



Notification Number: 2014/378/UK

Great Britain Smart Metering Implementation Programme: Notification of proposed amendments to the Great Britain smart metering regulations and technical specifications to support interoperability.

Date received : 31/07/2014

End of Standstill : 03/11/2014

Message

Message 001

Communication from the Commission - TRIS/(2014) 02254

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 : 2014/0378/UK - Notificare.

No abre el plazo - Nezahtuje odklady - Fristerne indledes ikke - Kein Fristbeginn - Viivituste perioodi ei avata -
Καμμία 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 késéket - 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: 201402254.EN)

1. Structured Information Line

MSG 001 IND 2014 0378 UK EN 31-07-2014 UK NOTIF

2. Member State

UK

3. Department Responsible

Department for Business, Innovation and Skills
European Reform Directorate
1 Victoria Street, London, SW1H 0ET.

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

3. Originating Department



Department of Energy & Climate Change
3 Whitehall Place
London, SW1A 2AW

Email: smartmetering@decc.gsi.gov.uk

4. Notification Number

2014/0378/UK - N00E

5. Title

Great Britain Smart Metering Implementation Programme: Notification of proposed amendments to the Great Britain smart metering regulations and technical specifications to support interoperability.

6. Products Concerned

Gas and Electricity Smart Metering Equipment

7. Notification Under Another Act

-

8. Main Content

The UK Government has introduced requirements ("roll-out licence conditions") on energy (electricity and gas) suppliers to procure and install smart meters in their domestic and smaller non-domestic customers' premises, with a limited number of exceptions, by the end of 2020. Smart meters must meet the minimum functional requirements defined in the Smart Metering Equipment Technical Specifications (SMETS) in force when they are installed. Energy suppliers must also offer consumers an In Home Display (compliant with the IHD Technical Specification that forms part of the SMETS2 document) as part of the installation.

The roll-out licence conditions and two versions of the SMETS (SMETS1 and SMETS2) were notified to the Commission on 5 April 2012 (2012/215/UK) and 24 January 2013 (2013/0046/UK) respectively. In each case the Commission responded without detailed opinion. The roll-out licence conditions came into force on 30 November 2012. SMETS1 was designated by the Secretary of State and entered into force on 19 December 2012, with minor clarifications made to it on 31 March 2014. The UK Government separately notified "no backward step" licence conditions on 30 October 2013 (2013/596/UK) and brought them into force in April 2014. SMETS2 has not yet been brought into force.

This notification includes a number of amendments and additions to the existing regulatory and technical specifications for GB smart metering. These are principally required to ensure the interoperability of GB smart metering systems (in particular building on the previous SMETS2 notification, 2013/0046/UK, which prescribed the use of ZigBee Smart Energy Profile and DLMS COSEM). There are also some additional minor amendments to the minimum capabilities required of smart metering devices that have been agreed following consultation with stakeholders.

A more detailed overview of the amendments and additions is provided in the explanatory document issued as part of this notification, but in summary these relate to:

- The provision and installation of Communications Hubs:

Communications Hubs will connect the Wide Area Network (WAN), which the Data and Communications



Company (DCC) will provide, and the Smart Metering Home Area Network (SMHAN) which will be established between smart metering equipment in the consumer's premises. We will require the DCC, through its licence, to provide suppliers with Communications Hubs that are compliant with the Communications Hub Technical Specifications (CHTS). The CHTS describes the minimum physical, functional, interface, data, testing and certification requirements of the Communications Hubs to be provided by DCC. The roll-out licences will be changed to require energy suppliers to install the communications hubs provided by DCC when they install SMETS2 smart meters. There will be a period during which energy suppliers will be allowed to install SMETS1 or SMETS2 smart meters, but in due course and following consultation new SMETS1 installations will no longer be allowed.

- The installation of Prepayment Interface Devices (PPMID):

PPMIDs are capable of replicating the pre-payment user interface of smart meters, allowing consumers to access prepayment functionality remotely from the smart meter (which could be in an inaccessible location). Energy suppliers are not required to offer/ install PPMIDs, but where they do we will require, through their licences, that they are compliant with the PPMID Technical Specification. This describes the minimum physical, functional, interface, testing and certification requirements of a PPMID and forms part of the SMETS2 document.

- The installation of HAN Connected Auxiliary Load Control Switches (HCALCS):

HCALCSs are capable of controlling loads connected to the SMHAN. Energy suppliers are not required to install HCALCSs, but where they do we will require, through their licences, that they are compliant with the HCALCS Technical Specification. This describes the minimum physical, functional, interface, testing and certification requirements of a HCALCS and forms part of the SMETS2 document.

- Compliance with the Great Britain Companion Specification (GBCS):

The GBCS for smart metering describes the detailed requirements for communications between smart metering devices in consumers' premises, and between these devices and users of the smart metering system via the DCC. The GBCS is based on and refers to open standards, principally ZigBee Smart Energy Profile 1.2, DLMS COSEM and Abstract Syntax Notation 1; therefore in considering the GBCS it is also necessary to consider the relevant content of these standards. We will require, through the SMETS2 and CHTS, that smart metering devices comply with the GBCS.

- Compliance with the Commercial Product Assurance (CPA) Security Characteristics for GB Smart Metering:

The Security Characteristics set the evaluation and certification requirements for GB smart metering devices. We will require, through requirements in the SMETS2 and CHTS, that gas and electricity smart meters, communications hubs and HCALCs are compliant with the Security Characteristics and are certified as such under the CPA scheme. The Smart Energy Code will require that the CPA certification is renewed every six years.

- Testing and certification:

In addition to the CPA requirements, we will require that energy suppliers, through the SMETS2, undertake testing to ensure that they are compliant with the requirements in SMETS, including with the GBCS. They will also be required to obtain certification from the ZigBee Alliance to confirm that the device is compliant with ZigBee Smart Energy Profile version 1.2 requirements described in the GBCS, and for electricity smart meters by the DLMS User Association as compliant with the DLMS COSEM requirements described in the GBCS. In addition we will require, through the Smart Energy Code (SEC), that devices enrolled with DCC are interoperable with the DCC's systems and that those devices have undergone testing to prove this in advance of being enrolled.

Similar requirements will be placed on the DCC with regard to the communications hub, through the CHTS.

- The physical interface between smart meters and Communications Hubs:

Energy suppliers will be required to provide the power supply to the communications hub when it is installed.



This could be achieved by connecting the communications hub to the smart meter or directly to the electricity supply. To facilitate this we will require in the SMETS2 and CHTS that energy suppliers and the DCC provide devices with a common Communications Hub Physical Interface, which should meet the physical requirements defined by the DCC.

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

The UK Government's vision is for every home and smaller businesses in Great Britain to have smart electricity and, where present, gas meters. Domestic consumers will also be offered an In Home Display (IHD). The roll-out of smart metering systems will play an important role in Britain's transition to a low-carbon economy and help us meet some of the long-term challenges we face in ensuring an affordable, secure and sustainable energy supply. It is also consistent with the European Directives 2009/72/EC and 2009/73/EC, the "energy third package" and the Energy Efficiency Directive (2012/27/EU).

The expected gross benefit of smart metering across the domestic and smaller non-domestic sectors is around £17.1 billion in present value terms, with combined gross present value costs of around £10.9 billion. This results in an expected net present value benefit of around £6.2 billion over the appraisal period to 2030.

The UK Government has concluded that the SMETS, CHTS and GBCS should be developed and mandated to ensure that interoperability can be achieved. Interoperability is a core requirement for the roll-out of smart meters. The effective operation of a competitive retail market for electricity and gas is dependent on customers being easily able to switch energy supplier without having to exchange metering equipment. Because energy suppliers are responsible for the installation of smart meters, there needs to be standardisation in the equipment they install so that smart meters installed by one energy supplier can be operated by another energy supplier. Interoperability between the smart meters, the communications hub (which will be provided by the DCC) and the DCC's systems is also provided for by the GBCS; this is needed to ensure DCC Users (energy suppliers, Network Operators, Energy Service Companies, etc.) can interact with the full range of smart meter functionality in a consistent manner.

It is also important for the efficient operation of the market and for consumer experience that parties have confidence that the functional, interoperability and security requirements described in the specifications have been met. We have therefore introduced a number of device testing and certification requirements on energy suppliers and the DCC.

During the development and notification of GB smart metering documents to date it has been acknowledged that additional requirements would need to be added to achieve full interoperability of equipment; in particular relating to the communications standards to be used in smart metering equipment. These additional requirements and some further amendments, including specifications for Prepayment Interface Devices and HAN Connected Auxiliary Load Control Switches (which are important for the realisation of consumer benefits), are the subject of this notification.

The process of developing Great Britain specifications has been thorough and collaborative – it has been undertaken in cooperation with industry experts, including consumer bodies, metering manufacturers, energy suppliers, network operators and other interested parties. Several of these industry experts have also been involved in the European standardisation process. Current and developing European standards, including as part of the M/441 and M/490 processes, have been reflected in the Great Britain specifications where possible.

10. Reference Documents - Basic Texts



References of the Basic Texts: Explanatory document on the notification of proposed amendments to the Great Britain smart metering regulations and technical specifications to support interoperability.

11. Invocation of the Emergency Procedure

No

12. Grounds for the Emergency

-

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

European Commission

Contact point Directive 98/34

Fax: +32 229 98043

email: dir83-189-central@ec.europa.eu