

# ***Case Study of Hungary: Status of Smart Meter Roll-Out in Hungary from DSO Perspective***

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# What will you hear from me in this presentation?

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- How did we get here? - Steps for smart meter roll-out
- What are the basic rules of Hungarian smart meter roll-out?
- Sticking points where we need to pay more attention.

# How did we get here? – Steps for smart meter roll-out

- EU Directives and cost-benefit analysis – Why we do it?
- Preamble 52 of the 2019/944 Directive:
  - „Smart metering systems empower consumers because they allow them to receive accurate and near real-time feedback on their energy consumption or generation, and to manage their consumption better, to participate in and reap benefits from demand response programmes and other services, and to lower their electricity bills.”
  - „Smart metering systems also enable distribution system operators to have better visibility of their networks, and as a consequence, to reduce their operation and maintenance costs and to pass those savings on to the consumers in the form of lower distribution tariffs.”
- In theory:
  - The Directive envisages new markets and lower electricity costs on the consumer side and
  - a better understanding of the network and as a result, reduced operation and maintenance costs on the DSO side.
- Hungarian cost-benefit analysis by Deloitte in 2019
  - Findings:  
Household consumption is 5000 kWh/year or above

# Hungarian regulations for smart meter roll-out



- Based on the amended Act No. LXXXVI of 2007 on Electricity and the Governmental Decree No. 273 of 2007 (X.19.) on Electricity Regulation (which are entered into force on 1<sup>st</sup> of January 2020, and 1<sup>st</sup> of September in 2020.), there is an ongoing roll-out process in Hungary which is a so called selective roll-out that mainly considers a certain threshold in the consumption of the household customers and special consumers like micro generation.
- We differentiate between two main categories of remotely available electricity meters:
  - Industrial meters
  - Smart meters.
- Industrial meters are installed to those consumers where the energy need exceeds 3x80 A and the connection to the grid is made via current transformer and therefore, direct metering is not possible.
- Smart meters are installed to grid users up to 3x80 A energy needs.

# Hungarian regulations for smart meter roll-out

- Electricity Act (Act No. LXXXVI of 2007 on Electricity )
  - New definition of smart meters
  - Obligation on the side of the DSOs to install smart meters
  - Data protection – GDPR compliant
  - Who pays for what? - DSO shall pay for the modification of the meter (if there is a necessity to modify).
  
- Governmental Decree No. 273 of 2007 (X.19.)
  - New connections (over 3x32 A and below 3x80 A)
  - Upgrading existing connections (increase in load) where the energy need exceeds 3x32 A but does not exceed 3x80 A

# Hungarian regulations for smart meter roll-out



- Governmental Decree No. 273 of 2007 (X.19.)
  - Micro generators (SSEGs – Small Scale Embedded Generators) up to 50 kVA
  - Consumers have 5.000 kWh or more energy consumption annually (existing consumer)
    - In this case the regulation sets up a timeline to remove old meters and install new smart meters. Where there is only one meter at the place of use, DSO must change the old meter to a new smart one by the end of 2023.
      - Where there are multiple meters, the deadline is the end of 2024.
  - Consumer requests smart meter.
  - DSO would like to install smart meter (prepaid meters).

# Hungarian regulations for smart meter roll-out



Status of the roll-out in numbers:

- By the end of the 2024 we have estimated that **377 000** smart meters should be installed in our licensed territory.
- This year (until September) we have already installed **71 000** smart meters.
- In previous pilot projects we have installed **120 000** smart meters.

# Sticking points where we need to pay more attention

- Data protection and health issues
- Multimeter issue
- Who should schedule smart metered consumers, and who should bear the balancing energy costs of them?
- There are cases where there is no coverage for the communication. - What is the minimum scheme that shall be paid by the DSO?
- Issues relates to COVID 19



**THANK YOU  
FOR YOUR ATTENTION!**

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