

# Energy Reporting Framework

---

draft-nordman-eman-er-framework-02

Bruce Nordman

# Keep it Simple!

---

But highly capable

# Anything wrong with EMAN framework?

- **Yes.**
- Re-engineered from an implementation
  - Not a bad idea in general, however, in this area (new to the IETF) many initial choices need re-consideration
  - Too many implementation choices moved to the framework
  - Too many new concepts were introduced
    - Some early stage concepts are outdated
  - Too many
  - **Not Simple.**
- Inconsistent sections
  - Coming from different sources, not well aligned in style and terminology
  - Many text sections not needed at all
- Not accessible to many desirable audiences
  - e.g. energy professionals

# How to make it better?

- Rewrite the framework based on many insights gained in WG and framework author discussions
- Take only necessary concepts (in their most simple version)
  - Drop the rest as unneeded (e.g. relationships)
- Use a clear and simple document structure
  - Introduction of six concepts (Section 2)
  - Discussion of energy-related topologies (Section 3)
  - Detailing the framework using the EMAN requirement structure
    - basic features (Section 4), advanced features (Section 5)
  - Operational considerations (Section 6)

# Why call it Energy Reporting (ER) Framework?

- >95% of the ER and EMAN frameworks is about reporting.
- Configuration items are few
- The ER framework even reduced need for control by simplification:
  - Control only needed for setting power states
  - For switching power at an outlet, the power state of the power interface is set

# Simple Framework

- Concepts used for ER framework
  - Energy Management System
  - Device, power interface, component, energy object, battery
- List of topology types
  - Power distribution
  - Metering
  - Reporting (in case of a device reporting for other devices)
- Information model directly derived from EMAN requirements
  - Split into basic mandatory elements and
  - advanced optional elements (that most readers can skip)
- Ensure all needed functionality is present, e.g. aggregation

# Next Steps

- Critical review on the list to directly compare the two drafts
  - Clarity
  - Completeness
  - Simplicity
  - Capability
  - Accessibility to diverse audiences
- Base decisions on empirical results