

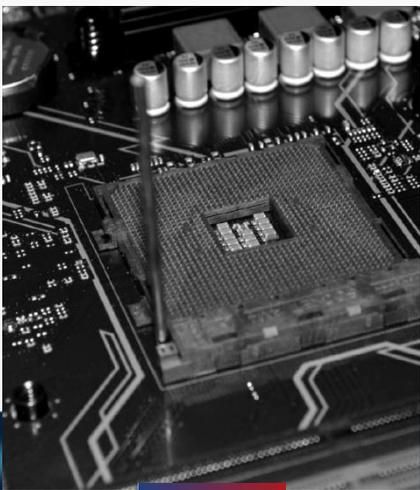


SMETS2 to OpenADR

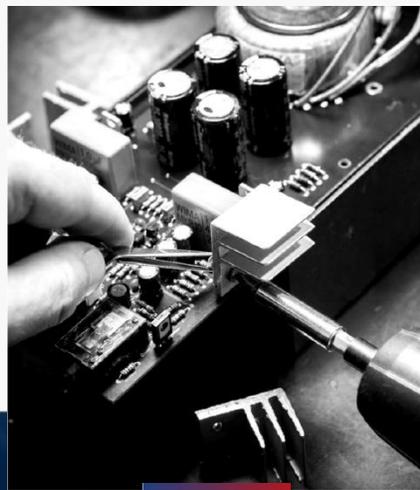
A product journey in digital energy, from SMETS2 in GB Smart Metering to Integrated Demand Side Response in energy flexibility systems



SLS CORE COMPETENCIES



**IP Cores &
FPGA Design**



**Hardware
Design**



**Software
Development**



**Client
Servicing**

Whose story is this?

- *System Level Solutions (SLS)*

- *Operations in USA, UK and India*
- *Focus on Industrial IoT, and utility-grade wireless solutions, digital energy, EVSEs*
- *In-house capability for hardware, firmware, wireless & cloud solutions*
- *Key & unique role in GB Smart Metering – inc. reference implementations & testing*

- *Proteus Switchgear*

- *UK manufacturer of over 35 years*
- *Specialising in the production of industrial , commercial and domestic switchgear products with a full complement of circuit protective devices*
- *Standard product offerings and fully bespoke units, tailored to customer needs to suit any individual installation.*

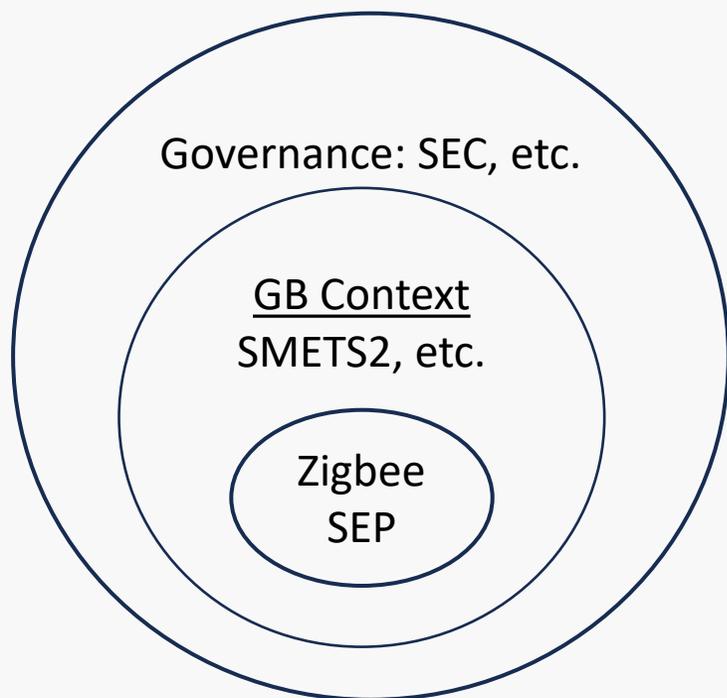


How is this relevant to OpenADR adoption?

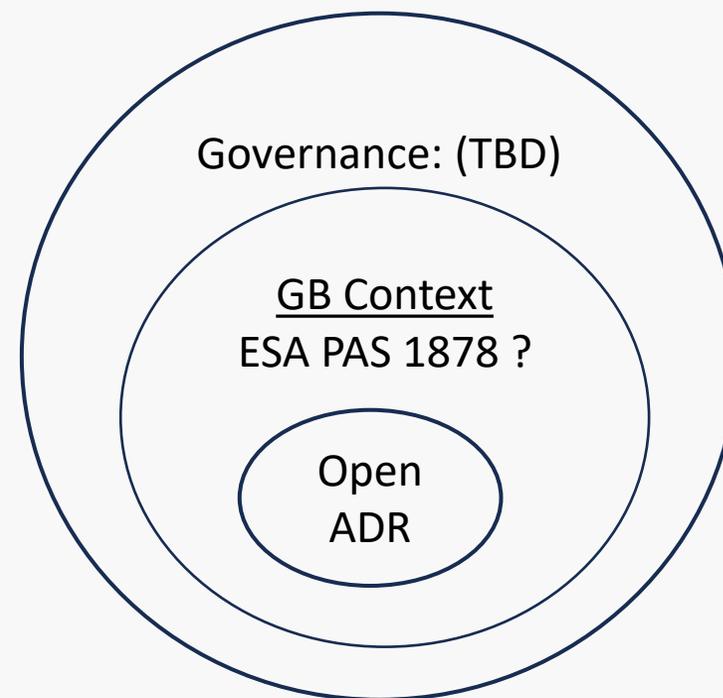
Digital Energy Maturity & Evolution



Secure & Mature GB Smart Metering



Energy System Flexibility Solutions / IDSR



Take a basic energy asset as an example



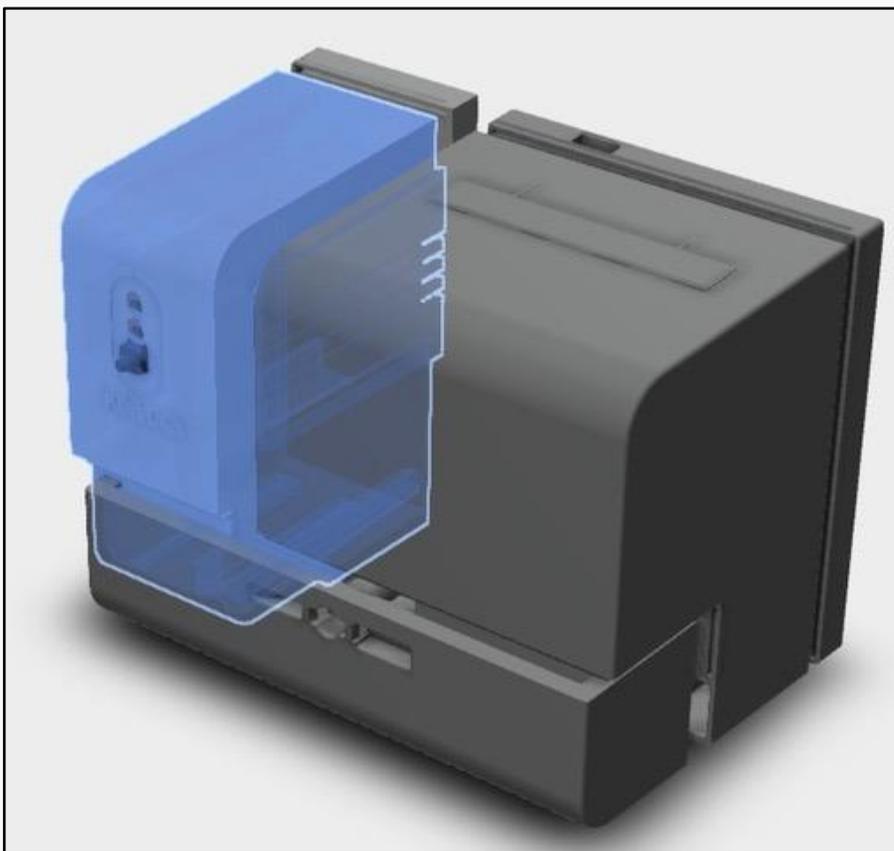
- OK, it's "just a switch" - but a very important high-quality product
- Widely adopted and highly trusted by a safety conscious marketplace
- Clearly it needs to participate in the digital energy environment
- Customers want to source this product via the same means and have the same high confidence but use it within a flexibility scenario.

Digital Energy – Product Motivations

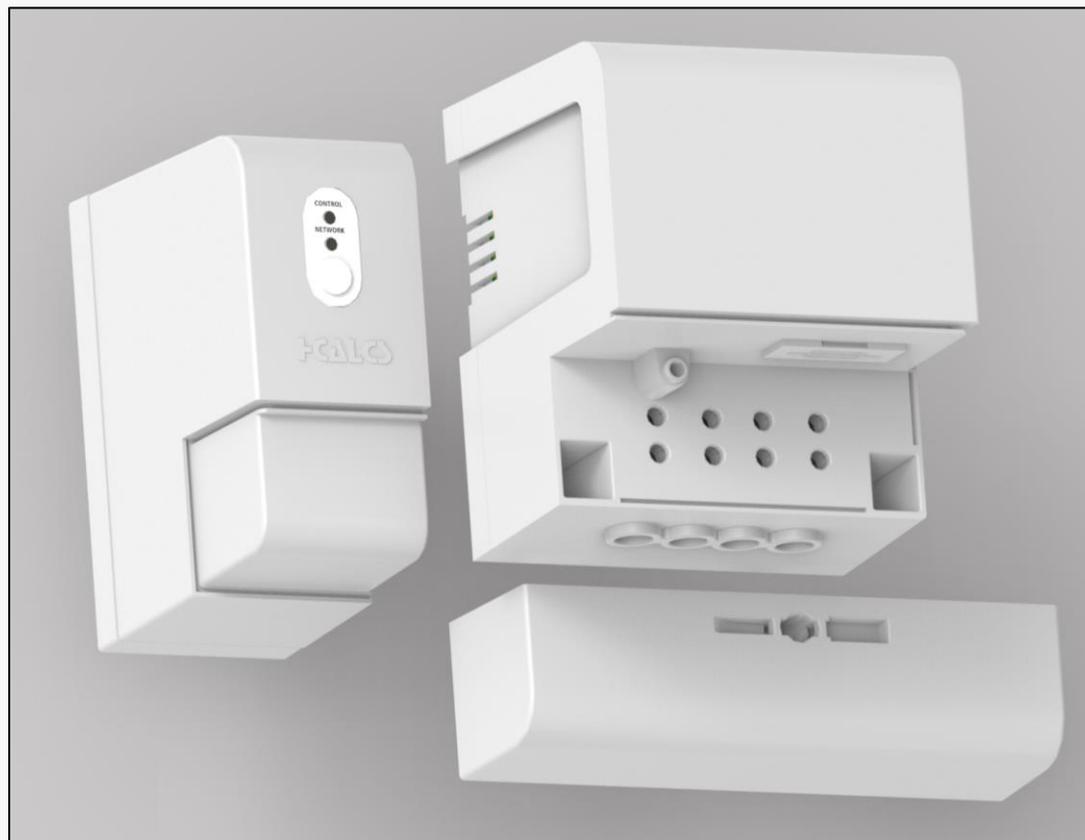
- Reuse technology beyond typical metering oriented installations
- Integrate existing energy assets into the secure digital system with minimal asset change
- Maintain product and expertise of the energy asset & its provider
- Partner rather than take-over or compete to create ESA's
- Compliment the marketplace rather than value chain land grab
- Do things which others are not doing (low volume, difficult, etc.)
- We are just a small part of the system and solution - do that bit well.

Product collaboration – for any energy asset

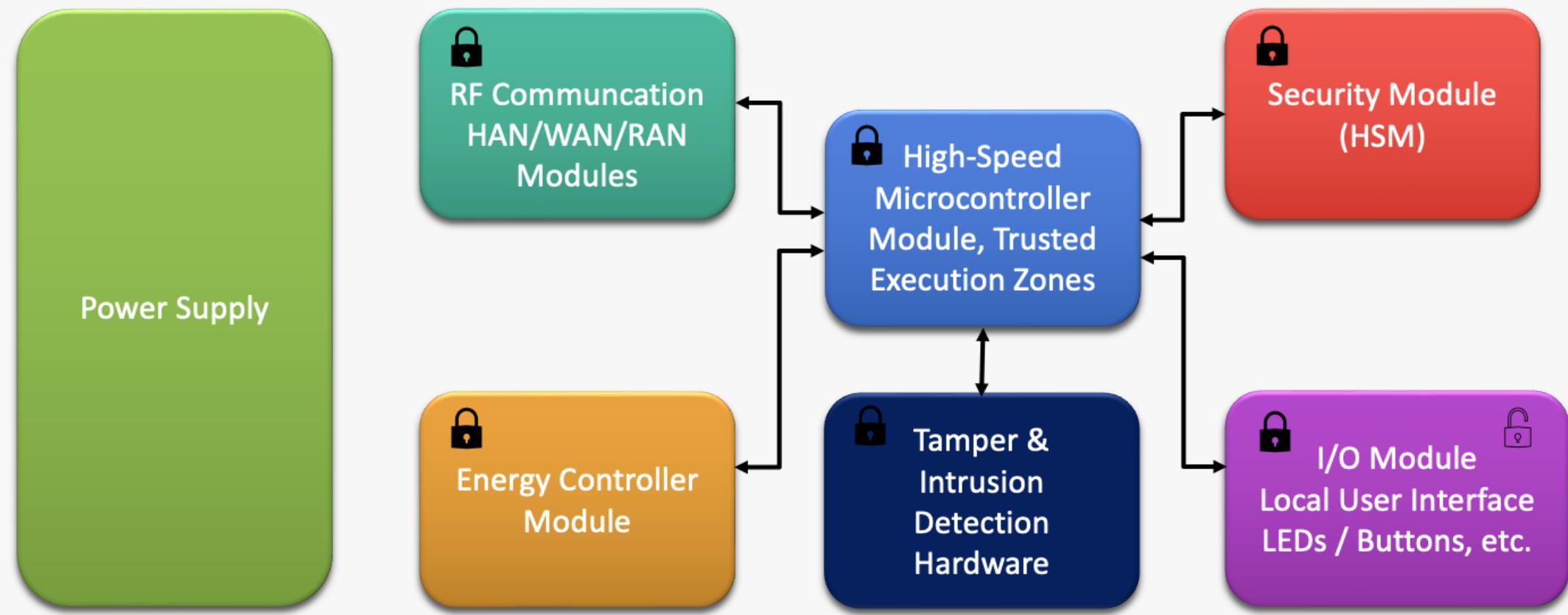
Introduction of a non-invasive secure digital control and communications module



A complete integrated but modular digitised Energy Smart Asset ready to participate in flexibility services



High Level Modular Block Diagram



Where else has this approach been used?



Why we are ready for OpenADR & IDSR...

- Product approach remains applicable for the GB IDSR marketplace
- The digital piece of the energy asset still has the same fundamental design components, we know how to do that - including OpenADR
- We can apply CNI-grade security knowhow to a new digital energy domain
- We know what to adopt from Smart Metering, and what not to repeat
- We know there are even more industry actors in energy flexibility scenarios compared to smart metering, and regulation must enable and facilitate that collaboration, but not define it explicitly
- We know this programme must be less prescriptive overall, more market led than smart metering, in order to yield the product innovation required.

About SLS

We are a Product and Service Company into Hardware & Software
Established in 2001 as Turnkey Solution Provider

100+

Active projects
across the globe

300+

In-house
staff

21

Years and
counting

Quick Facts

- No. of Business Verticals : 8+
- Operating Bases : India, UK, USA
- Part of the Make-In-India initiative
- In-house Design & Manufacturing Capability
- No. of Manufacturing Plants : 2

Subsidiaries



Verticals

FPGA/IP Core



Thank You



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