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succes

securing critical energy infrastructures



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NORM



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Next Generation Open Real Time Smart Meter

- Based on the "Unbundled Smart Meter" architecture
- Integrates:
- A Smart Metrology Meter (SMM)
- A low cost PMU (Phasor Measurement Unit)
- A Smart Meter Gateway (SMG, as an upgrade of SMX

Includes:

- High level data security by incorporating PUF (Physical Unclonable Function)
- Synchronisation based on PTP protocol (Precise Time Protocol)
- Data security support through local and remote consistency assessment of non-confidential data: voltage, frequency etc.





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NORM integration in an energy ecosystem





NORM designed to serve 3 main user types: Critical, Admin and Market





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Applying PUF technology (physical unclonable function) for increasing cyber security in communication



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NORM deployed in three test sites: Ireland, Italy and Romania

1. Consistency on continental frequency: Romania and Italy







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