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
- Governance: SEC, etc.
- GB Context
- SMETS2, etc.
- Zigbee
- SEP

Energy System Flexibility Solutions / IDSR
- Governance: (TBD)
- GB Context
- ESA PAS 1878?
- Open ADR

Transferable Skills, Approach & Experience
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
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
Thank You

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