

## STANDARD METERING COMMUNICATION SERVICES RECOGNISED BY THE CENTRAL DATA COLLECTION AGENT (CDCA)

| Services currently in place but are being phased out |                                      |                                                    |                                                                                                                                                              |
|------------------------------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identifier                                           | Description                          | Medium                                             | Notes                                                                                                                                                        |
| PSTN                                                 | Public Switched Telephone Network    | Dedicated Connection                               | Standard BT Connection, only offered to 2025 however BT have confirmed that something will be available in its place – unknown what yet possibly SIP         |
| ISDN                                                 | Integrated Services Digital Network  | Dedicated Connection                               | Standard BT Connection only offered to 2025, nothing to replace it currently                                                                                 |
| CTN (PABX LINK)                                      | Private Switched Telephone Network   | Dedicated Connection                               | Private network equivalent to PSTN, currently being upgraded to have an underlying IP backbone which requires moving to the DDI connection method below      |
| CSD                                                  | Circuit Switched Data                | GSM Radio (Global System for Mobile Communication) | Equivalent to PSTN/ISDN dialling over mobile network                                                                                                         |
| PAKNET                                               | X.25 Packet Data Network             | Radio                                              | Legacy radio connection to metering provided by Vodafone, is being discontinued                                                                              |
| 2G (GPRS)                                            | IP Connection over 2G mobile network | GSM Radio                                          | Allows connectivity to sites over the internet or over VPN to a sim provider will be being replaced between 2020 and 2025                                    |
| Services currently in place                          |                                      |                                                    |                                                                                                                                                              |
| Identifier                                           | Description                          | Medium                                             | Notes                                                                                                                                                        |
| SATELLITE                                            | IP Connection over Satellite Comms   | Satellite Link                                     | Uses satellite broadband links for very remote sites where a fixed connection is impossible and mobile coverage is not available                             |
| FIXED IP (INTERNET)                                  | Fixed IP address on the internet     | Local Internet Connection                          | Uses the sites own internet connection and one of their internet facing IP addresses to allow access to the site – will require the customer to allow access |

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| FIXED IP (INTERNET COHERENT)            | Fixed IP address on the internet using a mid-stage platform to provide the address | Local Internet Connection & Coherent Platform                                                                 | Uses the sites own internet connection, just requires access to the internet and then a fixed address is allocated by the provider Coherent, this does not require the customer to allow access to anything other than the internet                |
|-----------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FIXED IP (VPN)                          | Fixed IP address in a private network linked over the internet                     | Private Network over Local Internet Connection                                                                | Creates a tunnel between two networks allowing access to the private addresses, uses the internet as a carrier but keeps sites off the internet directly                                                                                           |
| FIXED IP (LINK)                         | Fixed IP address in a private network linked directly                              | Dedicated Business to Business Connection                                                                     | As above but with a dedicated link between the two businesses rather than using the internet as a carrier. Is very expensive                                                                                                                       |
| CTN (DDI LINK)                          | Private Switched Telephone Network                                                 | Dedicated Connection @ Site – uses ISDN @ DC                                                                  | Upgraded version of CTN, requires ISDN or PSTN dialling to connect                                                                                                                                                                                 |
| <b>Future Services not yet in place</b> |                                                                                    |                                                                                                               |                                                                                                                                                                                                                                                    |
| Identifier                              | Description                                                                        | Medium                                                                                                        | Notes                                                                                                                                                                                                                                              |
| 4G (LTE)                                | IP Connection over 4G mobile network                                               | LTE Radio (Long Term Evolution)                                                                               | Replacement for GPRS in this market, will use the same radio frequencies but 4G technology which is promised to offer better connectivity                                                                                                          |
| 5G (LTE+)                               | IP Connection over 5G mobile network                                               | LTE Radio                                                                                                     | Will likely not be used for metering as it is very high bandwidth and aimed at high speed services                                                                                                                                                 |
| SIP                                     | Session Initiation Protocol                                                        | Virtual Service offered over existing internet connection (or a separate internet connection dedicated to it) | Seen as a replacement for voice services, companies are now looking at delivering modem style communication over the SIP platform as well – this is being tested within the metering world, don't know if anyone is using it for live services yet |