



RESERVE



FUTURE GRIDS

fast, safe, sustainable

Network Codes, Governance and Regulatory Actions for the Transition towards up to 100% RES

INNOGRID2020+ The Innovative Power Conference

16 May 2018, Brussels

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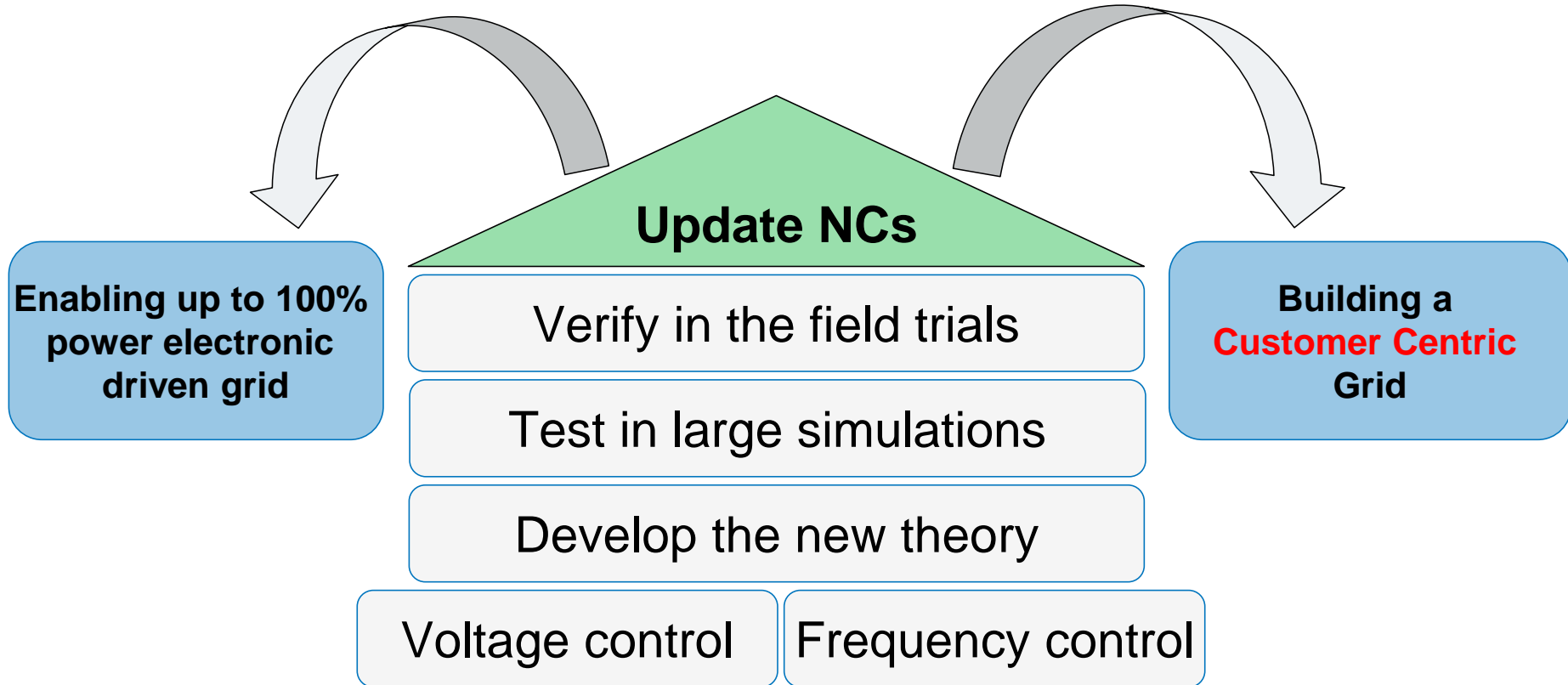
We urgently need to find ways to **Stabilise Energy Systems with up to 100% RES** to generate **RESERVEs** in the system so that society can relax in the knowledge that it has a stable and sustainable energy supply.

VISION (II)

The world envisioned by RESERVE will support our increasingly **ICT enhanced life styles** with a **stable and safe power ecosystem**, based on optimised energy and ICT networks, thus **maximising the use of renewable sources** of energy.



PROJECT OVERVIEW DIAGRAM



Operating the energy networks efficiently based on the use of up to 100% Renewable Energy Sources for generation

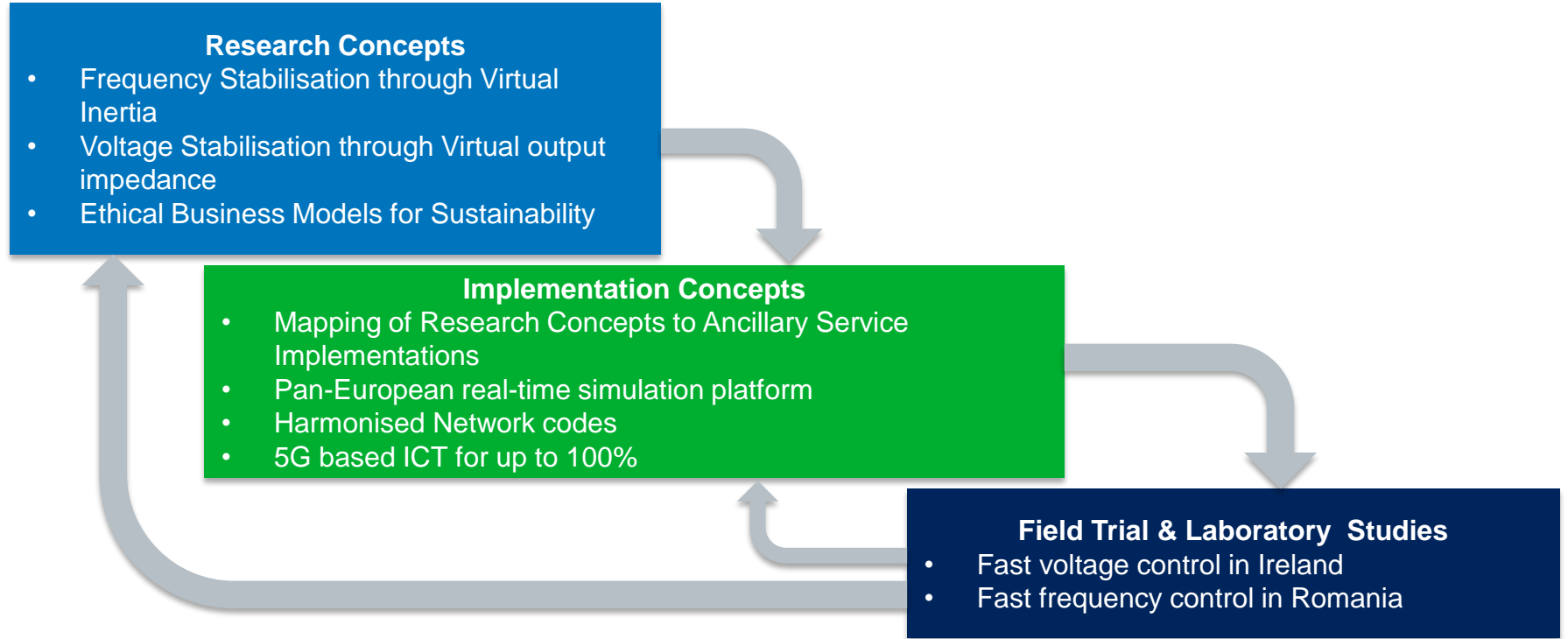
which requires:

- **Management** of largely decentralised energy systems
- **Harmonisation of Network Codes** on at least at European level
- **Provision of a Communication Infrastructure** for near-real-time services combined with high reliability

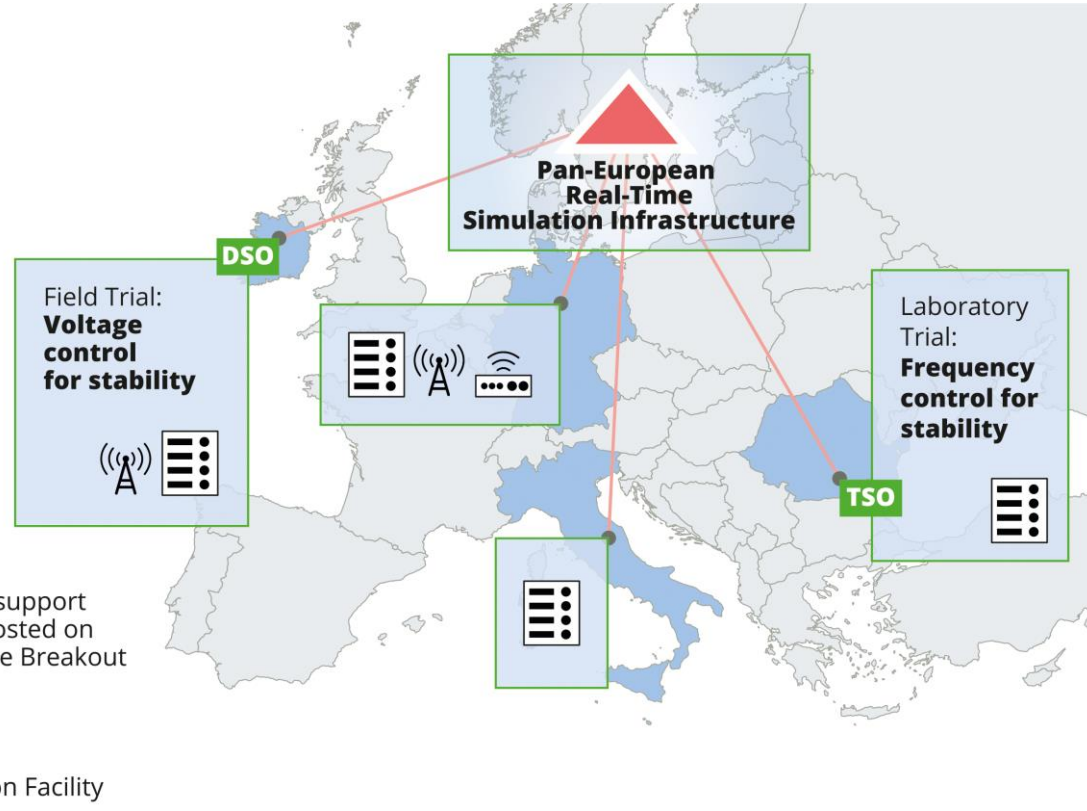
RESERVE develops innovative techniques and solutions based on **5G technology** to assist energy providers with:

- **balancing** the **voltage and frequency** of the power grid to maintain a stable power supply,
- **increasing the proportion of power** generated by volatile renewable energy sources,
- defining new **network codes and ancillary services** for the contribution of different RES technologies to a stable and safe power ecosystem,
- developing new **ethical business models** to support up to 100%RES integration improving market transparency

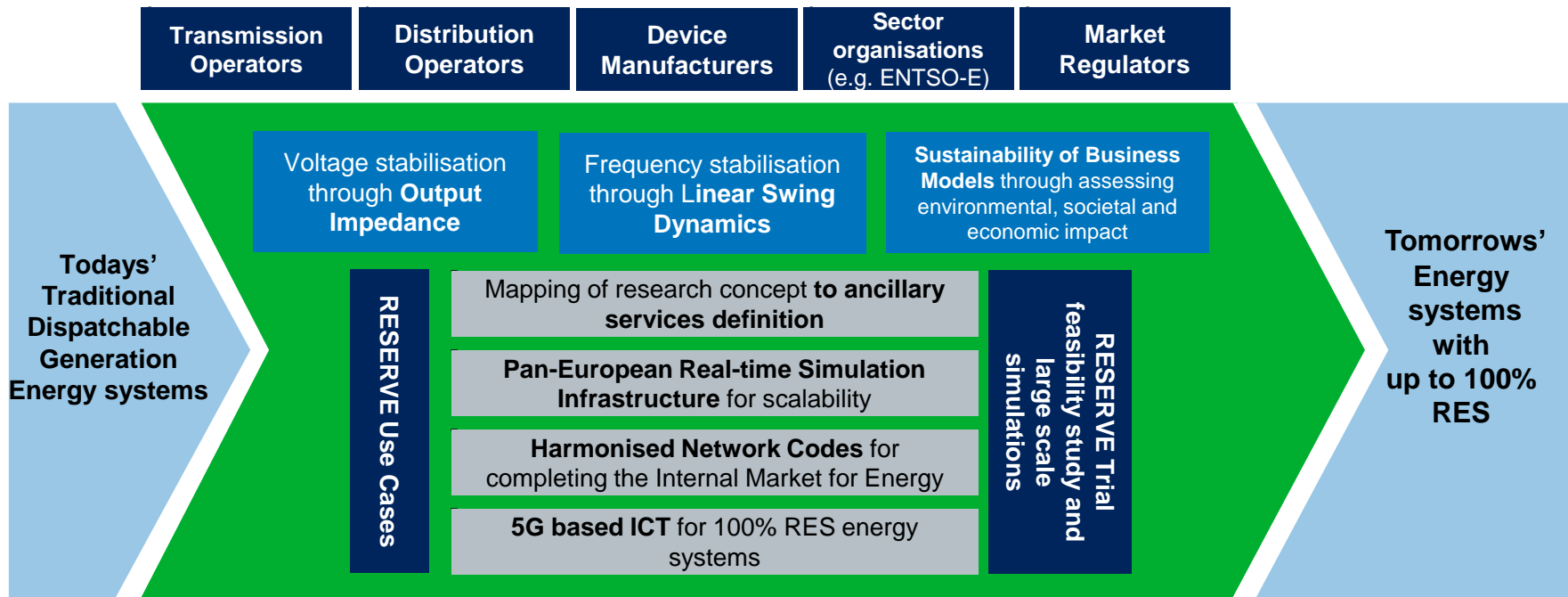
RESERVE RESEARCH AND IMPLEMENTATION CONCEPTS

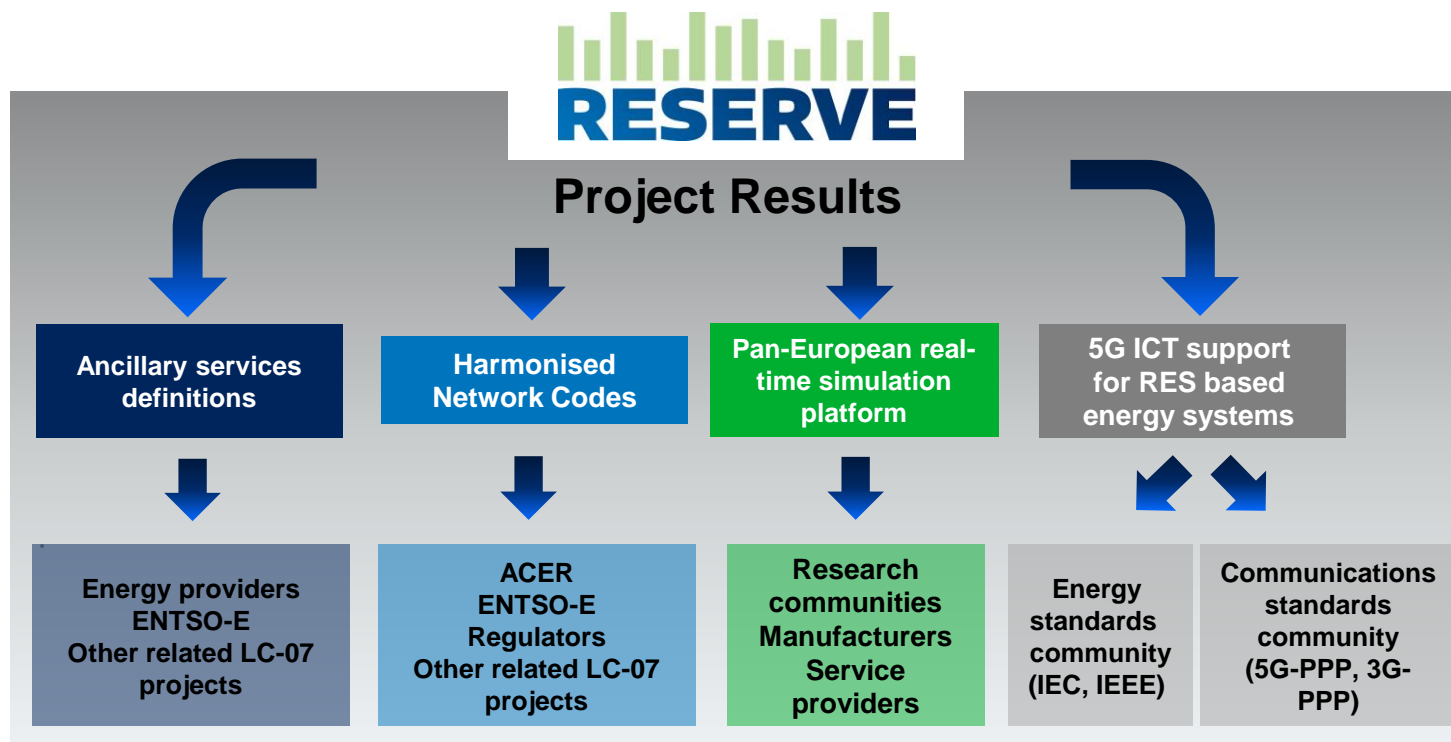


RESERVE TRIALS AND PARTNERS



RESERVE APPROACH







www.re-serve.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727481.