



# Using Industry Data to Facilitate the Smart Meter Rollout

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Chief Executive, ElectraLink

# ElectraLink Background



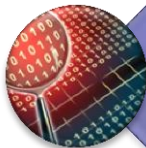
Founded in 1997 to provide regulated data transfer services (DTS) to the GB electricity market. Under ownership of the now 6 Distribution Network Operators.



Procure and manage model has ensured a cost effective and secure DTS that facilitates competition. Connected to all market participants in retail electricity and 74% of domestic retail gas.



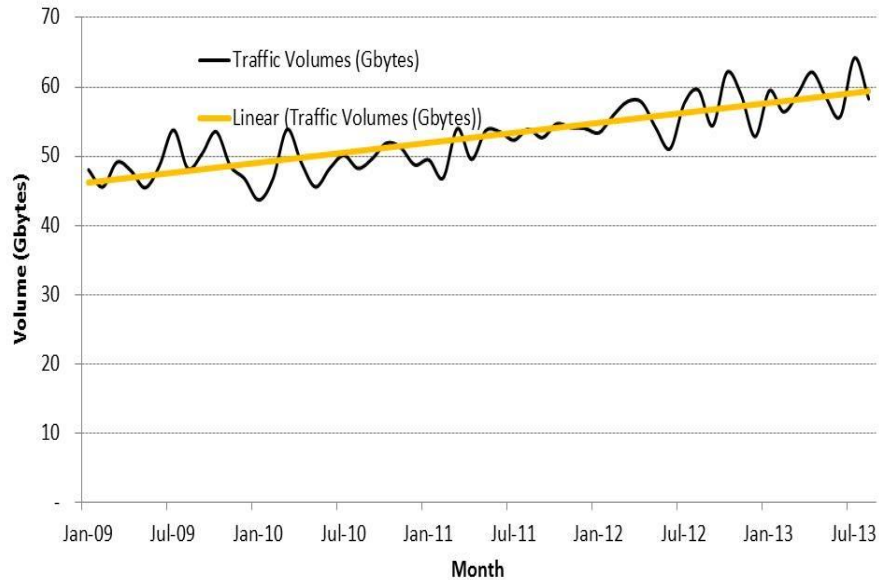
A growing Governance Services business unit provides value-add secretariat to electricity and gas industry codes.



Data Analytics and reporting services for industry introduced in 2012 after DTS users granted ElectraLink permission to store and analyse DTS data

# Growth in DTS Usage

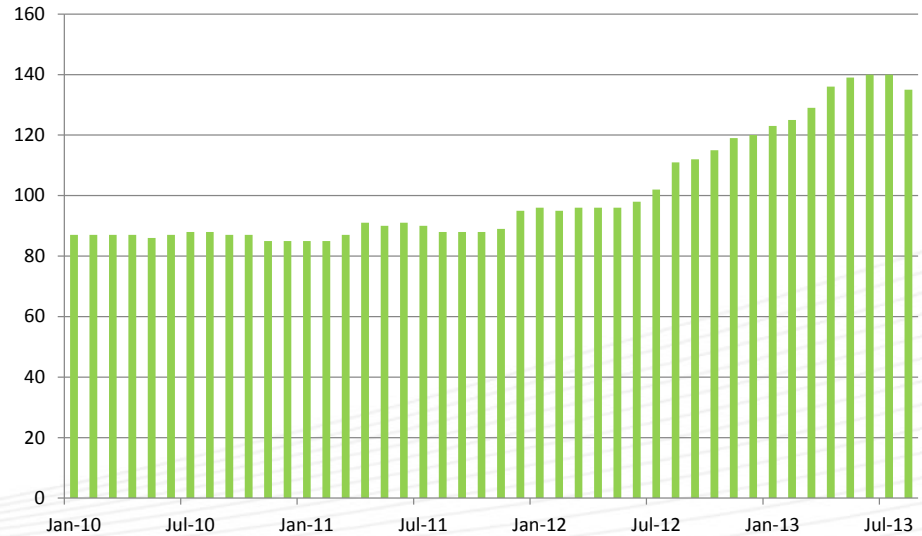
Usage of the DTS



## August 2013 Service Metrics

- 2.3 million messages
- 96.3% delivered in 5 minutes
- 100% delivered in 2 hours

Connections to the DTS



# Data Set = Electricity Market Processes

NHH ONLY Appoint agents to the Metering Point (New Supplier - CoS) (A166)

Obtain NHH Meter Readings (A110)

Operate PPMs including the re

Prepare Supply Quote (A599)

Prepayment Meter Infrastruct

Register MPAN and Appoint A

Registration on a New Connec

Registration on Change of Sup

Resolve Objection (A836)

Settlement and Reconciliation

SVA Agent (A1143)

Transfer Metering Point betw

Update MPAD Items and Cust

Updates to Distribution held N

Updates to Supplier held MPA

Validate and Aggregate Data a

HH Meters: Administer Metering Point Data (A991)

HH Meters: Obtain Readings (A110)

HH Meters: Process Meter Reading

HH ONLY Appoint agents to the Me

Industry Process View (A0)

Install, Replace, Energise, Remove

Install, Replace, Energise, Remove

Install, Replace, Energise, Remove

**Issue Full Refreshes (A402)**

Issue PPM Device (A1053)

**Issue Selective Refreshes (A403)**

Make Customer Appointment (A13)

Manage Market Domain Data (A10)

Manage Planned Outages (A1055)

Manage PPMs (A222)

Manage Supply (Install, and manag

Manage Supply Faults (A1062)

Managing Supply Faults and Outag

Meter Operations (A718)

Meter Reading on Change of Suppl

Minimise Illegal Abstraction (A783)

**MPAS Refreshes/Resends and Rep**

New NHH DC Obtain and Generate

NHH Meters: Administer Metering

NHH Meters: Obtain Readings (A93)

NHH Meters: Process Meter Reading

Allocate PPM Transactions (A1809)

Appoint agents (A161)

Appoint/De-appoint Agents to the Metering Point (same Supplier / New Connection) (A165)

Appoint/De-appoint DA (NHH & HH) (A1011)

Appoint/De-appoint HH DC (A1135)

Appoint/De-appoint HH MO (A1129)

Appoint/De-appoint NHH DC (A1028)

Appoint/De-appoint NHH MO (A1023)

Cable Installation and Network Connection (A100)

Change of Measurement Class (A450)

Change of Measurement Class : NHH to HH, Same Supplier (A1161)

Change of Measurement Class: NHH to HH, Coincident with CoS (A1162)

**Contact Notice Facility (A809)**

CoS Objection Process (A575)

DA Validation (A443)

Daily Profile Production (A912)

Data Collection and Processing of Meter Readings (including CoS reading) (A104)

Data Validation and Aggregation (A910)

Debt Assignment for PPM (A1800)

De-energisation (A928)

De-Energise, Energise & Disconnect (A109)

Determine NHH DR Site Visit Requirement (A1146)

Disconnection (A933)

DUoS Billing (A108)

Energise Metering Point (A430)

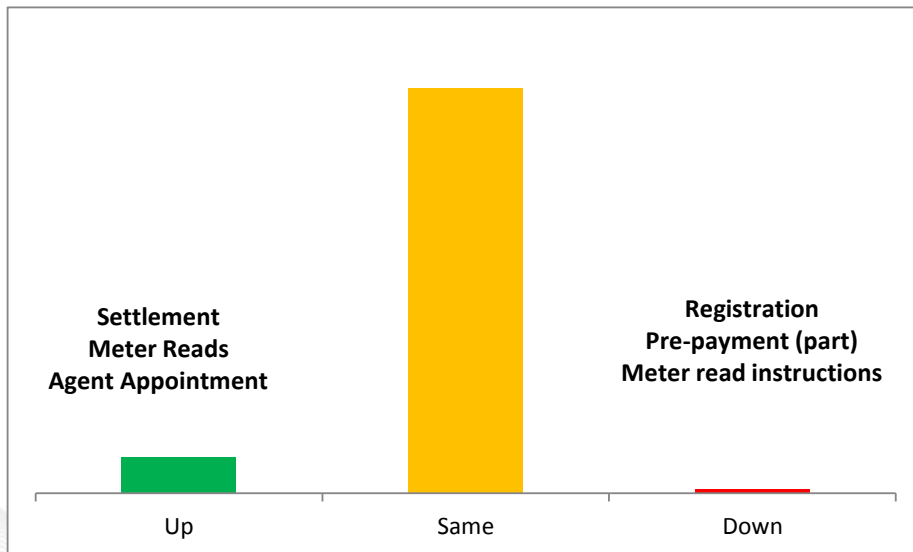
**Generation of new/additional MPAN Core(s) (A205)**

Likely to move from DTS with formation of DCC and centralisation of registration

# Impact of DCC on DTS Usage

- Up - Flow expected to grow in volume
- Same - Flow expected to remain constant/grow at organic rate
- Down - Flow expected to decline in volume

Breakdown of Q2 2013 DTS Traffic



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# Industry is Implementing Smart to the DTS

- DTC CP 3336 - Revisions to assess condition reporting
- DTC CP 3349 – Addition of new meter types for smart meters
- BSC P272 - Mandatory HH settlement for PC5-8 smart meters
- BSC CP1388 - Meter Technical Details for Smart Meters
- BSC CP1395 - Distribution of Configuration Details for Smart Meters
- BSC CP1390 - New MDD entity for SMETS Version
- MAP CP150 - Update to MAP09 to introduce a new data item in the MPAS address for the UPRN
- DTC CP3362 - Revisions to the DTC related to the SMIP Consequential Changes: Registration
- DTC CP3378 - Amendments to structure of the D0204 ‘selective or full refresh of MPAS details’ data flow
- DTC CP3379 - Inclusion of the Smart MPAD data items in the D0089 ‘Notification from MPAS of changed metering point details’.



# DTS Data Relevant to Smart Meter Rollout

- Meter location
  - Meter installation, change of supply, various meter operations activity
- Meter installations
  - Meter installation
- Site visit codes
  - Visits to site e.g. meter reads
- Installation Issues
  - Meter installation
- Change of supply
  - Change of supply events



# How Can This Data be Analysed

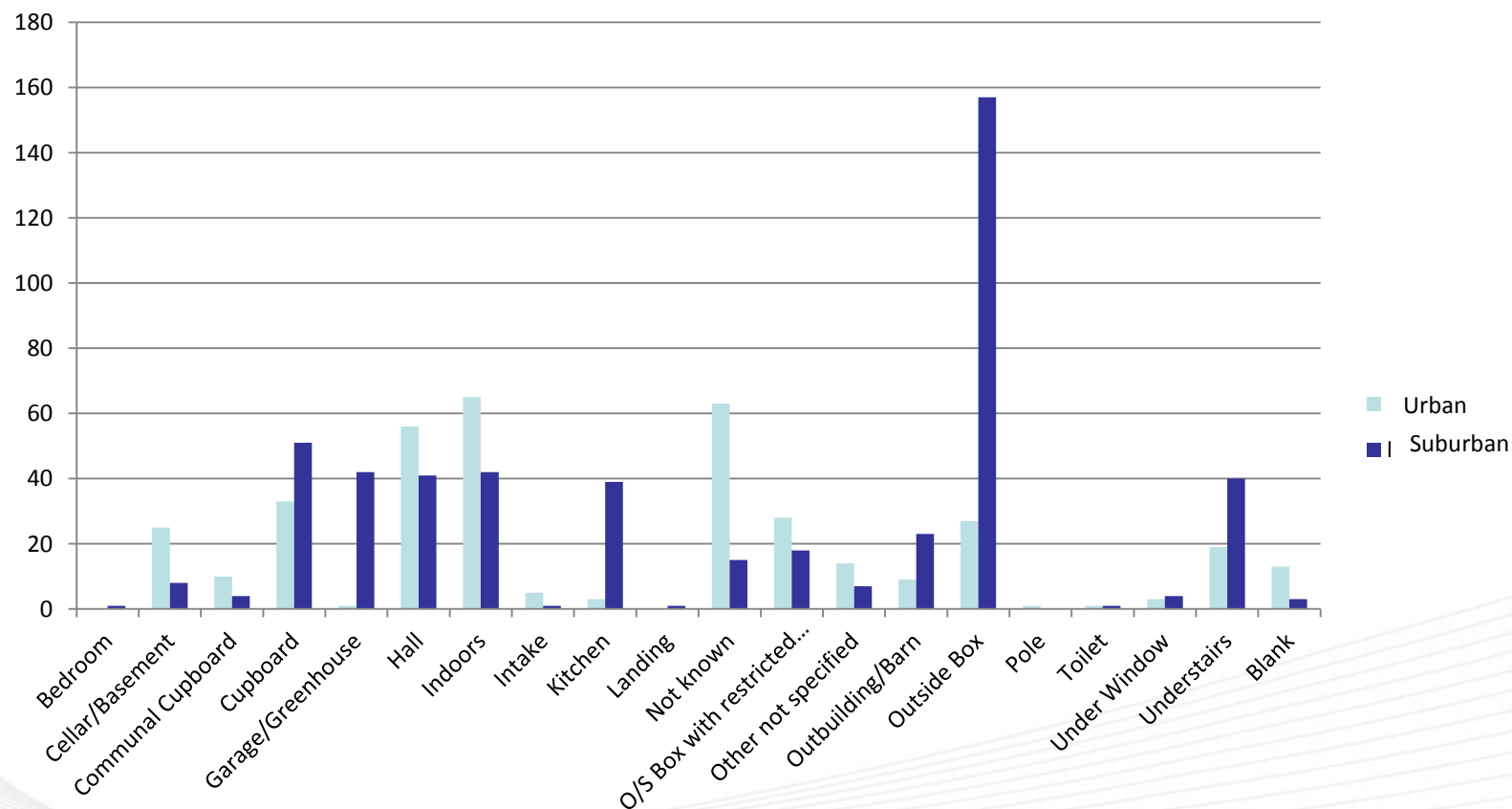
- Suppliers strategy
  - Where to target
  - Likely issues installation issues
- MOP strategy
  - What specific equipment am I likely to need
  - How many are the teams going to need
- DNO planning
  - What is the likely level of installation issues
  - What size work force will be required
- Seeing how behaviour changes as a result of Smart





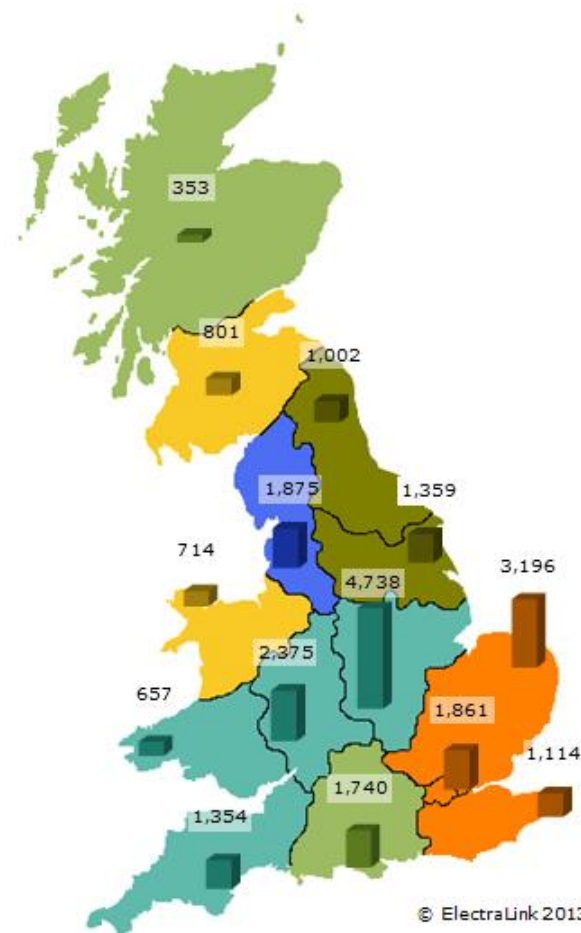
# Suppliers Strategy – meter location

## Meter Location – Sample Comparison



# Supplier Strategy – benchmark smart meter install against the rest of the market

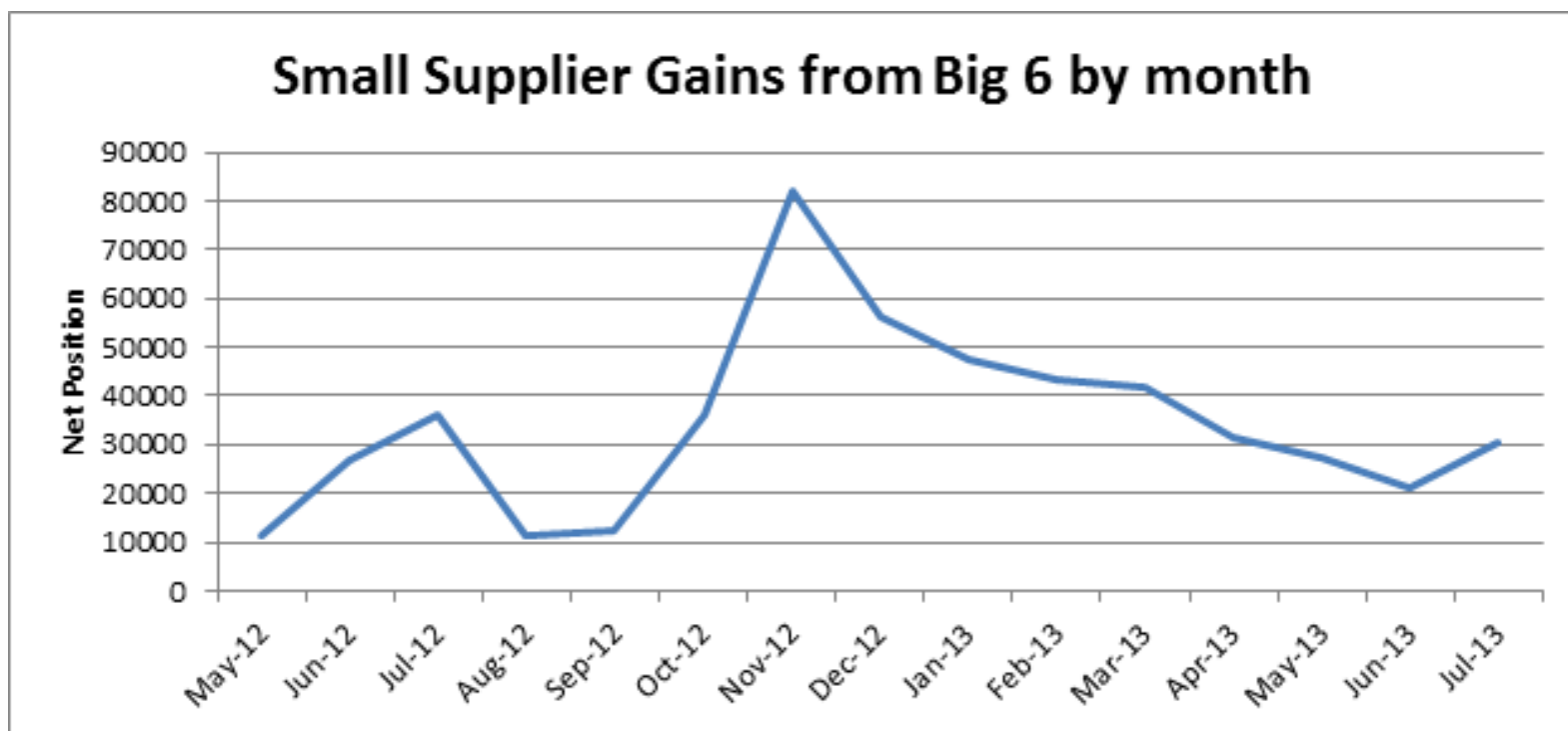
## Installs by GSP Region August 2013



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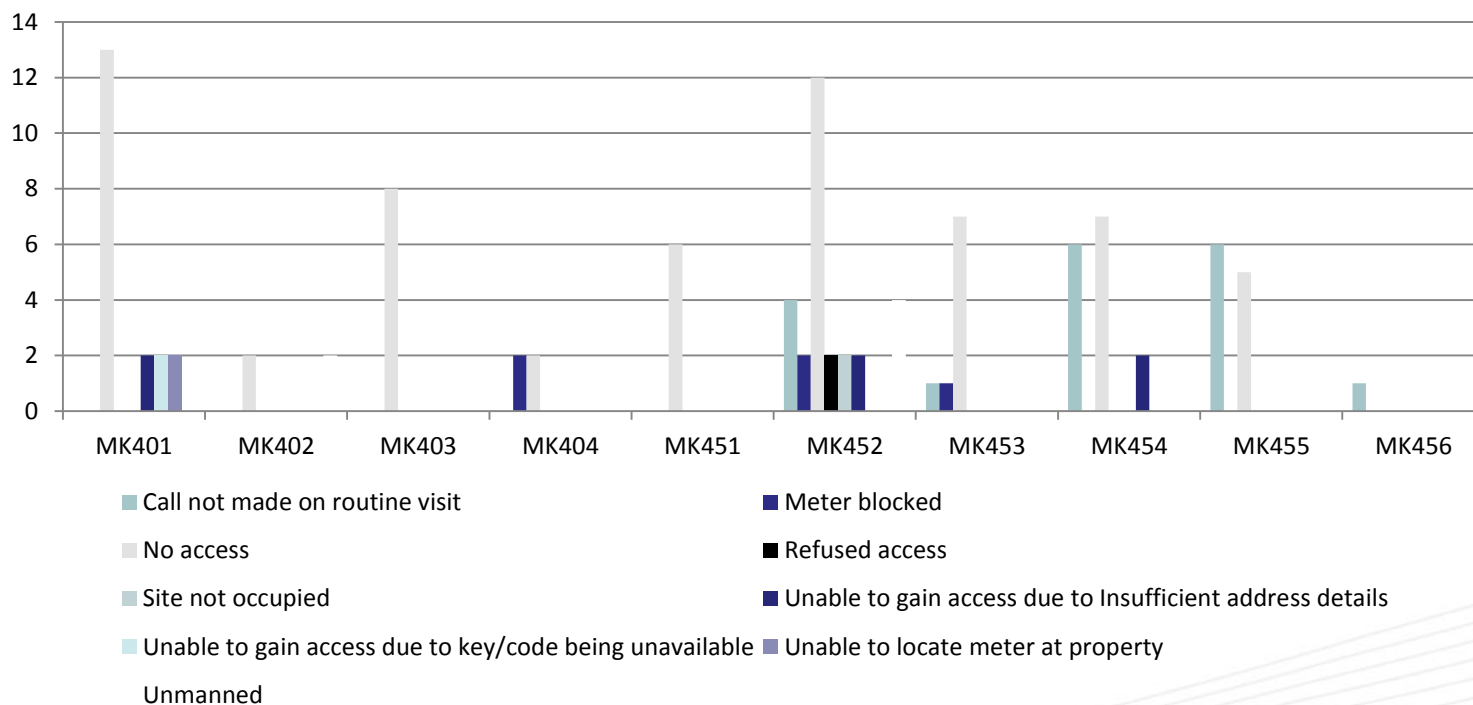
# Supplier Strategy - change of supplier





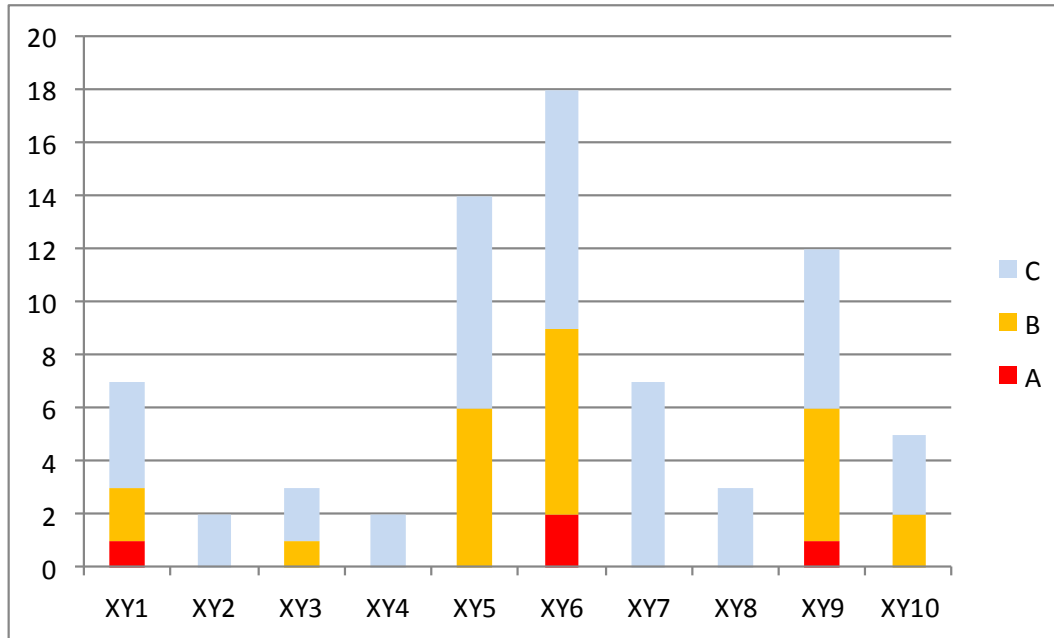
# MOP Strategy – installation issues

## Comparison of Site Visit Check Codes in MK40 (Bedford) and MK45 (Amphill)





# DNO Planning – installation issues

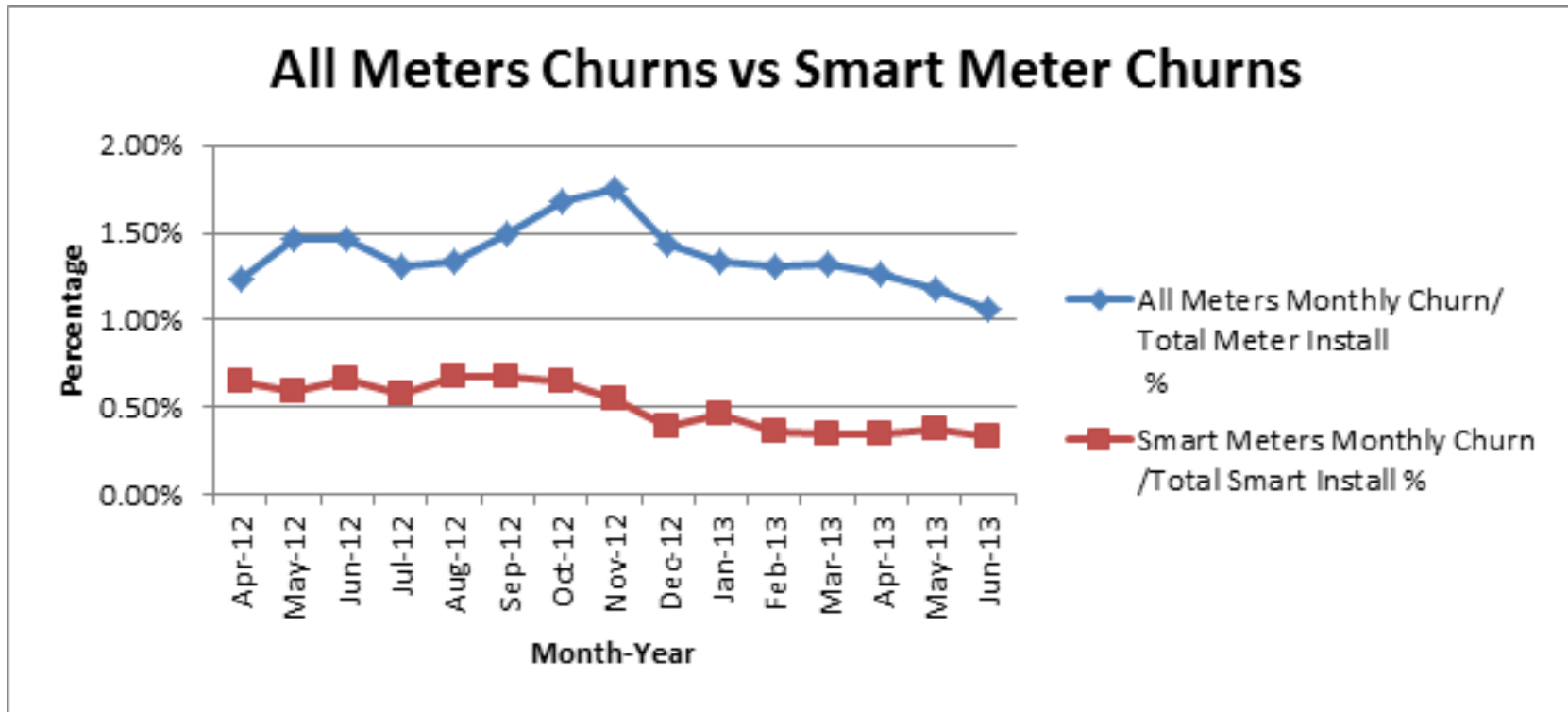


## Installation Codes

- A – Emergencies
- B – Need to be completed before installation
- C – Does not delay installation

Smart meter installation issues by postcode

# Smart Behaviour Changes







# Advantages of the DTS Data Set

- It covers the whole country
- It is generated by all participants in the retail electricity market
- Permission to store up to three years
- Raw data is at mpan and postcode level
- Data can be combined with other segmentation to provide greater insight



# Role of ElectraLink

- The guardian of the DTS data set
- Provision of expertise on the underlying DTS data structure to facilitate analytics
- Facilitation of innovation by the non-exclusive engagement with market participants and service providers
- Committed to the success of the smart meter implementation programme



# Thank you