



**WHP TELECOMS LTD**  
HELENA HOUSE  
TROY MILLS  
TROY ROAD  
LEEDS  
LS18 5GN

Our Ref: NE324

12<sup>th</sup> March 2020

The Chief Planning Officer  
Northumberland National Park Authority  
Eastburn  
South Park  
Hexham  
Northumberland  
NE46 1BS

Dear Sir / Madam,

**Arqiva's Smart Meter Network**

**Installation of Electronic Communications Apparatus at Elsdon Village Hall, Elsdon, Northumberland, NE19 1AB**

**Permitted Development – Prior Approval Determination Application**

On behalf of Arqiva Ltd, we submit herewith an application for a prior approval determination for the installation of electronic communications apparatus at the above site as part of Arqiva's planned Smart Meter Network. The application follows the completion of our pre-application consultation exercise, reflecting so far as is practicable the guidance and comments offered.

Arqiva Ltd is designated as an Electronic Communications Code Operator under the provisions of the Communications Act 2003 and operates in accordance with the Electronic Communications Code (Conditions and Restrictions) Regulations 2003, as amended.

The application is submitted in accordance with the requirements of Part 16 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015, as amended, and seeks a determination as to whether the Authority's approval will be required for the siting and appearance of the development.

The application comprises:

- i. The written description of the development:

PROPOSED ARQIVA SMART METERING 1No. 1.5m OMNI AT 13.15m  
MOUNTED ON PROPOSED STREETWORKS POLE.

PROPOSED ARQIVA SMART METERING 1No. GPS ANTENNA AT 12.3m  
MOUNTED ON PROPOSED STREETWORKS POLE.

PROPOSED ARQIVA SMART METERING 1No. 3G OMNI ANTENNA AT  
11.6m MOUNTED ON PROPOSED STREETWORKS POLE.

**Registered office: WHP Telecoms Ltd - 401 Faraday Street, Birchwood Park, Warrington WA3 6GA**

PROPOSED ARQIVA SMART METERING EQUIPMENT ENCLOSURE  
MOUNTED ON CONCRETE PLINTH.

- ii. An O.S. site plan scale **(1:1250)** Reference Number: NE324 (Drawing No: 306308-00-004-MD001 Rev 1A) showing the location where the base station will be installed
- iii. Payment of £462.00 in respect of the application fee
- iv. The Developer's Notice
- v. The Developer's contact details

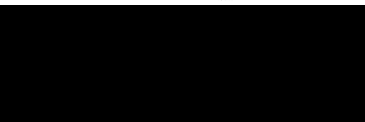
The following information is also provided to assist with your determination of the application:


- vi. Drawing reference numbers – NE324 (306308\_01\_100\_MD001 Rev1A; 306308\_01\_101\_MD001 Rev1A; 306308\_01\_150\_MD001 Rev1A) providing further details of the siting, layout and design of the development
- vii. A supporting Planning Statement that includes design considerations
- viii. An ICNIRP Certificate

Please also take this application and the details contained within it as due notification under Regulation 5 of the Electronic Communications Code (Conditions and Restrictions) Regulations 2003, as amended. In particular, you are given notice of the intention to install the electronic communications apparatus that is described in more detail in the application documentation (including the scale drawings) and to be located as shown on the application plans.

We trust everything is in order, but if you do require any further information or clarification, please do not hesitate to contact me.

Yours faithfully

  
Damian Hosker BA (Hons) MA MRTPI  
Principal Planner

  
**On behalf of Arqiva Ltd**

**Developer's Contact Details**

All correspondence relating to this application should be directed to the undersigned. However, in accordance with The Town and Country Planning (General Permitted Development) (England) Order 2015, all correspondence to the developers, in the first instance, should be sent to:

Arqiva Ltd, Town Planning Team, Crawley Court, Winchester, Hampshire SO21 2QA

Email: 

## Developer's Notice

Proposed development at: Elsdon Village Hall  
Elsdon  
Northumberland  
NE19 1AB

National Grid Reference: Easting 393793 Northing 593339

I hereby give notice, in accordance with paragraph A.3(1) of Part 16 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended, that **WHP on behalf of Arqiva Ltd, Crawley Court, Winchester, Hampshire SO21 2QA**, will be applying to Northumberland National Park Authority for a determination as to whether the prior approval of the authority will be required for the siting and appearance of the following permitted development:

PROPOSED ARQIVA SMART METERING 1No. 1.5m OMNI AT 13.15m MOUNTED ON PROPOSED STREETWORKS POLE

PROPOSED ARQIVA SMART METERING 1No. GPS ANTENNA AT 12.3m MOUNTED ON PROPOSED STREETWORKS POLE.

PROPOSED ARQIVA SMART METERING 1No. 3G OMNI ANTENNA AT 11.6m MOUNTED ON PROPOSED STREETWORKS POLE.


PROPOSED ARQIVA SMART METERING EQUIPMENT ENCLOSURE MOUNTED ON A CONCRETE PLINTH.

The application will be made to:

Head of Planning  
Northumberland National Park Authority  
Eastburn  
South Park  
Hexham  
Northumberland  
NE46 1BS

The local planning authority has 56 days from the date it receives the application to consider whether prior approval will be required for the siting and appearance of the development proposed and, if so, to grant or refuse such approval and to communicate its decision to the applicant. The application will be made available for public inspection at the offices of the local planning authority during usual office hours.

Any person who wishes to make representations about the siting and appearance of the proposed development may do so in writing to the local planning authority at the above address. A period of at least 14 days, from the date of this notice, will be allowed for any such representations to be received by the Local Planning Authority.

Name: \_\_\_\_\_ Damian Hosker BA (Hons) MA MRTPI \_\_\_\_\_  
Signed: \_\_\_\_\_  N. Damian Hosker \_\_\_\_\_  
On Behalf of: \_\_\_\_\_ Arqiva Limited \_\_\_\_\_  
Date: \_\_\_\_\_ 10<sup>th</sup> March 2020 \_\_\_\_\_

**COPY**

Our Ref: NE324

11<sup>th</sup> March 2020

FAO: Rita Colby  
Elsdon Village Hall Committee  
Vine Cottage  
Elsdon  
Northumberland  
NE19 1AA

Dear Rita,

**Arqiva Ltd: Installation of Electronic Communications Apparatus at Elsdon Village Hall, Elsdon, Northumberland, NE19 1AB**

Please find enclosed a Notice informing you that Arqiva Ltd, will be submitting an application to Northumberland National Park Authority for a prior approval determination for the installation of electronic communications apparatus at this site.

This Notice is provided in accordance with Paragraph A.3(1) of Part 16 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015, as amended which requires landowners to be informed of the submission of the application.

You will see from the Notice that you may make representations about the application direct to the Local Planning Authority should you wish to do so.

Yours faithfully,

Damian Hosker BA (Hons) MA MRTPI

**On behalf of Arqiva Ltd**

**DECLARATION OF CONFORMITY WITH  
PUBLIC RF EXPOSURE GUIDELINES  
(FORMERLY KNOWN AS “ICNIRP DECLARATION”)**

Arqiva  
Crawley Court  
Winchester  
Hampshire  
SO21 2QA

Declares on behalf of Arqiva (Smart Metering) that the proposed equipment and installation as detailed in the attached planning / GPDO application, and any existing equipment at:

ELSDON VILLAGE HALL  
ELSDON  
NORTHUMBERLAND  
NE19 1AB

Site ID: 306308  
Nominal Site ID: NE324

Plan View Drawing Reference: 306308-01-100-MD001  
Elevation View Drawing Reference: 306308-01-150-MD001

is designed to be in full compliance with the requirements of the radio frequency (RF) public exposure guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the EU Council recommendation of 12 July 1999\* “on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)” in all areas legitimately accessible to the public.

\*Reference: 1999/519/EC

Date: 9<sup>th</sup> March 2020

Signed: 

Name: Andrew Cottam

Position: Project Engineer

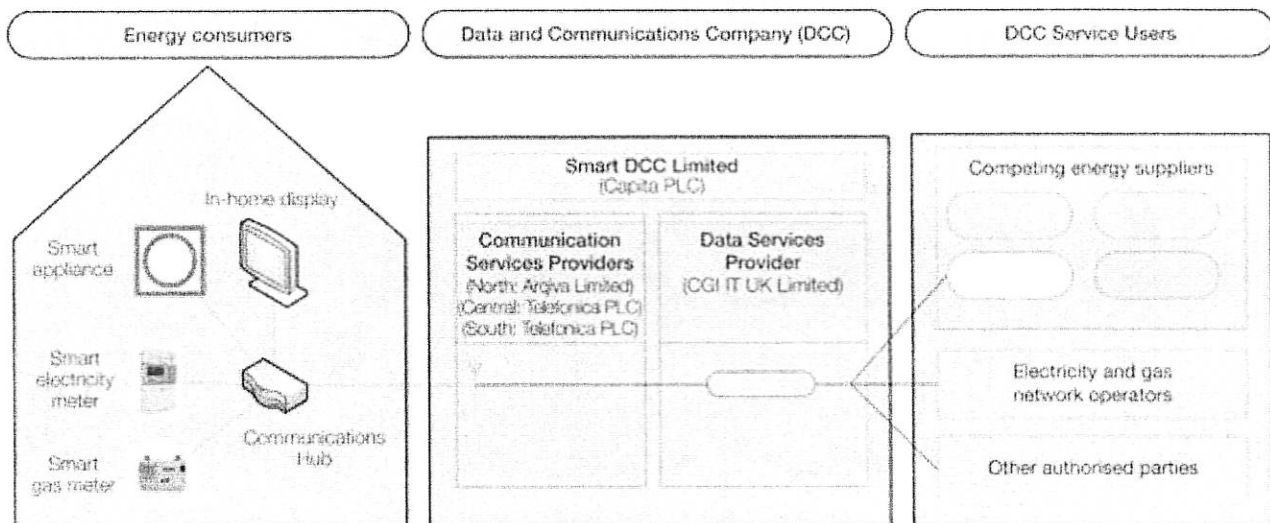




# The Smart Metering System

This leaflet explains how the smart metering system will work from 2016, when a new shared smart metering national infrastructure will be in place. Some energy suppliers are already offering smart meters using their own systems and technologies.

The diagram below illustrates the main parts of the smart metering systems showing the equipment and communications within energy consumers' homes. It shows the organisations that will use the information provided by smart meters (DCC Service Users), and the system provided by the Data and Communications Company (DCC) which will link these organisations with the smart meters.



## Equipment and communications within energy consumers' homes

The smart metering equipment installed by energy suppliers will normally consist of a smart electricity meter, a smart gas meter, and a communications hub (which will typically sit on top of the electricity meter). Energy suppliers will offer all domestic customers an In-home Display at no upfront cost as part of the installation process. These devices are explained below.

## ■ Smart electricity and gas meters

Existing electricity and gas meters in consumers' homes will be replaced with smart versions. Unlike traditional meters, they automatically send meter readings to energy suppliers, and support new functions including enabling smart appliances and time of use tariffs.

#### ■ In-home Display

The In-home display will allow consumers to see what energy they are using and how much it is costing in near real time. The display can also show information about the amount of energy used in the past day, week, month and year. This will help people to understand and control their energy consumption.

#### ■ Communications hub

The communications hub has two functions. Firstly it allows the smart meters and In-home Display (and other devices which consumers may wish to use) to communicate with each other over a Home Area Network, in a similar way to wireless computer networks (Wi-Fi). Secondly it provides a link to the Wide Area Network which allows information to be sent to and from meters by energy suppliers, energy network operators and energy service companies.



Organisations that will use the information provided by smart meters (DCC Service Users)

Consumers will have a choice about how their energy consumption data is used, apart from where it is required for billing and other activities that energy companies are legally required to undertake. Other organisations (for example, switching sites) will wish to access consumer data, but will only be able to do so if the customer agrees.

#### ■ Energy Suppliers

A consumer's energy supplier will communicate remotely with smart metering equipment to take meter readings, including on change of supplier or change of tenancy, as well as to update configuration and pricing information.

#### ■ Energy Networks

The organisations that operate the energy network infrastructure will be able to access data on an aggregated basis, to help them understand the loads on their network at the local level and to respond to loss of supply issues. They will have better information for managing and planning investment

activities which will help the move towards 'smart grids' that allow the monitoring and active control of generation and demand in near real-time.

#### ■ Organisations offering services

Consumers can choose to allow other organisations to have access to the data from their smart meter. For example, switching sites could use accurate information on the amount of energy used to advise consumers on the best tariff and energy supplier. As the rollout proceeds, an increasing range of devices should become available to help consumers manage their energy usage, including smart appliances which can operate automatically when electricity is cheaper.

Smart meter communications outside the home: the DCC and the Wide Area Network

The DCC will put in place communications across Great Britain to send and receive information from smart meters to energy suppliers, energy network operators and energy service companies. The DCC will be operated by Capita PLC under a licence regulated by Ofgem.

The DCC will manage three main subcontractors. CGI IT UK Limited is the Data Services Provider, which controls the movement of messages to and from smart meters. Arqiva Limited and Telefónica UK Limited are the Communications Service Providers who will put in place the Wide Area Network.

Arqiva will provide the network for Scotland and the north of England using long-range radio communications. Such infrastructure and technology is already used for other important national communications networks, such as those for digital television and emergency services.

Telefónica's network will cover the rest of England and Wales using cellular radio communications (technology typically used in mobile phone systems) plus "mesh" radio technology to supplement connectivity in a small number of hard to reach locations (such mesh systems have been used in smart meter installations in Sweden, Norway and Finland).

#### Further information

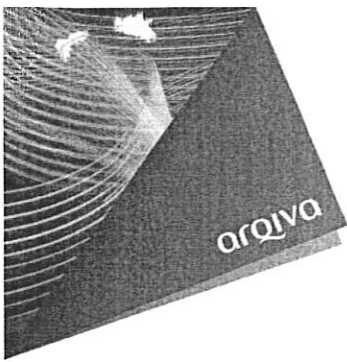
Further information about smart meters can be found on the Government's website at <https://www.gov.uk/smart-meters-how-they-work>.

#### Leaflets in this series

Smart Metering Implementation Programme: information leaflet: <https://www.gov.uk/government/publications/smart-metering-implementation-programme-information-leaflet>

Smart Metering Implementation Programme non-domestic leaflet: <https://www.gov.uk/government/publications/smart-metering-non-domestic-leaflet>





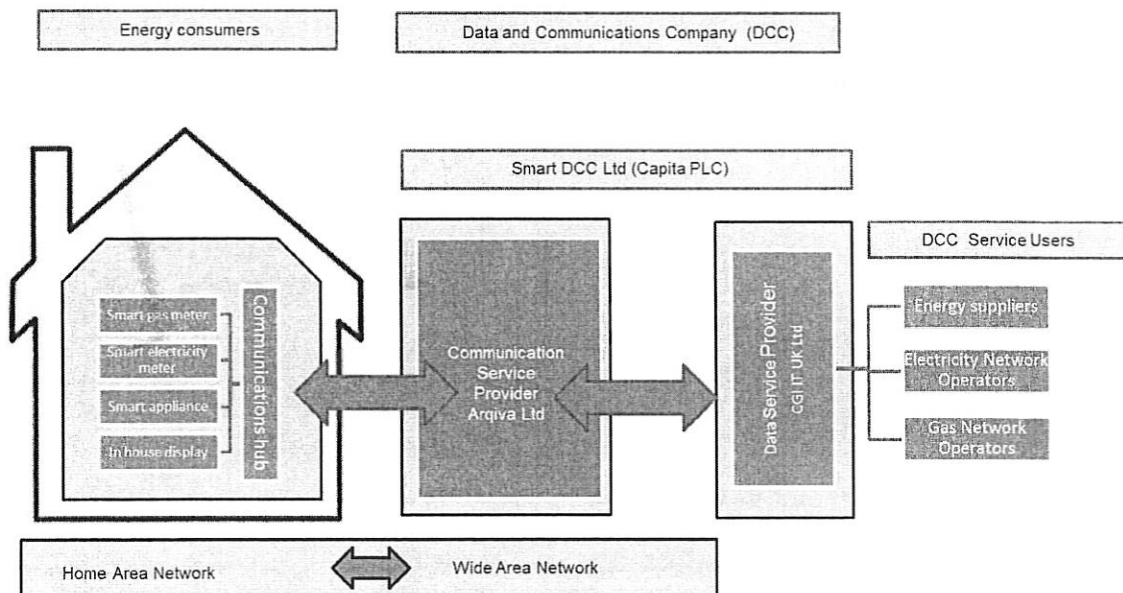
## The Smart Metering Network

The Smart Metering programme is described in the enclosed leaflet.

### The Wide Area Network

In Scotland and Northern England Arqiva is responsible for providing the Wide Area Network that connects Smart Metering equipment in consumers' homes and businesses to the energy suppliers and network operators.

To do this we need to establish a network of Smart Metering base stations that communicate by radio with the Smart Metering equipment.



### Smart Metering Base Stations

Smart metering base stations consist of a set of radio antennas mounted on a tall structure (either an existing one, such as a mast, rooftop or water tower, or a new purpose-built structure if no alternative is available) connected to a cabinet containing radio transmitting equipment.

Smart Metering base stations need to be located where they can provide the connectivity for the smart metering network. This means they have to be relatively close to the communications hubs in consumers' homes and businesses. The base

stations must be securely located and accessible for maintenance. They need an electricity supply and a telecommunications connection to transmit the data they have collected back to the energy suppliers.

### **Safety**

Smart Metering base stations emit nothing other than ordinary radio signals. They are required to comply with nationally and internationally accepted safety guidelines and certificates to this effect are provided by Arqiva with all planning applications. Arqiva can provide more information on the safety of its equipment if required.

### **Arqiva**

Arqiva is a British company which builds, owns, hosts and operates shared radio communications infrastructure. Arqiva owns and operates the UK's TV and radio broadcasting transmitter network and it hosts a large number of other radio transmission services on its sites.

