

## **Smart Meter Energy Data: Public Interest Advisory Group**

**A policy dialogue and work programme led by the  
Centre for Sustainable Energy & Sustainability First**

### **Working Note**

prepared following discussion at

**PIAG Workshop 1 – 19 March 2018**

## **Clarifying what smart meter data could add to the public interest**

### **Framing ‘public interest’ questions for PIAG on access to smart meter data**

#### **Status of this Document**

This working note was prepared as an input to the work programme of the  
Public Interest Advisory Group on access to smart meter energy data.

Last Revise - 6 July 2018

# Clarifying what smart meter data could add to the public interest

## Framing 'public interest' questions for PIAG on access to smart meter data

### 1. Introduction

This note draws together initial thinking on potential 'public interest' benefits which could arise from access to smart meter data - and the need to balance privacy considerations - discussed at the first PIAG workshop on 19 March 2018.

### 2. Why enable access to smart meter data for a 'public interest' purpose?

The BEIS smart meter cost benefit analysis (Nov 2016<sup>1</sup>) and earlier impact assessment (2014<sup>2</sup>) are largely silent on the potential for wider 'public interest' benefits from smart meter data

For PIAG thinking, a main 'public interest' purpose of access to smart meter data – and of potential public benefit - is **to improve upon the current evidence-base of energy end-use** and so **support better public policy-making & delivery**.

At the highest level, the main **public interest outcome** sought by PIAG would be a **better energy end-use evidence-base** able to **serve wider societal goals at a national and a local level** - by enabling and supporting improvements in **research, analysis, prediction, evaluation and targeting of public policy**. In effect, some recognition is desirable for the potential for smart meter data as a 'public good'.

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<sup>1</sup> BEIS. Smart meter roll-out cost benefit analysis. Parts 1 & 2. November 2016

<https://www.gov.uk/government/publications/smart-meter-roll-out-gb-cost-benefit-analysis>

<sup>2</sup> DECC. Smart meter roll-out for the domestic and small and medium non-domestic sectors (GB) Impact Assessment –January 2014. IA No: DECC0009

<https://www.gov.uk/government/publications/smart-meter-roll-out-for-the-domestic-and-small-and-medium-non-domestic-sectors-gb-impact-assessment>

### 3. For PIAG, what does a ‘public interest’ purpose look like?

Two papers commissioned by Sustainability First, CSE & Teddinet by UCL and Exeter and published in 2016 identified a number of potential ‘public interest’ benefits from smart meter data.

Broadly, these were as follows.

#### National-level<sup>3</sup>

At a national level, smart meter data to be used to produce **improved models** and therefore **better forecasting & prediction**. For example, better data to inform BEIS / ONS reports such as Energy Consumption in the UK (ECUK) and DUKES (Digest of UK Energy Statistics) ; Ofgem’s State of the Markets Report, Ofgem RIIO business plan assessments, National Grid’s Future Energy Scenarios and Capacity Mechanism assessments. Better end-use data could also provide better inputs to **whole-system** thinking (investment, operational), better grasp of **distributional impacts** of policy, and **better targeted policy, measures and evaluation** - especially for **different population segments** (elderly, vulnerable, fuel-poor), and for low-carbon.

#### Regional / local<sup>4</sup>

At a regional level, access to better energy end-use data from smart meters could **support better-informed investment** for smart grid, demand-side, and smart energy, as well as a **clearer view of local / community needs**—for market actors and for others. For regional authorities, cities and local

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<sup>3</sup> Smart Meter Data and Public Interest Issues. The National Perspective. Discussion Paper 1. Simon Elam. UCL. March 2016 – & Technical Annex

<http://www.sustainabilityfirst.org.uk/images/publications/other/Teddinet,%20CSE%20&%20SF%20-%20Discussion%20Paper%20by%20Simon%20Elam%20UCL%20-%20Smart%20Meter%20Data%20&%20Public%20Interest%20Issues%20-%20National%20Focus%20-%2010%20March%202016%20-%20FINAL.pdf>

[http://www.sustainabilityfirst.org.uk/images/publications/other/Teddinet\\_CSE\\_SF\\_-\\_Simon\\_Elam\\_UCL\\_-\\_Technical\\_Annex\\_-\\_Smart\\_Meter\\_Data\\_Public\\_Interest\\_Issues\\_-\\_10\\_March\\_2016\\_-\\_FINAL.pdf](http://www.sustainabilityfirst.org.uk/images/publications/other/Teddinet_CSE_SF_-_Simon_Elam_UCL_-_Technical_Annex_-_Smart_Meter_Data_Public_Interest_Issues_-_10_March_2016_-_FINAL.pdf)

<sup>4</sup> Smart Meter Data and Public Interest Issues. The Sub-National Perspective. Discussion Paper 2. Jess Britton. University of Exeter. March 2016

[http://www.sustainabilityfirst.org.uk/images/publications/other/Teddinet\\_CSE\\_SF\\_-\\_Discussion\\_Paper\\_by\\_Jess\\_Britton\\_Exeter\\_-\\_Smart\\_Meter\\_Data\\_Public\\_Interest\\_Issues\\_-\\_10\\_March\\_2016\\_-\\_FINAL.pdf](http://www.sustainabilityfirst.org.uk/images/publications/other/Teddinet_CSE_SF_-_Discussion_Paper_by_Jess_Britton_Exeter_-_Smart_Meter_Data_Public_Interest_Issues_-_10_March_2016_-_FINAL.pdf)

communities, there could be better evidence by which to **plan and develop energy-related infrastructure and low-carbon measures** (EVs, heat, homes, local energy schemes).

Similar to the national level, better evidence on energy end-use could help **design better targeted support and services for different population segments** (elderly, vulnerable or fuel-poor).

Finally, better end-use insights from smart meter data could support **better-informed partnerships and collaborations** – with energy networks, local authorities, social landlords, health agencies and other community bodies.

#### **4. How might PIAG balance judgements on whether ‘public interest’ purposes may warrant access to smart meter data?**

The stimulus paper by Maxine Frerk, circulated for PIAG Workshop 1, about the data access privacy landscape discusses current rules and arrangements on access to smart meter data in depth, including the ICO guidance on anonymization.

For this note, it is simply worth noting that current legal frameworks offer relatively limited guidance **on how to set about judging the balance** between (1) individual customer protections, and (2) any potential wider public interest benefits from accessing smart meter data. The main rules and guidance are :

- The **Data Protection Act & GDPR** (General Data Protection Regulation) each allow access to data for ‘research, history and statistics’ (DPA 1998, section 33. GDPR 2017, article 89). However, their main focus is to protect and anonymise individual data – rather than consider a balance of interests.
- **Freedom of Information Act 2000 Pt II – ICO Public Interest ‘Test’** provides guidance on balancing a decision on a case-specific basis on whether a particular FOI disclosure may or may not be in the public interest on a case-specific basis.
- **Digital Economy Act 2017** – enables new arrangements on research in the public interest and, in addition, on data sharing between public sector organisations. Under the DEA, the **UK Statistics Authority** is required to publish a **Research Code of Practice and Accreditation Criteria** - published in March 2018. This offers some definitional examples on research in the public interest<sup>5</sup>. The code also sets out criteria for accrediting research and researchers. The

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<sup>5</sup> UK Statistics Authority. Research Code of Practice – <https://www.gov.uk/government/consultations/digital-economy-act-part-5-data-sharing-codes-and-regulations/research-code-of-practice-and-accreditation-criteria>.

DEA 2017 also enables data-sharing across certain public sector organisations where this meets public interest objectives. The **Cabinet Office** published an **Information Sharing Code of Practice** in March 2018 with respect to these new data sharing powers, and also this sets out public interest objectives for data-sharing<sup>6</sup>.

And of most relevance :

- **The Smart Meter Data Access and Privacy Framework (DAPF )2012** was drafted around strong protections for individual customer data. It **requires explicit individual customer ‘opt-in’ for access to half-hourly data** - and customer ‘opt-out’ of supplier-access to daily data. This thinking was largely shaped by a wish, in the public interest, to encourage smart meter uptake.

It is worth noting **ICO guidance on a ‘Public Interest Test’** under the FOI 2000, which offers some possible ‘read-across’ towards a public interest definition for PIAG :

*‘The public interest can cover a wide range of values and principles relating to the public good, or what is in the best interests of society. Thus, for example, there is a public interest in transparency and accountability, to promote public understanding and to safeguard democratic processes. There is a public interest in good decision-making by public bodies, in upholding standards of integrity, in ensuring justice and fair treatment for all, in securing the best use of public resources and in ensuring fair commercial competition in a mixed economy. This is not a complete list; the public interest can take many forms’.*<sup>7</sup>

The ICO note that a case-by-case approach should be taken to information disclosure and that their examples do not automatically mean that information is disclosed or withheld. This will be guided by a number of considerations, including questions of transparency, weight (e.g. whether similar information is already available elsewhere), as well as the idea of overall balance in terms of whether the public interest is better served by disclosure or non-disclosure.

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paras 6.1 and 33.1 set out the Authority perspective on the public interest.

<sup>6</sup> Cabinet Office. Information Sharing Code of Practice. Section 2.1 (under Public Service Delivery) sets out a further definition of the ‘public interest’.

<https://www.gov.uk/government/consultations/digital-economy-act-part-5-data-sharing-codes-and-regulations/information-sharing-code-of-practice-public-service-delivery-debt-and-fraud>

<sup>7</sup> ICO Guidance. Public Interest Test. July 2016 v 2.1 para 9. For qualified exemptions [https://ico.org.uk/media/for-organisations/documents/1183/the\\_public\\_interest\\_test.pdf](https://ico.org.uk/media/for-organisations/documents/1183/the_public_interest_test.pdf)

## 5. A ‘process’ to guide the PIAG work programme – rather than a public interest definition

For the PIAG work-programme, a simple ‘public interest’ definition may offer rather limited value at this point in the project as an overall guide to balancing the public interest on access to smart meter data against consumer privacy and other considerations.

But a *process*<sup>8</sup> that seeks (1) to understand *in depth* the public interest on access to smart meter data, and, through this, (2) to balance different and legitimate interests – could be helpful. A similar approach was adopted in our recent Sustainability First New-Pin project (New Energy and Water Public Interest Network)<sup>9</sup>.

In similar vein, a need for a framework to balance risk and benefit where public bodies might consider sharing data to deliver ‘public benefit’ is outlined in a recent report on ‘Data for Public Benefit’ from the CarnegieUK Trust<sup>10</sup>.

In the year ahead, our proposed PIAG Process therefore aims to build a systematic picture & a better understanding of:

- Key ‘public interest’ topics on access to smart meter data
- Any significant areas of agreement / disagreement among PIAG members
- What a **‘good’ and balanced outcome** might look like – when we take account of individual protections while also serving wider public interest goals.

## 6. Public interest questions to frame PIAG’s work

Below is a list of potential public interest and public benefit questions to consider in framing the PIAG work programme.

1. How to get a better view of **customer-thinking on trade-offs** between privacy, data access and the public interest ?

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<sup>8</sup> See Annex for detail on the PIAG process

<sup>9</sup> Looking to the Long-Term : hearing the public interest voice in energy and water. Eight agendas for change. New-Pin. New Energy and Water Public Interest Network. Sustainability First. February 2018.  
<http://www.sustainabilityfirst.org.uk/new-pin-publications>

<sup>10</sup> Data for Public Benefit. Balancing the risks and benefits of data sharing. CarnegieUK Trust, Involve and Understanding Patient Data. April 2018.

*PIAG will draw from the consumer research of others – & plans to commission some limited research of its own – to better understand how different properties of smart meter data might raise or address privacy concerns – both real or perceived.*

2. What are the **main ‘public interest’ purposes** for accessing smart meter data ? (National, regional, local).
3. Do we understand the main data characteristics likely to facilitate these public interest purposes ?
4. From a privacy viewpoint, do we also understand which data characteristics critically impact the data sensitivity ?

*Development of the PIAG use-cases - and a better understanding of likely data attributes associated with each - should help clarify questions 2, 3 & 4.*

5. From a ‘public interest’ stand-point, can some purposes for data-access be ruled ‘out-of-scope’ (e.g if simply to improve *targeting of individuals* for improved services / commercial offers) ?
6. **Which actors** are the most likely to seek access to smart meter data **for a public interest purpose - and chiefly for what purpose** ? From the view-point of a public interest benefit, can some actors or some purposes be prioritised over others ?
7. What are the **most likely routes** open to those actors who seek access to customer smart meter data for public interest purposes (e.g. register as a user with the Smart Data Communications Company, UCL’s Smart Meter Research Portal; energy system operators and networks ?
8. Under present rules, **how far can ‘public interest’ actors already fairly readily access smart meter data** – and whether **at reasonable cost**?
9. What are **appropriate data-handling capabilities** for such actors ?
10. Whether **key public interest purposes** are at risk of **remaining unserved** without additional steps in support of data-access ? Do we understand the main enablers and barriers ?
11. **Can we identify potential additional risk to the customer** (individual, collectively) – should current thinking on data-access arrangements evolve for ‘public interest’ reasons ?
12. Do we understand what distributional impacts – or unintended consequences - might arise with better access for public policy purposes to end-use energy data from smart meters ?

## Appendix

### PIAG - Our Strawman 'Process' / Framework

The PIAG work programme will be organised around the following topics / framework.

#### What can smart meter data add to the wider public interest?

- What does PIAG mean by the 'public interest' (March 2018)
- Applications & use-cases (March → July 2018)
- Data characteristics & attributes – including how these might impact privacy concerns (March → July 2018)

#### Who can access smart meter data and on what basis? (March → July 2018)

- Privacy rules – ICO, GDPR, DAPF
- International examples
- Data ethics – other sectors

#### Likely consumer and customer attitudes to access to – and use of smart meter data – for a public interest benefit purpose (July → November 2018).

- PIAG consumer research

#### Potential future routes for accessing smart meter data for public interest purposes (November 2018)

- Likely process & costs
- Smart Meter Research Portal consortium
- Smart Data Communications Company
- Energy system operator / energy network
- Other?

#### What capabilities are needed to make use of meter data for public interest purposes ? (November 2018 – March 2019)

**Final PIAG Report & Principles** – will pull together across these five themes. (March 2019).



## PIAG Workshops - Forward Agendas

PIAG will run for 18 months (until March 2019), bringing together a membership representing a broad range of public interest views. The project will run in parallel with the BEIS review in 2018 of the 2012 Data Access and Privacy Framework and Ofgem settlement reform (so far as timetables allow). Work will be conducted via a combination of desk-research & analysis, four PIAG workshops and bi-lateral discussion with PIAG members.

In addition, the group will aim to conduct some limited customer research, avoiding duplication with research that is already out there. The scope will be finalized at the July 2018 workshop, but could potentially include some focus groups.

We expect to cover the following topics at future PIAG workshops.

### Workshop 2 – July 2018 Feed into DAPF review & Ofgem thinking on half-hourly settlement reform

- Use cases
- Data attributes – anonymisation & aggregation
- What privacy concerns (if any) flow from the use-cases to inform scoping consumer research?
- Is there a public interest ‘driver’ for national-level data capture and possible curation?
- What might this mean for the DAPF and approaches to customer consent?

### Workshop 3 – November 2018

- Consumer Research - findings
- Privacy vs public interest ‘balance’ – what does this mean for consent?
- Draft ‘Public Interest’ Principles - & their application
- Possible access routes to smart meter data for public interest purposes
- What capability might be needed to make use of meter data for public interest purposes?

### Workshop 4 – March 2019

- **Finalise PIAG Principles** – to address what principles might need to be put in place to access smart meter data for public interest purposes for:
  - (1) UCL Smart Meter Research Portal (national) and
  - (2) possible access more widely (sub-national)
- **PIAG Report** – facilitating access to smart meter data for public interest purposes. May cover issues such as : SMRP – public interest access approaches & rules ; possible support for public interest actors to access data; possible approaches to capacity building and / or curation; Consumer Access Device pairing in the public interest – privileged access ?