

## **VDE FNN and DKE Warn: Parallel “Light” Solutions for Smart Meters Are Slowing Down the Rollout**

**The Network Technology and Operation Forum within VDE (VDE FNN) and the DKE German Commission for Electrical, Electronic & Information Technologies (DKE) criticize the federal government’s proposal to introduce “Smart Meter Light systems.” This will predictably slow down the scalable rollout of smart metering systems and prevent systemic economies of scale. Instead, greater use should be made of the cost-effective “1:n” solutions (one smart meter gateway for many meters) for tenants in multi-family buildings, which are already provided for in the MsbG.**

(Frankfurt/Berlin, July 13, 2026) VDE FNN and DKE reject the plan approved by the coalition committee to establish “Smart Meter Light” systems outside the mandatory rollout of smart metering systems. “This sets back the timeline for building the new, secure infrastructure needed for the energy transition,” says Frank Borchardt, head of the “Metering and Digitalization” division at VDE FNN and co-author of a recent position paper on the topic. Additional, new technical concepts for a “Smart Meter Light” would initially require renewed standardization, development, and implementation efforts, thereby tying up resources for years that are currently needed to accelerate the rollout. “The personnel and technical resources required for this are the same ones currently driving the installation of smart metering systems,” Borchardt continues, “instead, the existing efficient solutions provided by the Metering Point Operation Act for multi-family dwellings should be utilized.”

**“Without uniform standards, we’ll end up in chaos.”**

A “Smart Meter Light” would increase the risk associated with a parallel system landscape, while undermining the scalability of a nationwide, standardized, cyber-secure, and interoperable rollout. “Smart Meter Light” systems must also feed their data into grid management, balancing, and procurement processes. However, what starts as a resource and process issue can quickly

become a threat to the power grid if grid operators and other market partners can no longer rely on the integrity of the data their systems use to make decisions. “This risk can only be avoided if ‘Smart Meter Light’ systems are specified, developed, and tested in exactly the same way as the solution that is already available today. Otherwise, data formats, systems, and processes simply won’t be compatible,” says Borchardt. “Without uniform standards, we’ll end up in chaos.”

Millions of end customers would be led into a technological dead end. Especially since, in recent years, more than 60% of all electricity meters have already been replaced with the aim of potentially using them in Intelligent Metering Systems (iMSys). Without prior standardization and process integration of this parallel world, every time an end customer switches providers, the old provider’s proprietary “Smart Meter Light” would have to be replaced with the new provider’s version. With the self-defined goal of “customers who are not subject to mandatory installation,” the installation of a “Smart Meter Light” for these customers complicates the retrofitting process for using PV systems, wallboxes, and heat pumps. “The moment end customers want to participate in the energy transition and truly tap into the potential of dynamic rates, they become eligible for mandatory installation of an iMSys,” Borchardt continued. “They will then either have to spend more money to have their ‘Smart Meter Light’ replaced with an intelligent metering system, or they will have to forgo these opportunities.”

### **A more efficient “1:n” solution is already enshrined in the Metering Point Operations Act**

To accelerate the smart meter rollout, VDE FNN and DKE instead propose using the cost-efficient and cyber-secure 1:n connection—already provided for in the Metering Point Operation Act (MsbG)—for end customers outside the mandatory rollout. With the 1:n connection enshrined in the law, multiple digital electricity meters (n) can be connected via a single smart meter gateway (1). “This solution is therefore particularly appealing for apartment buildings and is already fully integrated into the process,” explains Frank Borchardt.

The solution is already available and proven, and offers the added advantage that end customers can easily add control functions later on without having to go through the cumbersome process of replacing their smart meter. Furthermore, it does not create a parallel process structure.

VDE FNN and DKE therefore consider it imperative to focus on promoting established “1:n” solutions for tenants and to ensure that the further digitization of the energy system is not slowed down by parallel systems. Investment and planning certainty are crucial for the rollout and must be guaranteed at the policy level.

## **Frank Borchardt answers the most important questions about the “Smart Meter Light”**

*What is a smart meter, and how does it differ from the “Smart Meter Light”?*

“A smart meter is an intelligent metering system. It establishes a new infrastructure for the secure, market-based, and grid-friendly integration of customers into the energy transition. It consists of one or more digital electricity meters (modern metering devices) and a communication unit (smart meter gateway). For end customers with PV systems, storage units, wallboxes, and/or heat pumps, a control device may also be added as needed. This control device allows customer systems to be actively managed when necessary.

The term “smart meter light,” on the other hand, is not yet defined at all, and the technology is even less standardized. Various technical solutions are being discussed that are intended solely to transmit meter data to a location that has not yet been defined. It is also still unclear how this data could be integrated into market communication and processes and how it should be made cyber-secure.”

*In other European countries, more than 90 percent of households have a smart meter; Germany is among the countries lagging behind. According to the Federal Network Agency, only 5.5 percent of households will be equipped with a smart meter by the end of 2025. Why is that?*

“The figures from different countries aren’t comparable. Other countries have so far only used their smart meters to automate meter reading. Germany has leveraged the technical capabilities to build a cyber-secure infrastructure for smart grids based on smart meters. This required a longer planning phase. Now that this phase is complete, the rollout is currently scaling up at a rate of approximately 2 million connections per year. Many countries typically launch a new rollout every 10 years because the technology they’re using has become outdated by then, and they want to implement features that we in Germany have already factored in (such as software updates or tariff control), or that are mandatory for cybersecurity reasons (EU CRA).”

*What are the legally mandated costs for a smart meter in Germany?*

“Different requirements and different conditions lead to different costs for end customers. For a smart meter *without* remote reading and *without* control functions, end customers in Germany pay 25 euros per year. With the 1:n solution stipulated in the MsbG *that includes* remote reading, the end customer in a multi-family residence pays only 5 euros more, for a total of 30 euros per year. If control functionality is added, for example, in accordance with Section 14a, end customers pay an additional 50 euros per year but receive a credit of approximately 150 euros against their grid fees. The distribution system operator also covers part of the costs. These price caps for end customers are set by the Metering Point Operation Act.”

### **About VDE FNN:**

The Network Technology and Operation Forum within VDE (VDE FNN) develops the electricity

grids with foresight. The aim is to ensure reliable system operation at all times with 100 percent renewable energies. VDE FNN makes innovative technologies practicable and provides answers to the grid technology challenges of tomorrow. Here, various specialist groups with different interests work together on solutions. Its members are over 500 manufacturers, grid operators, suppliers, system operators, authorities, and scientific institutions.

For more information, visit [www.vde.com/fnn](http://www.vde.com/fnn)

#### **About DKE:**

The DKE German Commission for Electrical, Electronic & Information Technologies (DKE) is the national platform for about 10,000 experts from industry, science and public administration to elaborate standards and safety specifications for electrical engineering, electronics and information technology. Standards support global trade and, among other things, the safety, interoperability and functionality of products and systems. As a competence centre for electrotechnical standardization, the DKE represents the interests of German industry in European (CENELEC, ETSI) and international standardization organizations (IEC). In addition, the DKE provides comprehensive services in the field of standardization and VDE specifications.

For more information, visit [www.dke.de](http://www.dke.de)

#### **About VDE:**

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 130 years. VDE is the only organization in the world that combines science, standardization, testing, certification, and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for more than 100 years.

Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network more than 2,000 employees at over 60 locations worldwide, more than 100,000 honorary experts, and around 1,500 companies are dedicated to ensuring a future worth living: networked, digital, electrical.

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The VDE (VDE Association for Electrical, Electronic & Information Technologies) is headquartered in Frankfurt am Main. For more information, visit [www.vde.com](http://www.vde.com)

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