First European smart meter manufacturer integrates Wirepas 5G Mesh and DLMS interoperability - demo at Enlit Europe 2023

Wirepas, a leading mesh connectivity provider, and Meter&Control, smart meter manufacturer, are announcing a ready-to-deploy integration of Wirepas 5G Mesh technology and DLMS interoperability.

FLEXY modular smart meter is the first European made smart meter to integrate 5G Mesh technology developed by Wirepas, the world's only technology based on non-cellular 5G connectivity standard DECT NR+. The working demonstration will be showcased at Enlit Europe and will also include the integration with Netinium universal HES, which allows quick DECT NR+ integration as a future connectivity option in existing utility backend topologies.

DLMS interoperability combined with Wirepas 5G Mesh allows utilities to benefit both from DLMS's security and bidirectional support to push and receive messages as well as from the security of network transmissions enabled by Wirepas 5G Mesh based on the publicly available spectrum around 1,9 GHz in Europe. The currently implemented IPv6-based profile provides ultra-high reliability between smart meters.

"Our FLEXY series modular smart meter with replaceable modem was designed for utilities to quickly and easily switch communication technologies within the meter lifetime, thus allowing them to keep the pace with fast evolutions in smart metering. Now, the Wirepas 5G Mesh modem steps up the connectivity game to the next level for us: it is a new proposition for existing customers and it also opens the doors of markets where this technology is ushering or is already well-established.
The entire implementation of Wirepas 5G Mesh modem with FLEXY meter was done by Lobaro and, being effectively a third-party hardware, was unexpectedly straightforward and quick," Says Vladan Lapcevic, CEO at Meter&Control.

"A new generation RF mesh standard with a dedicated and free-of-charge spectrum was the missing brick in speeding up the next-generation smart metering deployments: with our 5G Mesh, the highest reliability comes at the lowest total cost. We are thrilled to see Meter&Control as the first moverfor Wirepas 5G Mesh and DECT NR+ in Europe," adds Jani Vehkalati, SVP Smart Metering at Wirepas.

Together with partners, Meter&Control will demo DLMS over Wirepas 5G Mesh at the ESMIG community booth 7.2.B30 at ENLIT Europe on 28-30 November in Paris.
Partners involved in the demo are Wirepas as connectivity solution provider, Netinium as the head end supplier for the pre-integration of DLMS and NR+ as well as Lobaro as the design house of the integration and Nordic Semiconductor as provider of the radio chipset.

More on Wirepas 5G Mesh
Wirepas 5G Mesh is the first connectivity fully compliant with the non-cellular 5G standard, DECT NR+ or simply NR+. The standard originated from a need for a unified European-wide way to connect smart electricity meters reliably and wirelessly. NR+ is a non-cellular radio standard included in the ITU 5G standards using the free-to-use, license-exempt spectrum around 1,9 GHz.
Wirepas 5G Mesh employs a self-healing and autonomous mesh network with minor infrastructure needs. This makes it easy to commission devices and significantly reduces planning and maintenance efforts. It's totally decentralized network management provides a fully transparent private network to the utility – not requiring a dedicated operator in the middle.

More on DLMS

DLMS is a protocol standard that is used in utility meters globally. Protocol standards are needed to send and read data between different meter types and manufacturers. Using this standard, the client can talk with the meter and speak the same "language." DLMS is supported by various wired and wireless communication standards, with DECT NR+ being the latest addition.

More on Meter&Control FLEXY modular smart meter
FLEXY are three-phase and single-phase modular smart meters for measurement of active, reactive and apparent electrical energy, with direct or CT connection to three-phase and single-phase networks. The new platform allows the use of various communication technologies by easy replacement of communication modem: LTE NB IoT, CAT M1 , G3-PLC in CENELEC A and FCC frequency range, hybrid RF-PLC solution as well as 5G Mesh DECT NR+. This allows utilities to keep pace with fast transitions and evolutions of communication technologies within meter lifetime and to choose a smart metering concept according to their needs. FLEXY series feature high level of security, wide range of measurement data, much beyond classic billing data, and various interfaces toward smart home and other external systems. FLEXY meters empower utilities with data necessary for successful handling of ongoing energy market transformation.