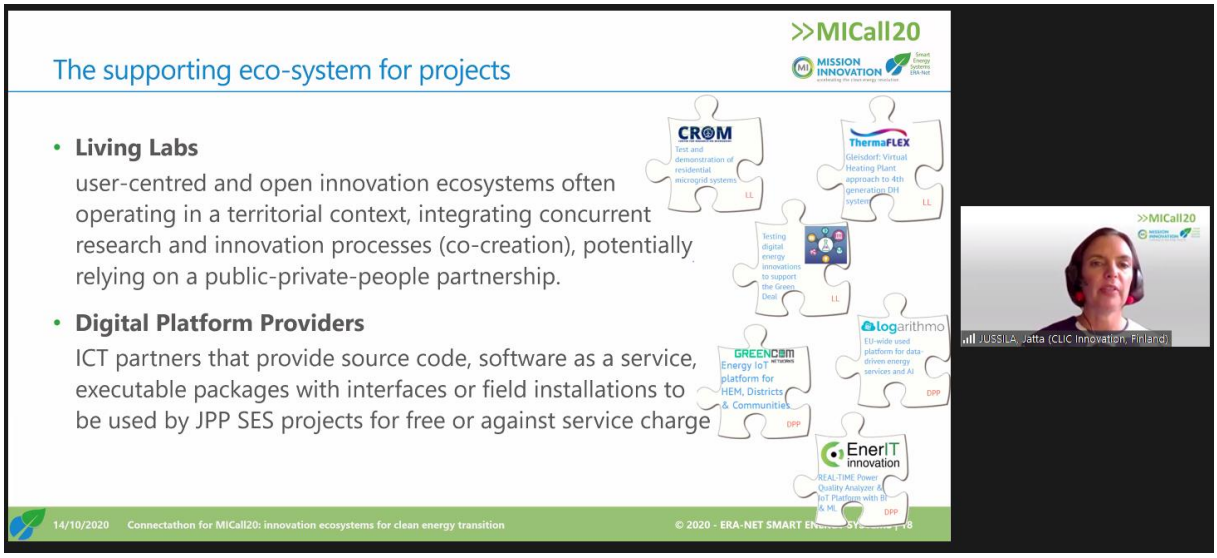
The sub-sequent workshop sessions were structured along the four areas of digitalization.



Four areas of digitalization

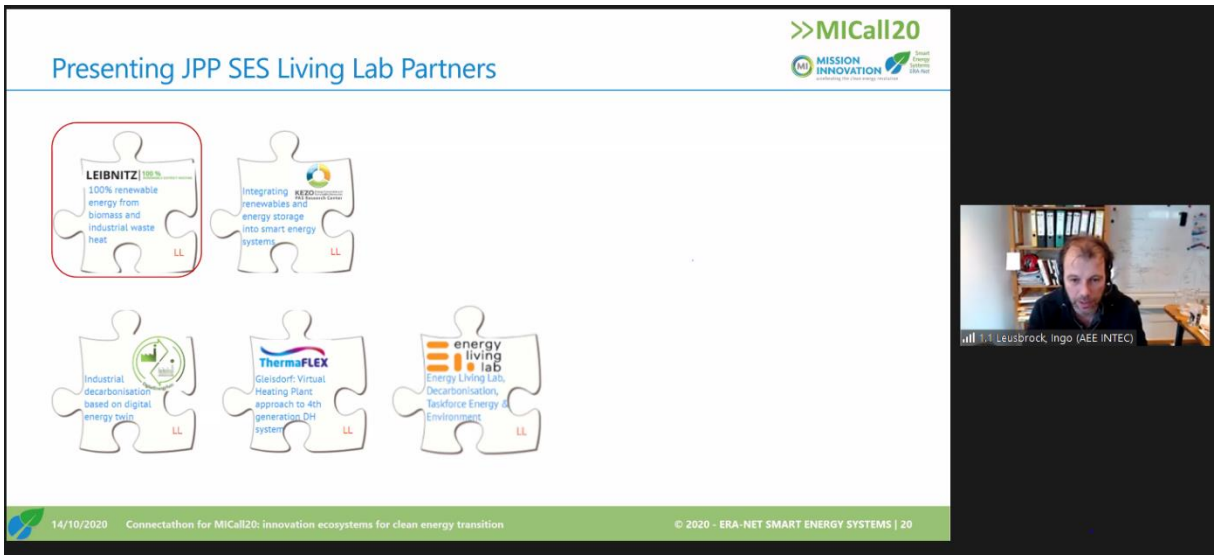
3.1 JPP SES Digital Platform Providers & Living Lab and Testbed Network introducing offers for MICall20

In the pitch session moderated by **Jatta Jussila**, 11 Digital Platform Providers and 13 Living Lab and Testbed Networks introduced presented their offers for user-centred and open innovation ecosystems to support the prospect project consortia. The Living Labs and Digital Platform Providers have been selected from numerous applicants. Due to the vast interest, a second round will follow.



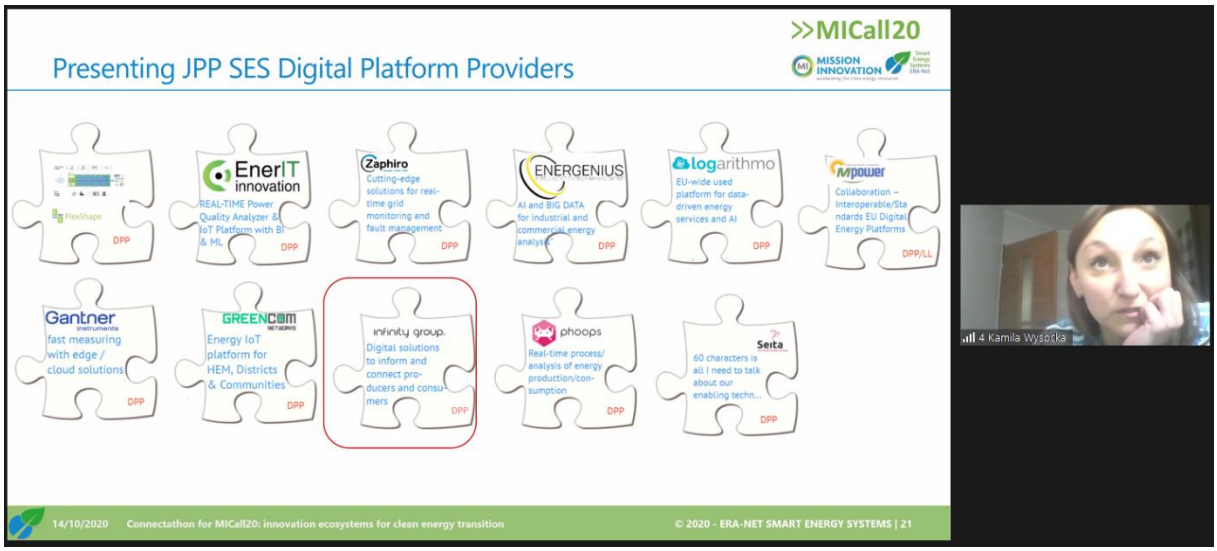
Jatta Jussila introducing the Living Labs and Digital Platform Providers

The offers from the Living Labs ranged from test and demonstration sites but also virtual plants and playgrounds for innovators.



Pitch by Living Labs

The Digital Platform Providers included measuring, real-time monitoring and analysis or collaboration platforms for producers and consumers.



Pitch by Digital Platform Providers

A detailed profile of every Digital Platform Provider and Living Lab describing their special competence, available infrastructure and what can be tested can be found on the JPP SES website. This page includes also the contact details and the pricing model of the respective Living Lab and Digital Platform Provider.

3.2 Co-creation in sub groups

The aim of this workshop session was turning research needs and supportive offers into concrete ideas for collaboration in MICall20. The research needs were identified during the co-creation workshop with researchers and need owners following the 5th Mission Innovation Ministerial Side Event hosted by JPP SES The offers came from the Digital Platform Providers and Living Labs and Testbed network who can support research on those needs.

The Connectathon followed the guiding question for MICall20: Which research is needed from a technical operation / business operation / market operation / communication operation perspective for advancing the green energy transition in all sectors while ensuring security of supply, creating new business opportunities and providing social sustainability?

The groups approached this task by first reviewing all the research needs. Then, they reflected on the first of these research needs, coming up with ideas and solutions in the form of key exploitable results. The Digital Platform Providers and Living Labs connected their puzzle pieces with solutions from the pitch to the needs. This process was continued with the next research needs.

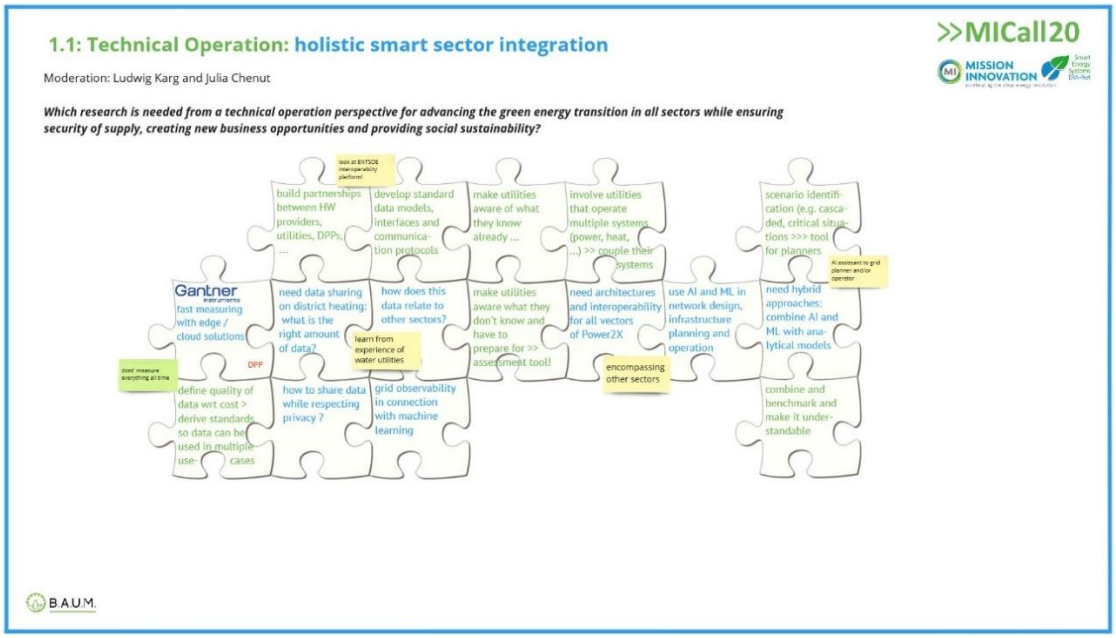
3.2.1 Area 1 of digitalization: Technical operation

Participation was high in this area leading to the organisation of two different subgroups. Both of them treated ICT support for technical control of grid, generation, consumption and storage devices.

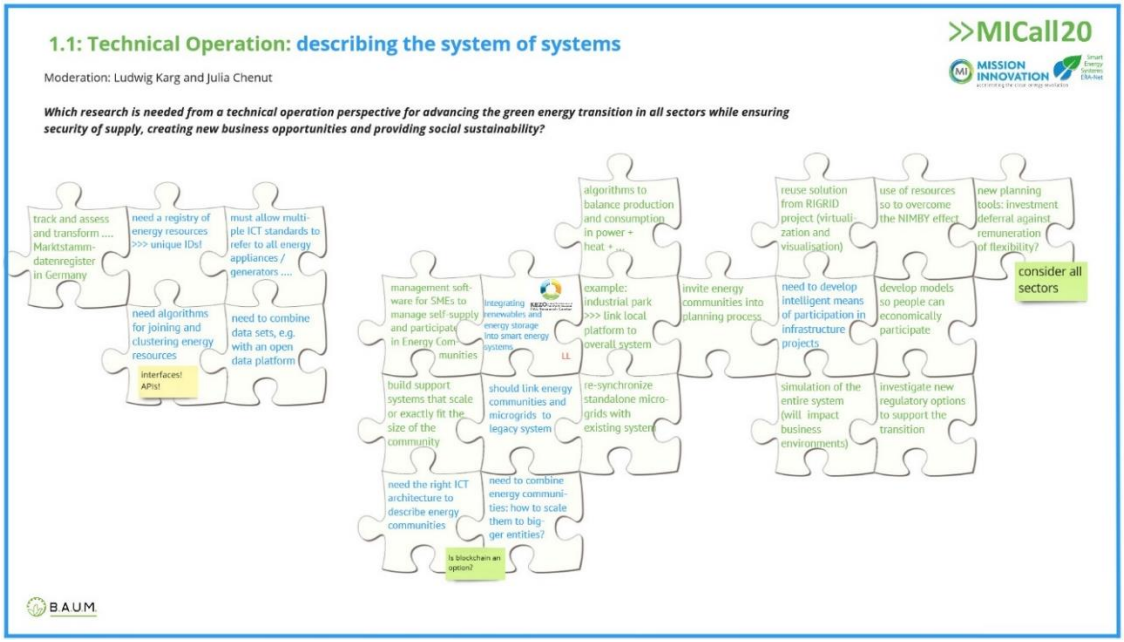
The first group discussed mainly the following needs:

- Holistic smart sector integration
- Describing the system of systems
- Relation of planning and technological architectures

The main outcomes of the discussion and co-creation can be found in the images below.



Technical Operation 1: holistic smart sector integration

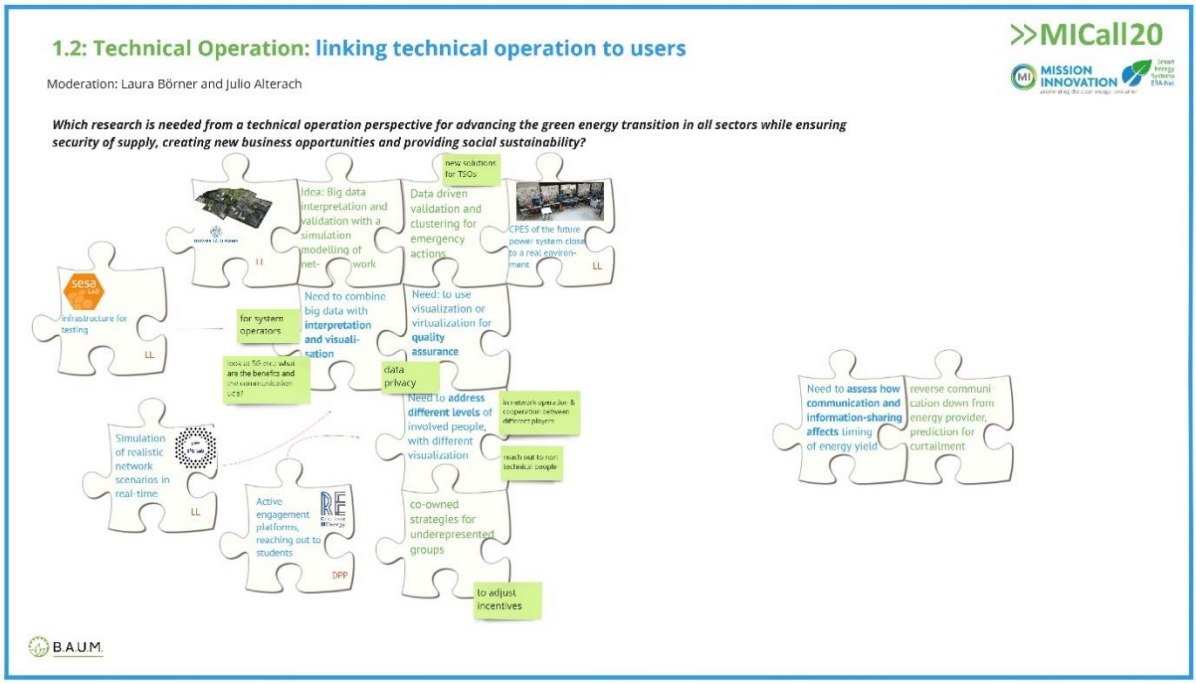


Technical Operation 1: "describing the system of systems" and "relation of planning and technical architectures" were merged into one discussion as synergy could be found.

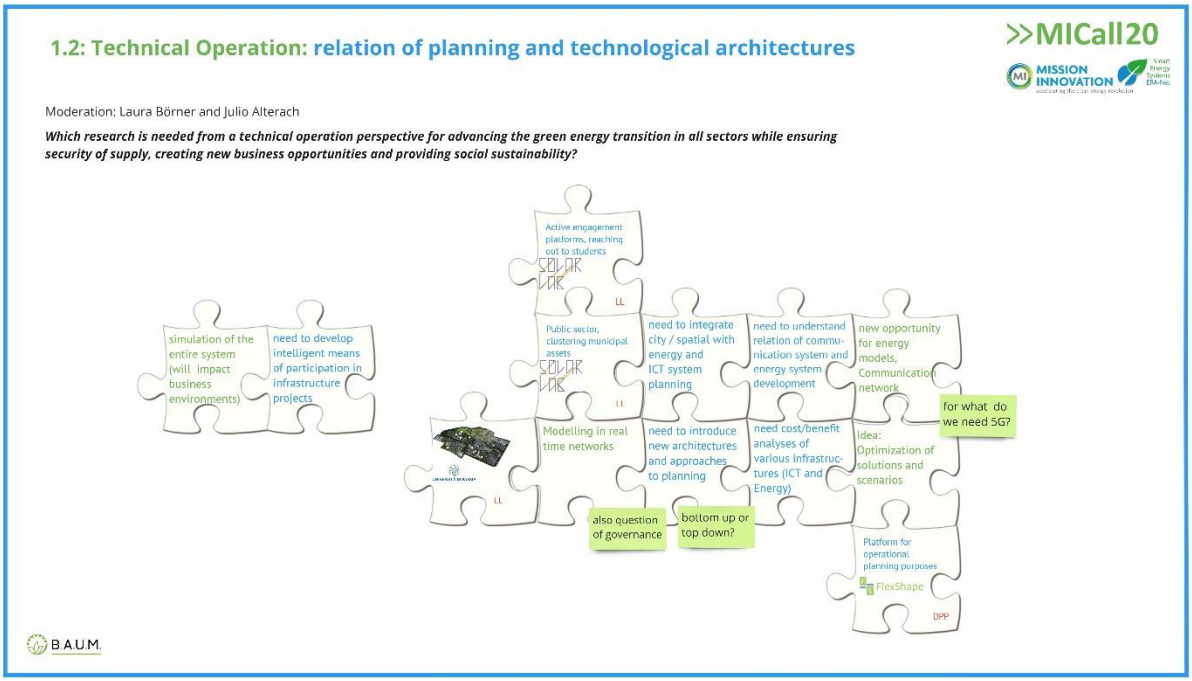
The second group on Technical Operation discussed mainly the following needs:

1. Linking technical operation to users
2. Relation of planning and technological architectures
3. Describing the system of systems

The main outcomes of the discussion and co-creation can be found in the images below.



Technical Operation 2: linking technical operation to users



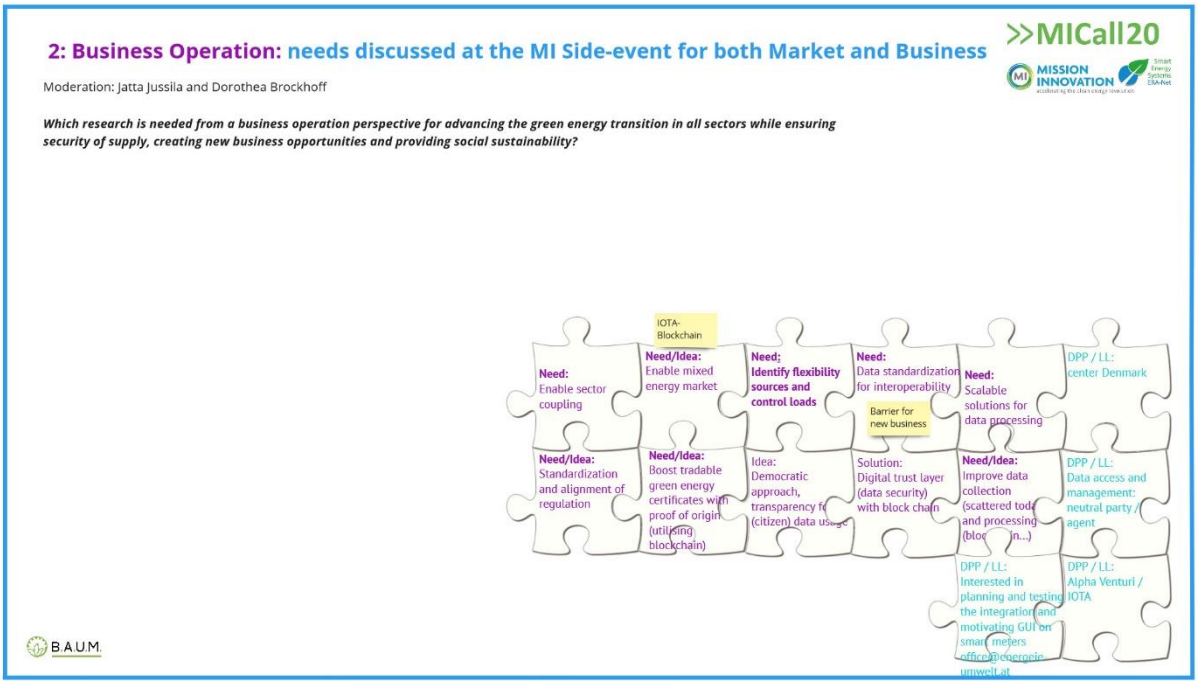
Technical Operation 2: relation of planning and technological architectures

3.2.2 Area 2 of digitalization: Business operation

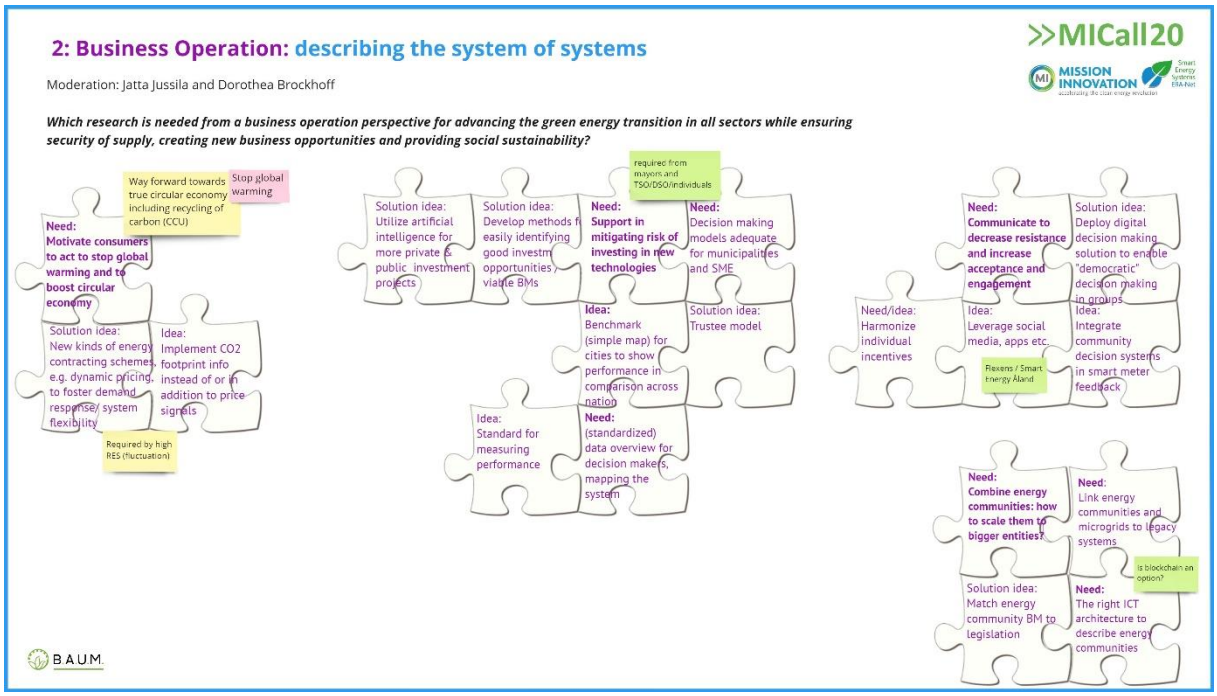
This group focused its discussion on the following needs:

1. Identifying flexibility sources and control loads
2. Describing the system of systems

The main outcomes of the discussion and co-creation can be found in the images below. The core needs on every board appear with bold letters.



Business Operation: identifying flexibility sources and control loads



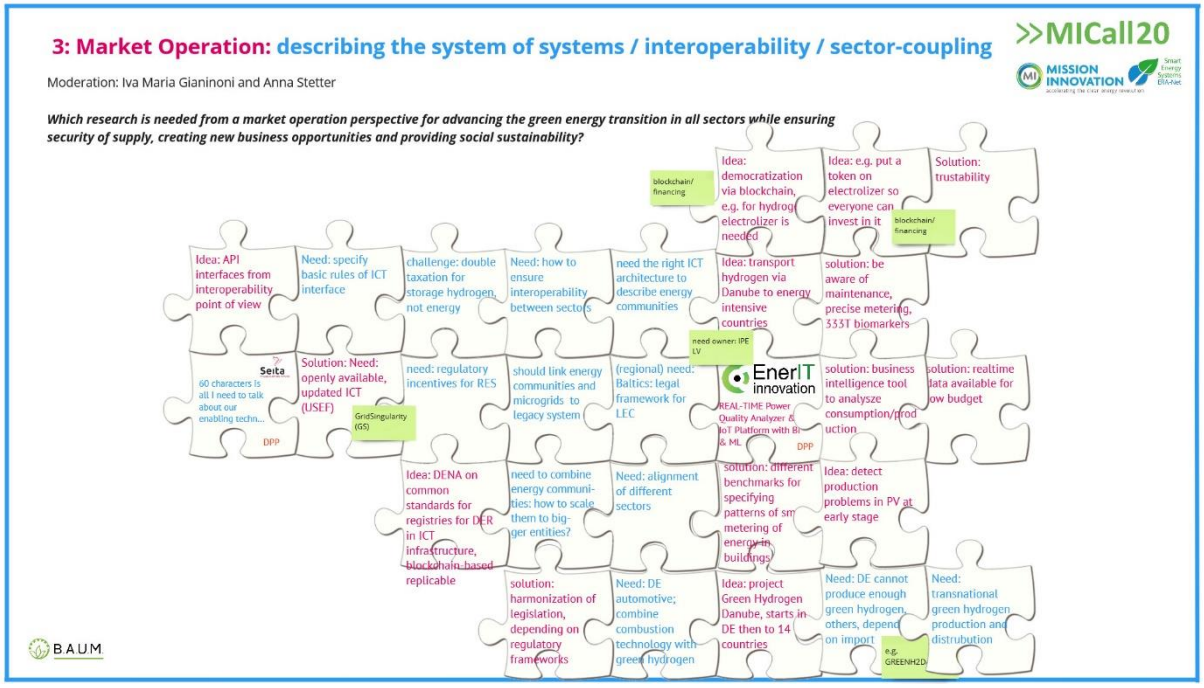
Business Operation: describing the system of systems

3.2.3 Area 3 of digitalization: Market operation

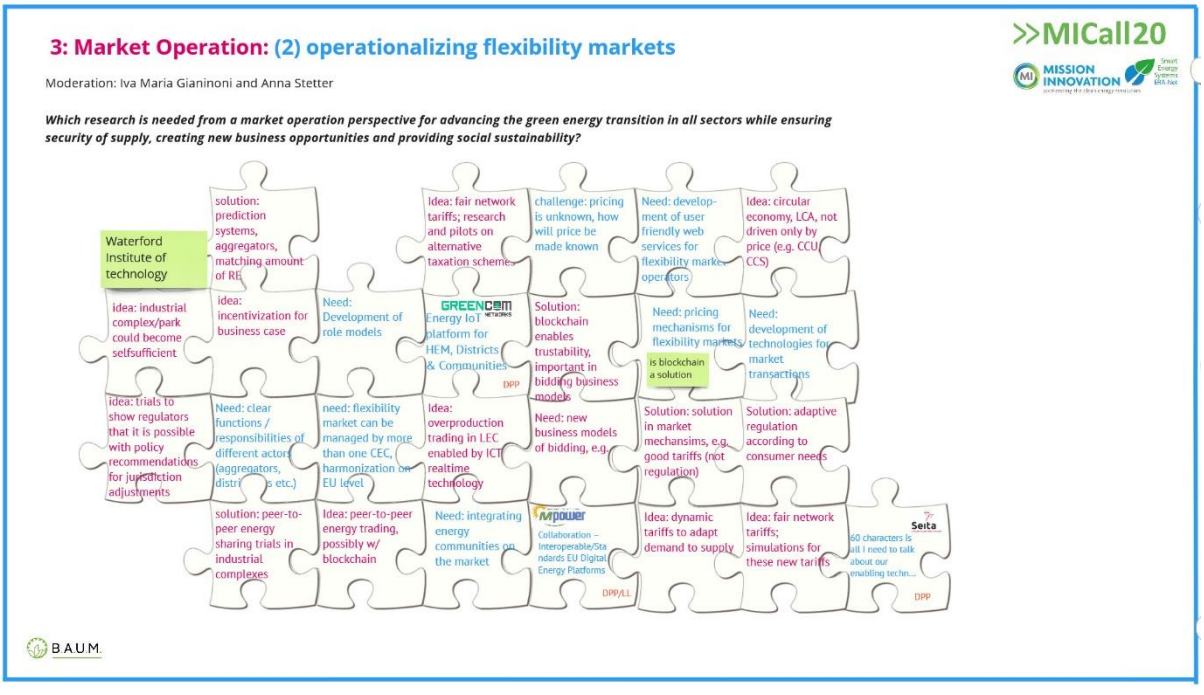
The market operation group treated ICT based platforms and transaction mechanisms to trade energy, power and flexibilities. The participants discussed the following needs:

1. Describing the system of systems, / interoperability / sector-coupling
2. Operationalizing flexibility markets

The main outcomes of the discussion and co-creation can be found in the images below.



Market Operation: describing the system of systems



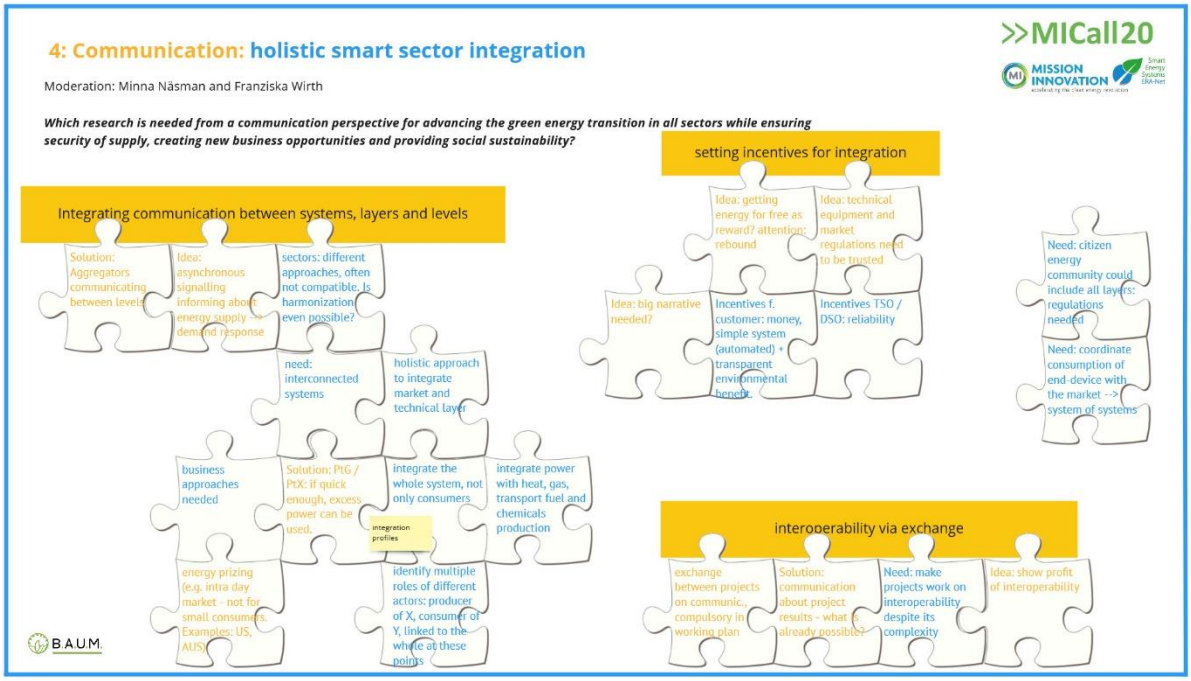
Market Operation: operationalizing flexibility markets

3.2.4 Area 4 of digitalization: Communication

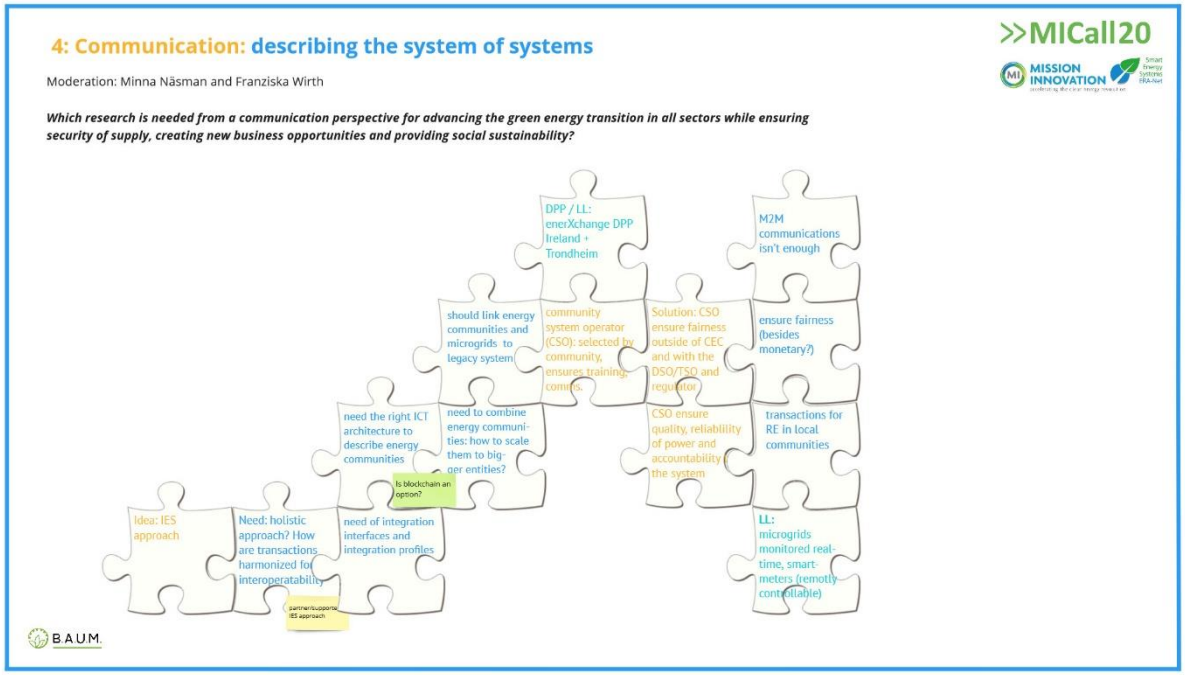
This group discussed mainly the following needs:

1. Holistic smart sector integration
2. Describing the system of systems
3. Integrating and connecting communities

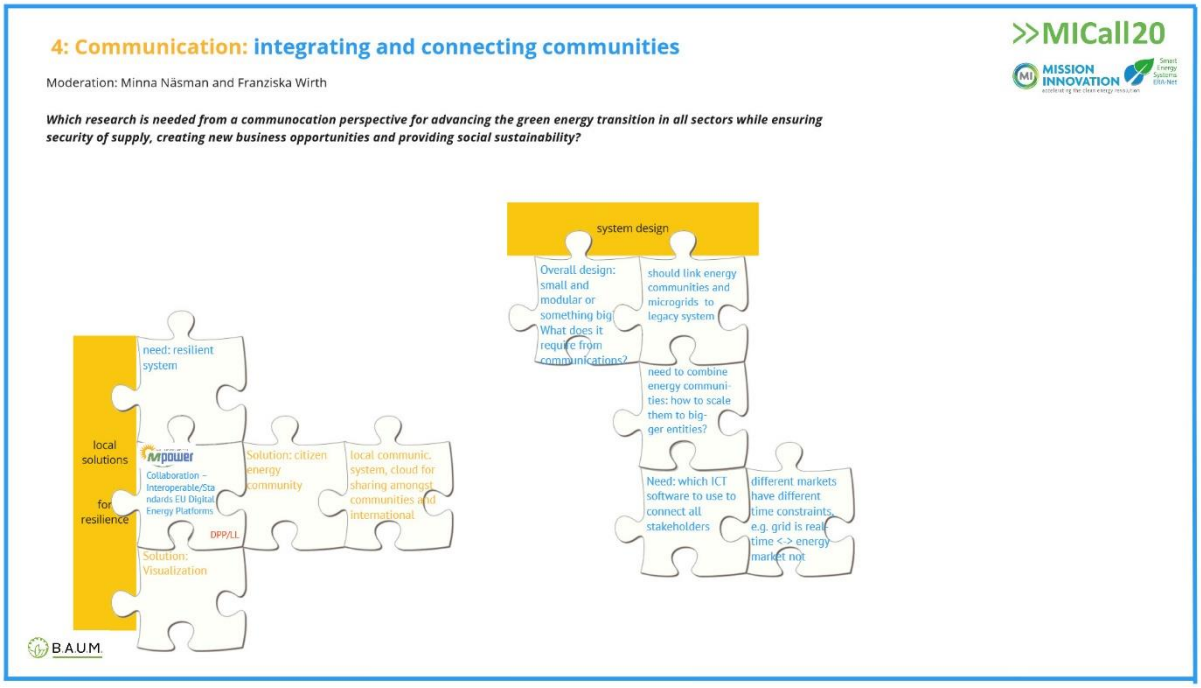
The main outcomes of the discussion and co-creation can be found in the images below.



Communication: holistic smart sector integration



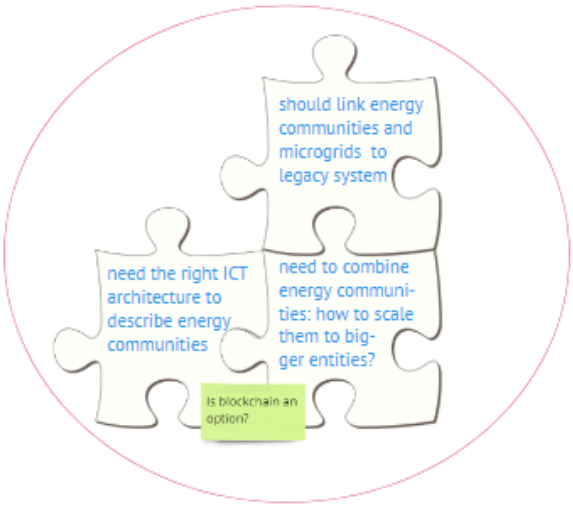
Communication: describing the system of systems



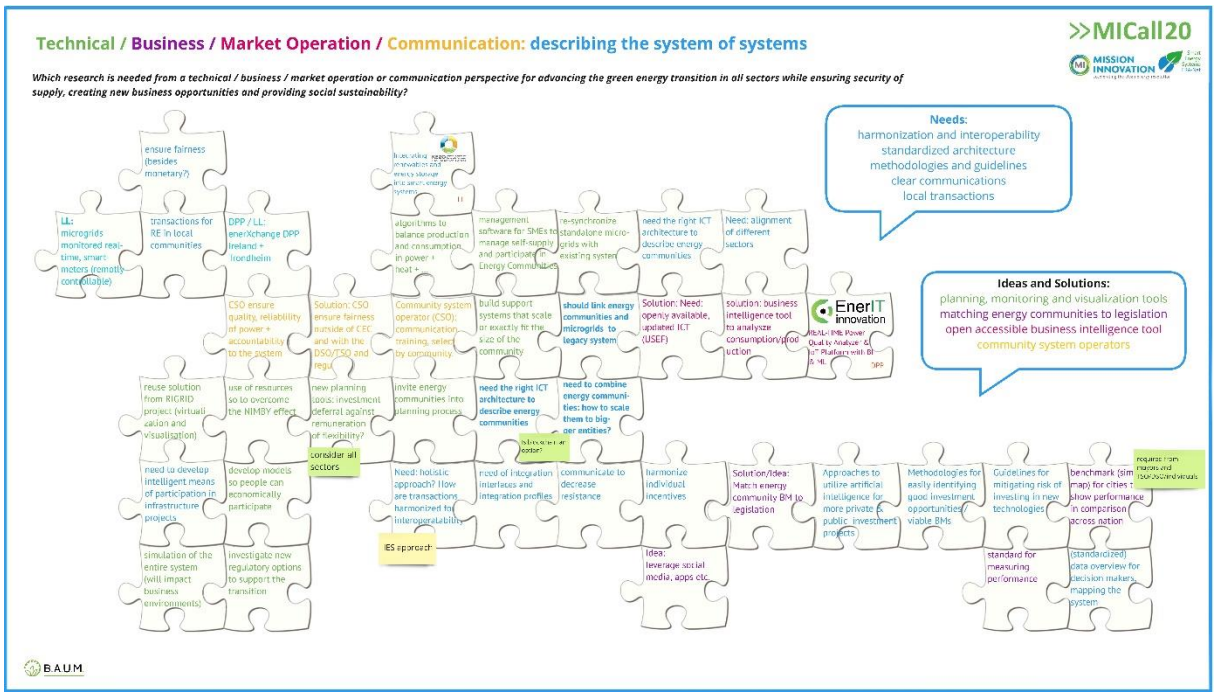
Communication: integrating and connecting communities

3.3 Wrap-up

In the wrap-up, moderator **Ludwig Karg** showed how one need could be tackled in the upcoming call for project proposals while covering the four dimensions of digitalization. The need "describing the systems of systems" and the example of energy communities were chosen for demonstration. This need was addressed in all subgroups.



Here is the consolidated result of the co-creation work in the groups:



Describing the system of systems - needs on energy communities tackled from a technical, business, market operation and communication perspective

ERA-Net SES funding partners

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