

# Item 3: SEC Update on Non-Communicating SMART Meters

PAC – Gas Smart Metering

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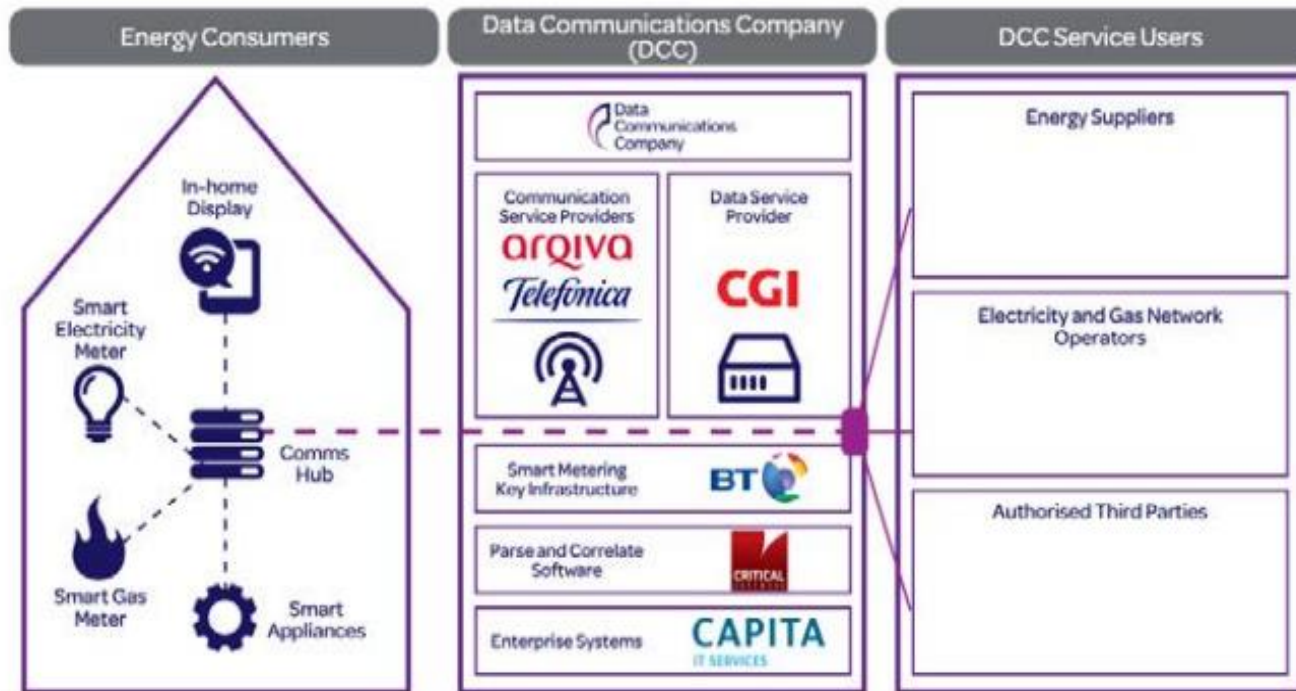
# Introduction

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- **Purpose:** To provide a brief overview of the operation of DCC enrolled Gas Smart meters, the current Smart Energy Code (SEC) Operations Group reporting on DCC performance, and Issue management

# Smart Metering overview



- In SMETS1 & SMETS2+ the Communication Hub (CH) enables Wide Area Network (WAN) interactions and is generally powered by the Electricity Smart Metering Equipment (ESME) (therefore located within or on top of the meter).
  - There is an exception referred to as 'Hot Shoe' set up whereby the Communication Hub is installed via a power cable which some Suppliers utilise when completing a Gas only Smart Meter installation.
- Gas Smart Metering Equipment (GSME) utilise batteries for power and are designed to 'wake up' every half an hour to send and receive information from the CH.
- A SMETS2+ CH has an internal but separate function called the Gas Proxy Function (GPF) which will retrieve and store Gas Meter data (Consumption, Meter Reads, Alerts etc) whenever the Gas Meter wakes up. This allows for instantaneous access to Gas data without the need to wait for the 'wake up' cycle.
- The GSME is often located away from the ESME (and therefore the CH) which can hinder Home Area Network (HAN) communication (dependent on location, distance and building materials).

# HAN Communication



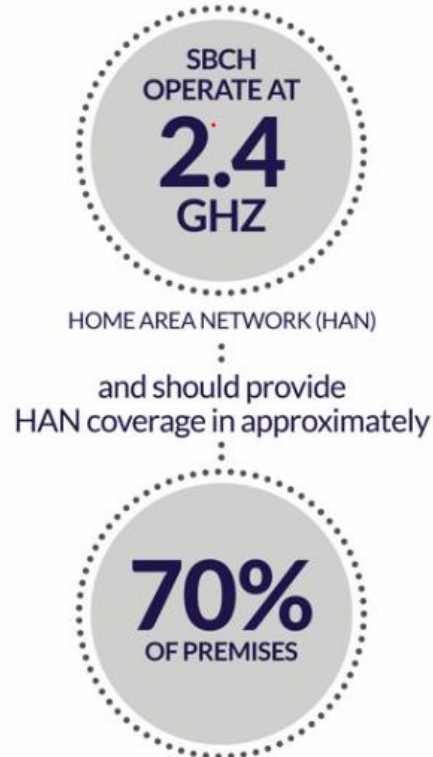
## SINGLE BAND v DUAL BAND COMMS HUBS

### Single Band Comms Hubs (SBCH)

THE VAST MAJORITY OF HOMES ARE WELL SUITED TO SINGLE BAND SMART METERS AND COMMS HUBS, BUT SOME NEED A LITTLE EXTRA HELP



HOMES WITH ESPECIALLY THICK WALLS OR FLATS WHERE THE METERS ARE FAR AWAY FROM THE PROPERTY, NEED DIFFERENT TECHNOLOGY



### Dual Band Comms Hubs (DBCH)

WILL UNLOCK **25%** MORE PROPERTIES

**2020** these meters became available at scale



DUAL-BAND ALLOWS MORE HOMES TO TAKE CONTROL OF THEIR ENERGY USE AND BRINGS THE NATION ONE STEP CLOSER TO NET ZERO

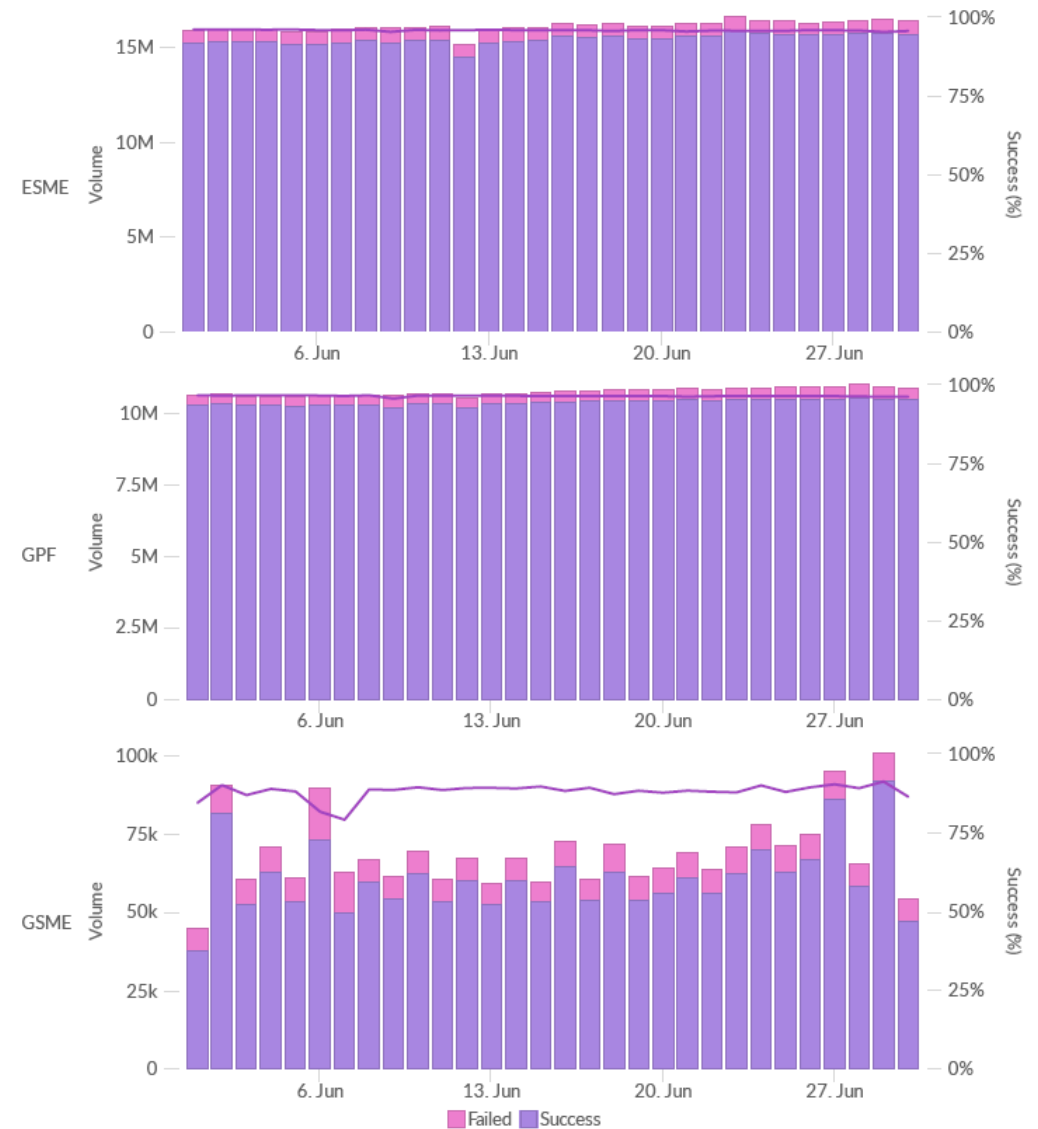
Expected increase coverage  
**96.5%**  
OF PREMISES  
(BEIS approximation)

These hubs will enable millions more British homes to benefit from smart metering



# OPSG Reporting and Limitations

- The SEC Operations Group (OPSG) under the SEC Panel, are responsible for reviewing a variety of reporting produced by the DCC on the performance of the Smart Metering Service
- Over the the last few years, significant improvements have been made to provide a more granular and reflective suite of reporting that aligns with the User experience and business processes (see example)
- However, due to the design of the systems the reporting is representative of whether messages have been successfully sent and received as per response and error codes (as opposed to whether they contain correct or accurate data)
- The DCC are unable to see within the ‘payloads’ or requests/responses and therefore there will be examples where there has been a successful Meter Read sent to the DCC User although the data within may be blank or missing read periods.
- Only those Users are able to confirm whether they have successfully received adequate data from those requests for Billing or Settlement purposes. If data is missing then this could be indicative of how the request was composed, Device Issues, and/or Communication Issues

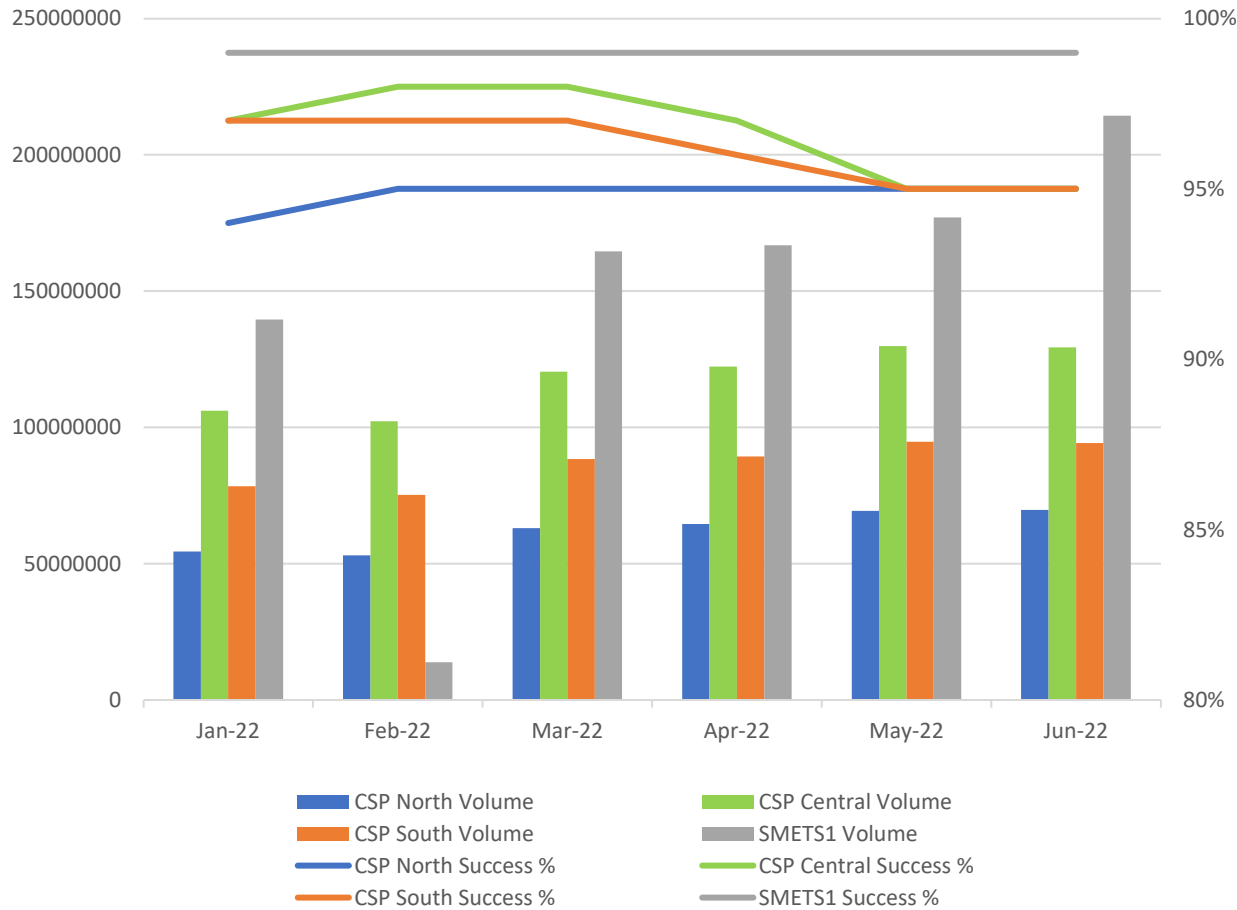


Combined Read Requests across SMETS1 and SMETS2 CSP regions

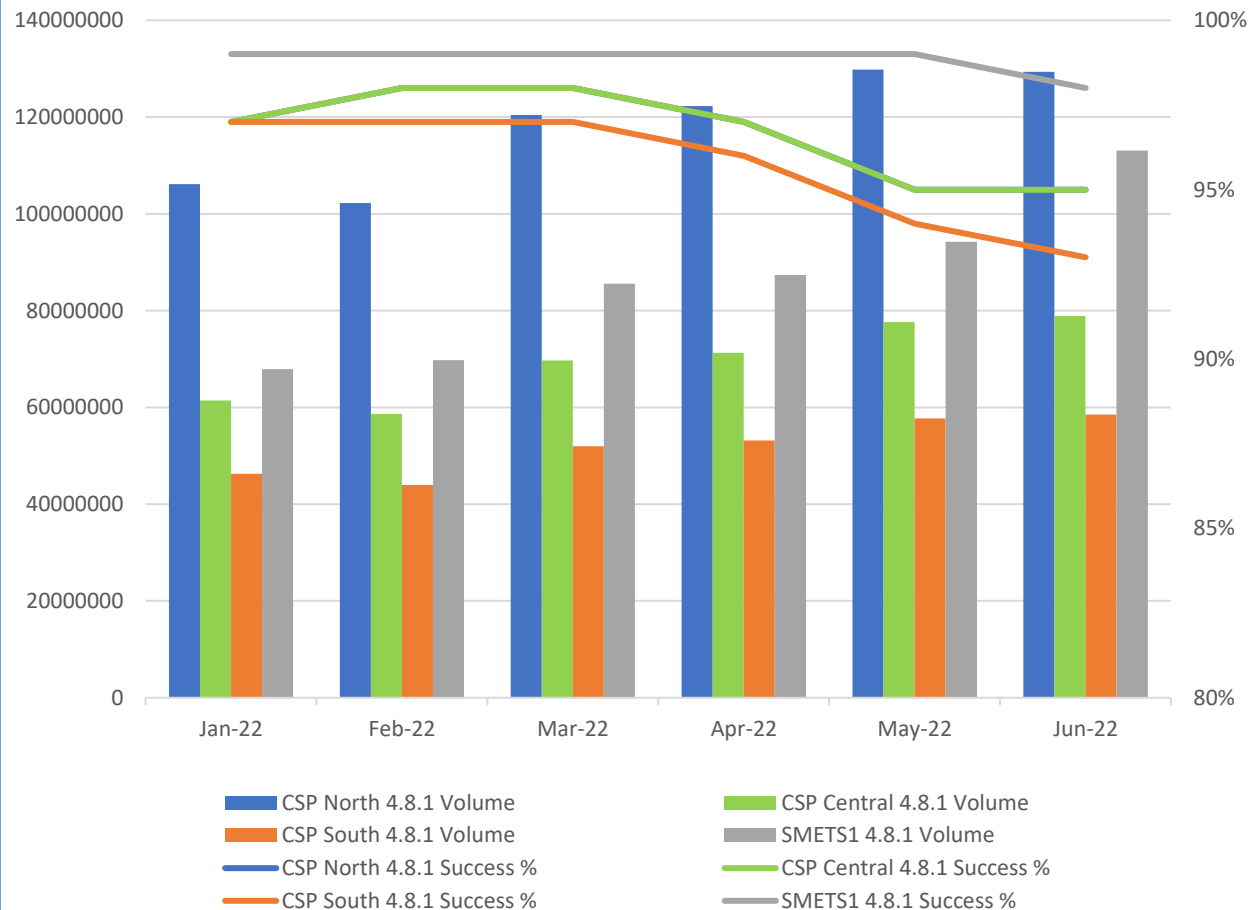
# Meter Read Performance (End-to-End)



SR4.6.1 'Retrieve Import Daily Read Log'



SR4.8.1 'Read Active Import Profile Data'



# OPSG Issues Log

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- The OPSG has an Issues log where we raise and track issues related to the Smart Metering Systems and Services.
- Collaborative effort is required across multiple parties to identify and resolve issues of this nature and we would encourage parties to raise issues with the OPSG if they are seeing this in large volumes (isolated issues generally require individual investigation and do not necessarily suggest systemic problems).
- The issues log is intended to drive forward the identification and resolution of systemic issues within the DCC System or Smart Metering Devices, rather than individual User or device issues.
- Examples being:
  - Performance issues (Requests not meeting SEC Targets)
  - Party/Process Non-compliance as per SEC requirements
  - Inefficient or ineffective processes and systems
- If a SEC party would like to raise an issue with the OPSG for consideration then please contact [SECAS@gemserv.com](mailto:SECAS@gemserv.com)

# Appendix: What is “Alt HAN”?

## What is Alt HAN?

- Alternative Home Area Network
- The delivery of a technological solution to reach the c2.52% percent of premises the mainstream smart solution cannot cater for.

## Alt HAN is a range-extending service

“Missing piece of the jig-saw”, where:

- Meter + DCC services  $\neq$  full smart customer experience
- Because 2.4 GHz or 868 MHz cannot propagate far enough to pair with gas meter and/or IHDs/CADs
- Obligation on energy suppliers to use it where needed as part of smart meter rollout.

## Alt HAN is an organisation and a company

- A “regulated co-operative” of suppliers
- Established in 2016
- Single, regulated purpose to deliver Alt HAN
- Alt HAN Forum as decision-maker
- Alt HAN Co. as contracting party
- Empowered by the SEC
- Underpinned by licence obligations on suppliers
- Costs recovered via DCC charges.

