



Notification Number: 2012/215/UK

Proposed amendments to the Gas and Electricity Supply Licence Conditions to require the roll-out of smart metering systems in Great Britain and the draft Smart Metering Equipment Technical Specifications (SMETS).

Date received : 05/04/2012

End of Standstill : 06/07/2012

Issue of comments by : Commission

Message

Message 001

Communication from the Commission - SG(2012) D/5925

Directive 98/34/EC

Notificación - Oznámení - Notifikation - Notifizierung - Teavitamine - Γνωστοποίηση - Notification - Notification - Notifica - Pieteikums - Pranešimas - Bejelentés - Notifika - Kennisgeving - Zawiadomienie - Notificação - Hlásenie-Obvestilo - Ilmoitus - Anmälan - Нотификация : 2012/0215/UK - Notificare.

No abre el plazo - Nezažuje odklady - Fristerne indledes ikke - Kein Fristbeginn - Viivituste perioodi ei avata - Καμία έναρξη προθεσμίας - Does not open the delays - N'ouvre pas de délais - Non fa decorrere la mora - Neietekmē atlikšanu - Atidėjimai nepradedami - Nem nyitja meg a késések - Ma' jiftaħ il-perijodi ta' dawmien - Geen termijnbegin - Nie otwiera opóźnień - Nao inicia o prazo - Neotvorí oneskorenia - Ne uvaja zamud - Määräaika ei ala tästä - Inleder ingen frist - Не се предвижда период на прекъсване - Nu deschide perioadele de stagnare - Nu deschide perioadele de stagnare.

(MSG: 201200925.EN)

1. Structured Information Line

MSG 001 IND 2012 0215 UK EN 05-04-2012 UK NOTIF

2. Member State

UK

3. Department Responsible

Department for Business, Innovation and Skills

Innovation & Enterprise Group

1 Victoria Street, London, SW1H 0ET.

Email: 9834@bis.gsi.gov.uk.



3. Originating Department

Department of Energy & Climate Change
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4. Notification Number

2012/0215/UK - N00E

5. Title

Proposed amendments to the Gas and Electricity Supply Licence Conditions to require the roll-out of smart metering systems in Great Britain and the draft Smart Metering Equipment Technical Specifications (SMETS).

6. Products Concerned

Gas and Electricity Smart Metering Equipment, including In Home Displays

7. Notification Under Another Act

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8. Main Content

The UK Government will require all licensed energy suppliers to take "all reasonable steps" to complete the roll-out of compliant smart metering systems to all domestic and smaller non-domestic consumers in Great Britain by the end of 2019 (energy policy in Northern Ireland is devolved to the Northern Ireland Assembly). This will require the replacement of 58 million meters across 30 million different premises; one of the largest roll-outs of metering equipment in Europe. The roll-out will be mandated through new conditions in the suppliers' licences which will require suppliers to:

- complete the rollout of smart metering systems, which meet the minimum requirements defined in the Smart Metering Equipment Technical Specifications (SMETS), by 31 December 2019;
- install only smart metering systems from a date to be specified by the Secretary of State (new and replacement obligation); and
- offer to provide domestic consumers with an In-Home Display (IHD), which will give them access to real time consumption and price information.

The SMETS will be designated by the Secretary of State for Energy and Climate Change. It describes the minimum capabilities for gas and electricity smart metering systems and the IHD. The SMETS establishes that specified functional requirements are required to be delivered in a consistent, defined way, such that any supplier will be capable of operating any metering system with a clear understanding of the processing the equipment will undertake and the outputs they and their customers, will receive.

The licence conditions identify general exemptions from the roll-out for non-domestic premises where contracts are in place by 2014 to install advanced metering systems (metering systems that include some but not all of the functionality described in SMETS) by 2019. There are also specific exemptions for current transformer meters and larger gas meters (those designed to deal with gas flows of over 11 cubic metres) installed at both non-domestic and domestic properties that have been provided with advanced metering systems. There are already existing requirements for the provision of advanced metering services to larger non-domestic customers.

Smart metering systems installed should comply with the version of SMETS in place at the time of the



installation. Suppliers will also be required to offer their domestic consumers a SMETS compliant IHD at the time of installation of their smart metering system. Changes to SMETS will be made in such a way as to enable suppliers and manufacturers to plan in advance and avoid the purchase and installation of outmoded equipment. The UK Government wishes to avoid the physical retrofitting or replacement of compliant smart metering systems, although the licence conditions identify that this activity may be required in exceptional circumstances.

The SMETS includes, but is not limited to, the following minimum requirements:

- Physical requirements - the components to be included in a smart metering system, including for example, requirements and communications interfaces and detail about the physical characteristics of the system.
- Communication requirements – the capability of identifying and establishing secure communications links with other smart metering equipment, consumer devices and the central Data and Communications Company (DCC).
- Data requirements – describes the minimum information which the smart metering system is to be capable of holding in its Data Store, for example 13 months of half-hourly profile data.
- Display and provision of consumer information - the capability of displaying consumption and pricing information to a consumer on the equipment's user interface and In-home Display and of providing this information to other consumer devices in the premises.
- Payment mode – the capability of operating in credit and prepayment modes and of being remotely switched from one mode to the other. When operating in prepayment mode the smart metering system must be capable of processing credit top-ups locally or remotely.
- Security requirements – the capability to protect the integrity of the device, security components and any personal data, with a breach of integrity logged and an alert raised.
- Tariffing – the capability of applying multiple pricing structures and of recording consumption to up to 48 registers (electricity) and 4 registers (gas) according to the time the electricity or gas is used.
- Smart grids compatibility – the capability of load limiting and of recording voltage quality information, import and export active and reactive energy consumption.

It is important to note that none of the functions set out in SMETS refer to the MID compliant gas or electricity meter. The function of these components is regulated under Directive No 2004/22/EC of the European Parliament and the Council of 31 March 2004 on measuring instruments (OJ (EU) 2004, L 135), which has been implemented in the UK by the Measuring Instruments (Active Electrical Energy Meters) Regulations 2006 and the Measuring Instruments (Gas Meters) Regulations 2006.

The SMETS also includes a mutual recognition clause to clarify where compliance with comparable requirements will be seen to satisfy a requirement to comply with the SMETS.

The UK will fulfil its obligation under Article 12 of Directive 98/34/EC when these regulations are officially published.

9. Brief Statement of Grounds

Why is the UK Government mandating a roll-out of smart meters?

The roll-out of smart metering systems will play an important role in Great Britain's transition to a low-carbon economy and help it meet some of the long-term challenges it faces in ensuring an affordable, secure and sustainable energy supply. Through smart metering systems, consumers will have real time information on their energy consumption to help them control energy use, save money and reduce emissions. There will be an end to estimated billing and switching between suppliers will be smoother and faster, which will be beneficial to many customers. New products and services will be supported in a vibrant, competitive and more efficient market in energy and energy management.

In addition, suppliers will have access to accurate data for billing and to improve their customer service. They will also be able to reduce costs, for example by reducing call centre traffic, removing the need for a site visit to read meters and through better management of debt. Energy networks will have better information upon which to manage and plan current activities and the move towards smart grids which support sustainable energy supply.

The UK Government has carried out extensive analysis of the expected costs and benefits from rolling out



smart metering in Great Britain. Benefits to the energy industry as well as to consumers have been identified and quantified. The impact assessments included as part of this submission expect a combined gross benefit across the domestic and smaller non-domestic of over £18.6 billion, with combined gross costs of around £11.5 billion. This results in an expected net present value benefit of around £7.2 billion over the appraisal period of 2012 to 2030.

Why is the proposed approach on the SMETS necessary?

In Great Britain, the provision of energy meters to consumers is the responsibility of energy retail suppliers, and is subject to competition. Although some suppliers are already rolling out smart metering systems to a selection of their customers it is expected that, in the absence of intervention by Government, only limited numbers of smart metering systems would be rolled out.

Government intervention is needed to ensure that smart metering systems are able to deliver the full range of functionalities needed to meet the Government's objectives outlined above. Moreover, intervention is needed to deliver interoperability and to ensure the benefits are available to all customers regardless of geography. This will facilitate the capture of wider benefits to consumers, the environment, network operators and new businesses.

Interoperability is a core requirement for the roll-out of smart meters in Great Britain. The effective operation of a competitive retail market for electricity and gas relies on a smooth process for customers to be able to switch supplier. Because responsibility for the provision of meters lies with suppliers, there needs to be standardisation in the equipment they choose to install, so that meters installed by one supplier can be operated by another supplier. This interoperability of equipment means that:

- equipment is not unnecessarily replaced before the end of its economic life;
- the need for multiple visits (which incurs significant costs for suppliers) to consumer premises at the point of switching, is avoided;
- the consumer switching process is smooth and does not act as a disincentive for consumers to participate actively in the energy market and seek to reduce their energy costs; and
- the costs and risks associated with change of supplier are reduced such that they do not represent a barrier for new entrants or provide a disadvantage for smaller suppliers.

The SMETS is a key part of the UK Government's strategy to deliver interoperability. It will deliver "functional interoperability" of equipment, i.e. functional requirements must be delivered in a consistent, defined way, such that any supplier will be capable of operating any meter with a clear understanding of the processing the equipment will undertake and the outputs they, and their customers, will receive.

To further support interoperability, the UK Government is exploring whether in the future to include a communications standard(s) as part of the SMETS. This would help ensure that compliant smart meters are technically interoperable, including by speaking the same 'language' regardless of what brand of meter is installed. It may also reduce cost and complexity, avoiding the need for multiple translation services to be developed.

Is the proposed approach consistent with European-level developments in smart metering?

The roll-out of smart metering systems in Great Britain is also consistent with European Directives 2009/72/EC and 2009/73/EC: the "energy third package". The preparation and adoption of the SMETS is a key component of the strategy for achieving interoperability of smart metering systems within Great Britain. It will provide the minimum requirements on which suppliers will be required to use of appropriate standards and best practice in smart metering systems.

Current and developing European standards, including as part of the M/441 process, have been reflected in the Great Britain specifications where possible, however, these specifications will be more detailed than those submitted by other countries. This is required to achieve interoperability, in light of the decision to require suppliers to roll out smart metering systems in a competitive manner. The detail in the Great Britain specifications also reflect the prepayment market that exists here, which is more significant than in other Member States.

10. Reference Documents - Basic Texts

References of the Basic Texts: 1. Explanatory document to support the notification of the proposed



amendments to the Gas and Electricity Supply Licence Conditions and the draft Smart Metering Equipment Technical Specifications (SMETS) to the European Commission

11. Invocation of the Emergency Procedure

No

12. Grounds for the Emergency

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13. Confidentiality

No

14. Fiscal measures

No

15. Impact assessment

Yes

16. TBT and SPS aspects

TBT aspect

No - The draft has no significant impact on international trade

SPS aspect

No - The draft is not a sanitary or phytosanitary measure

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