

Smart Meter Hardware Development

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Salford Smart Meters 2019 Conference

3 Questions

- What do today's smart meters look like?
- What do tomorrow's intelligent devices look like?
- How do these intelligent devices fit into the future energy system?

Decentralisation requires grid edge intelligence

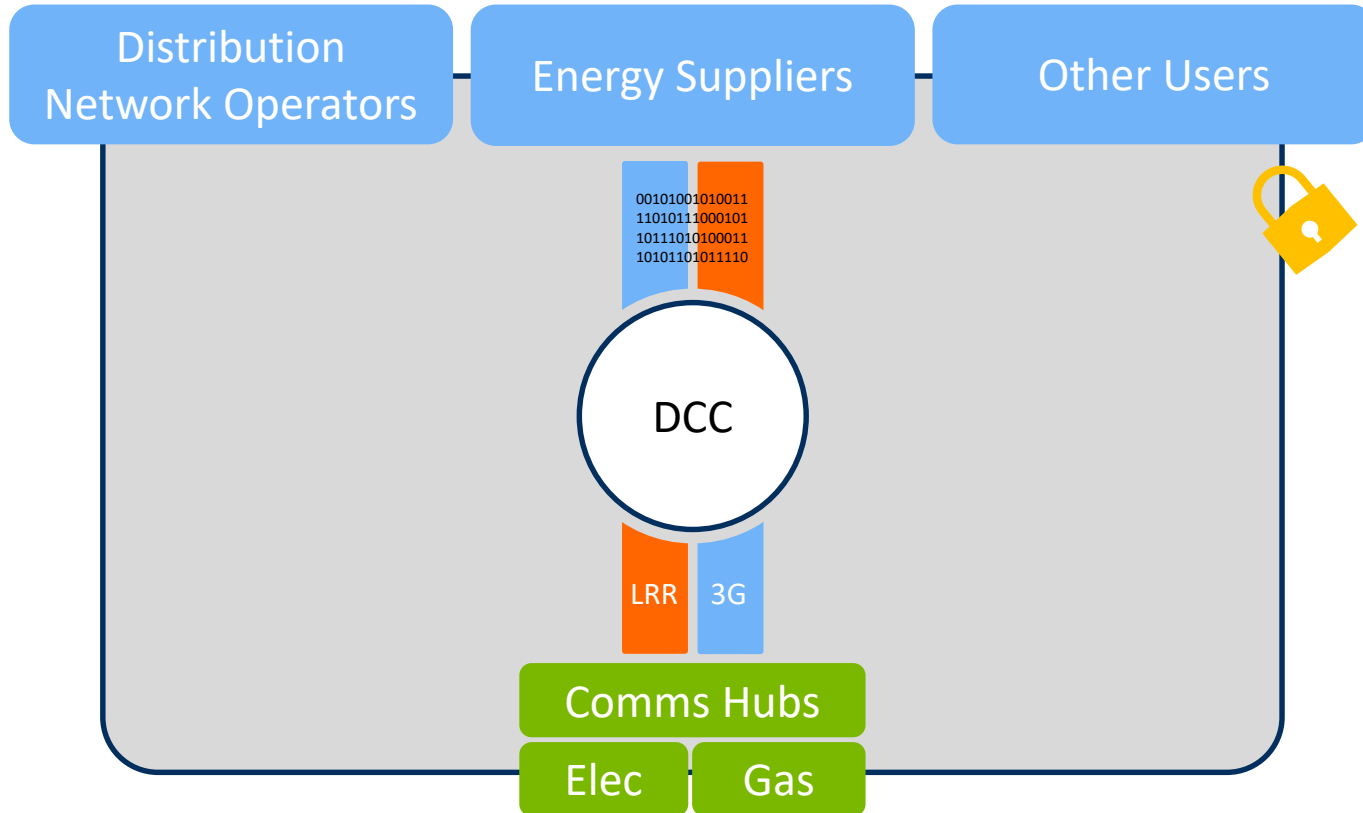
Traditional power grid



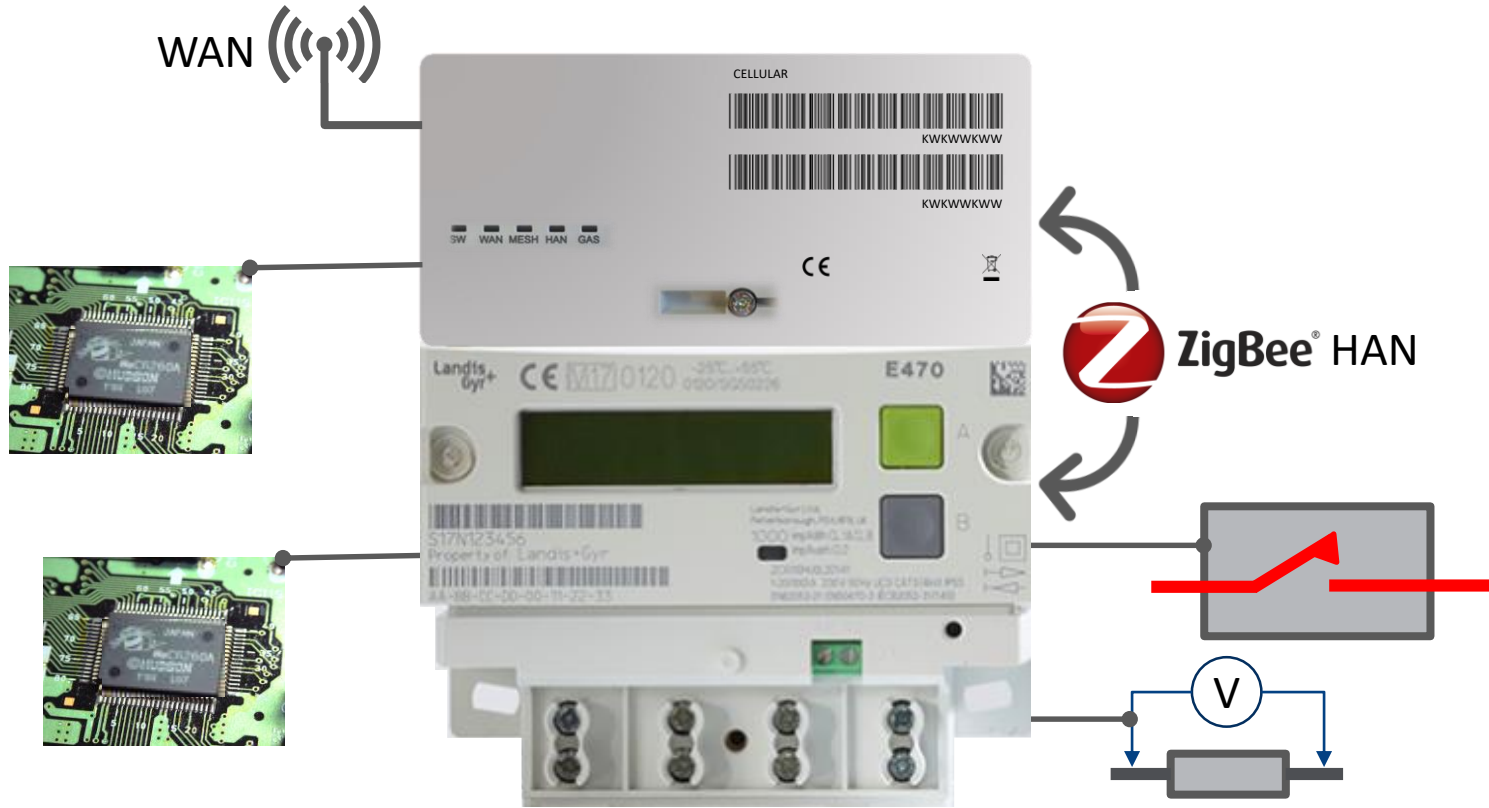
Decentralised power grid



The GB Smart Meter System: SMETS2



Smart Meter Hardware



- ToU tariffs
- Secure change of supplier
- Full prepayment capability
- Instantaneous energy readings
- Power quality data

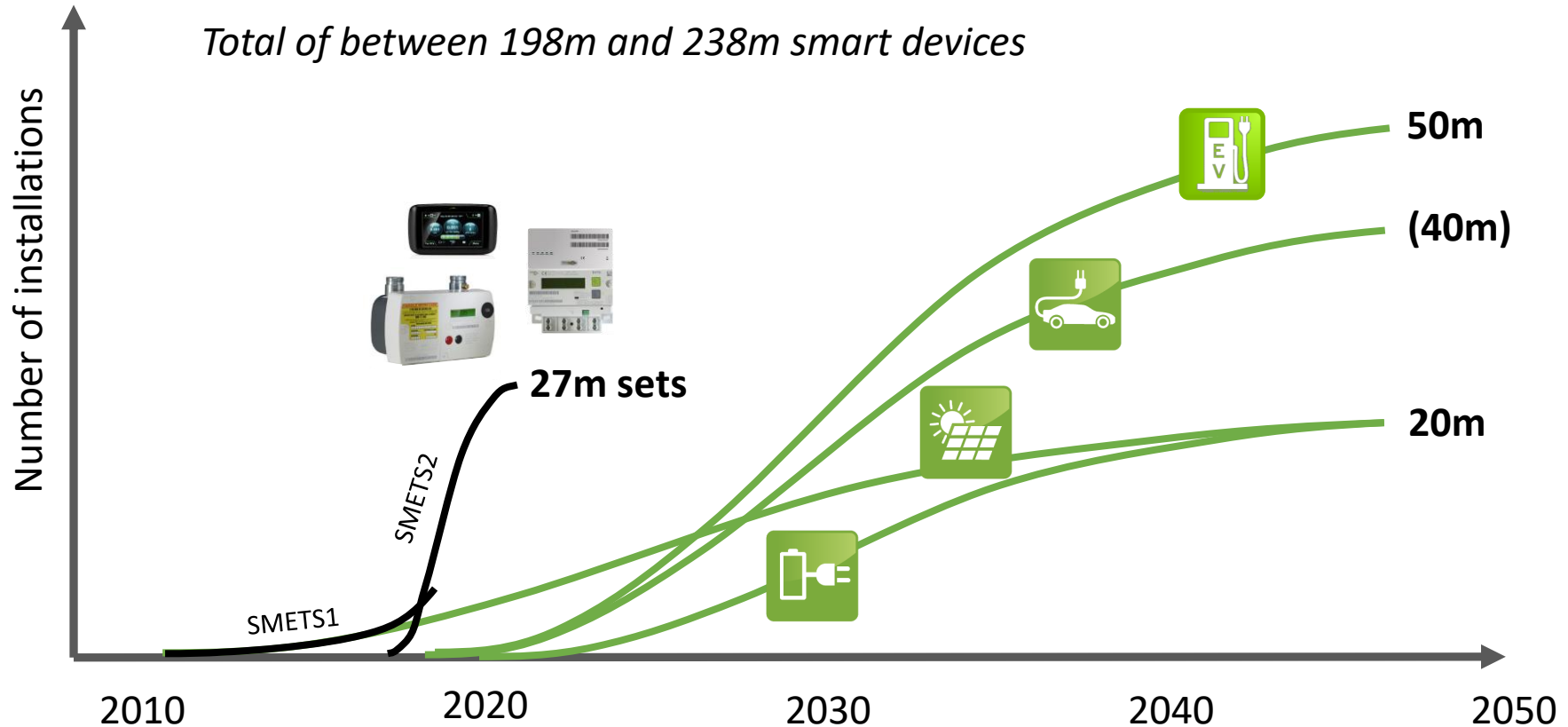
Smart charging with intelligent devices



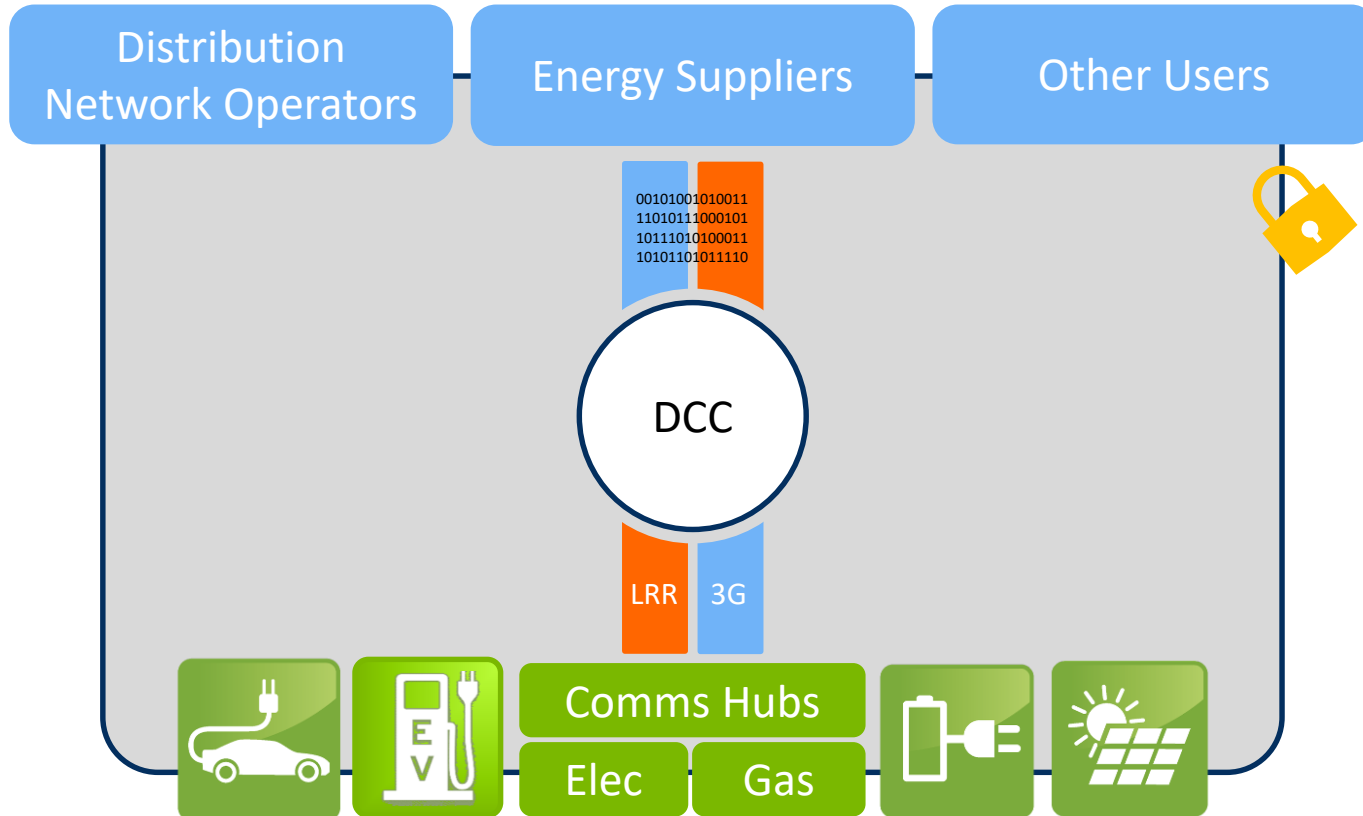
Microgeneration with intelligent devices



Growth of intelligent devices

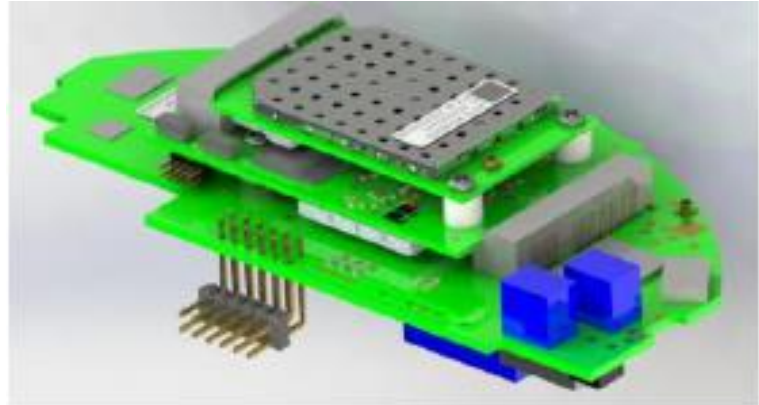


The future energy system: Grid edge intelligence



Smart module for intelligent devices

- Software with optional hardware
- Plug-in module for secure, smart connectivity
- Integrates into EVs, smart chargers, solar PV and home batteries
- SMETS-ready



How do we proceed?

- UK has invested in a smart meter system which is:
 - Secure
 - Capable
 - Extensible

- We need to build on this secure platform...

- ...to bring the future energy system to life

- Get involved nick.merricks@landisgyr.com