Individual Response to Ofgem Consultation: Consumer Vulnerability Strategy 2025 Timothy Hendry – 08/08/2019

Contents

Introduct	ion	2
Key Point	s in this response	3
Question	1: Do you agree with the five priority themes and the outcomes we will aim for?	4
1.	Improving identification of vulnerability and smart use of data.	5
2.	Supporting those struggling with their bills	6
3.	Driving significant improvements in customer service for vulnerable groups.	11
4.	Encouraging positive and inclusive innovation	12
5.	Working with partners to tackle issues that cut across multiple sectors	15
Question	2: Do you agree with our approach on affordability?	15
Question	3: What more could be done through energy regulation?	17
Question	4: Do you agree with our proposals for the first year of the strategy?	19
Appendix	1: Author's Qualifications and Experience	20
Appendix	2: Comparing Benefits and Disadvantages of Smart Meters for Different Consumers	21

Introduction

I welcome the opportunity to respond to this Ofgem consultation on the *Draft Consumer Vulnerability Strategy 2025*. This response is not confidential.

I am an independent thinker on smart meters, fuel poverty and vulnerability and have written several online articles about these issues available <u>here</u>. I have an MSc in Energy Policy and a background in managing and delivering energy advice and fuel poverty services for several London boroughs. More information on my experience and publications is available in Appendix 1.

Imagine an accessible, affordable and innovative market for vulnerable consumers...

Imagine a market where 'all customers including those in vulnerable situations receive a service that meets their needs and that prices reflect the efficient cost of supplying energy and no more'¹. One where 'consumers in vulnerable situations have equal access to market benefits such as competitively priced energy and their circumstances do not put them at a disadvantage in accessing services.'² In this marketplace, consumers in vulnerable situations including those on low incomes,

- can access competitively priced tariffs and products along with effective and reliable customer service experiences irrespective of payment method or credit situation
- are not penalised on price, accessibility or convenience because they choose prepayment options that put them in control of their budget and let them avoid arrears and debt
- are prioritised in the remaining smart meter rollout, despite their personal circumstances, accommodation type and tenure, because they have the most to gain from smart meters
- receive tailored training at installation that is appropriate to their individual circumstances, along with signposting to further longer-term advice and support to help them access the full range of benefits and services available through their smart meters
- Have increasingly affordable access to energy including freedom from debt and, gain an equal share in the benefits of a just transition to a sustainable low-carbon energy system
- can access innovative products, features, technologies and services designed around their needs because effective competitive means providers must work hard to win their custom
- can consistently access additional support when needed and are not put off from switching provider or product because of limited options or fears over poor service and support

This is a world we'd all like to see. Unfortunately, it is not one that is consistently available in Great Britain yet. But it is a world that it is entirely possible with bold action based around a strong vision for change. In responding to this consultation, I hope to illuminate what I see as some practical options and opportunities for bringing about this positive change.

¹ Ofgem (2019) <u>Draft Consumer Vulnerability Strategy 2025</u>

² Ofgem (2016) <u>Ofgem's regulatory stances</u>

Key Points in this response

Question 1: Do you agree with the five priority themes and the outcomes we will aim for?

- Affordability, prepayment and debt remain key issues for vulnerable consumers and demand greater focus in this updated consumer vulnerability strategy 2025
- Smart use of data should recognise that vulnerability includes geographical indicators such as indices of deprivation or dedicated disabled housing that remain relatively constant
- DNOs and GDNs may be best placed maintain PSRs on behalf of consumers and suppliers
- It's difficult to accrue debt on a prepayment meter which is why consumers like ppm
- The ppm market is a failing market as recognised by the CMA's recent provisional decision on extending the PCR: Ofgem can and should take more action to remedy this
- A suggested additional theme for the strategy: 'A competitive smart prepayment market'
- Suggested outcomes under an additional smart prepayment theme:
 - More consumers become debt free and levels of debt come down overall, because all suppliers offer Smart PPM as an effective alternative for managing energy costs
 - Vulnerable and low-income households and existing ppm customers are prioritised in the remaining smart meter rollout, because they have most to gain
 - Recognise that Alt-HANs issues in flats may disproportionately affect more deprived households and ensure tenants and landlords aren't prejudiced by the solutions implemented
- The onus should be on suppliers to describe what good customer service looks like and to demonstrate how they intend to deliver to the standards they have defined
- Encouraging positive innovation should include a focus on particular issues facing vulnerable consumers now, that can be realistically addressed in the timeframe of this strategy: namely tackling debt and preventing arrears and improving customer service for vulnerable groups
- The theme 'Working with partners to tackle issues that cut across multiple sectors' needs to be more ambitious to justify it's inclusion as one of the five themes in this strategy

Question 2: Do you agree with our approach on affordability..?

- There is more that Ofgem can and should do to address market failures in the ppm market and this will also significantly benefit low-income households at risk of debt on credit billing
- The landscape has changed since the CMA prescribed the PCR meaning there is greater opportunity for Ofgem to act to address ppm market failures through mandating smart ppm
- Consumers value prepayment because it gives them more control
- Smart prepayment is already transforming the experience of those consumers who have received it with higher rates of satisfaction than recipients of credit smart meters
- Prepayment has a disproportionately high share of fuel poor customers but the f gap is lowest for this group making it the cheapest group to lift out of fuel poverty

Question 3: What more could be done through energy regulation..?

- Ofgem should review the metering codes to improve existing rules around debt recovery via ppm and outlaw higher recovery rates for debt 'owed to the meter'
- Ofgem should require suppliers to prioritise WHD payments to prepayment customers at the start of the winter so that these funds are available to pay for their winter fuel costs up front

Question 4: Do you agree with our proposals for the first year of the strategy?

• Actions to accelerate the rollout of smart ppm and the transformation of the ppm segment of the market should be included as priority areas for the first year of this strategy

Question 1: Do you agree with the five priority themes and the outcomes we will aim for?

The priority themes included in the draft strategy all track important issues for vulnerable consumers as highlighted through Ofgem's stakeholder engagement process. However, it is a concern that the draft 2025 strategy rolls three important themes from the 2013 strategy, namely prepayment meters, affordability and debt, into the single theme 'supporting those struggling with their bills'. Despite progress being made on these issues since 2013, evidence suggests that these areas continue to contribute substantially to negative outcomes for vulnerable consumers and therefore still demand greater focus in the new strategy.

Ofgem's own figures confirm that the total number of customers in arrears or repaying a debt actually increased in 2018 compared to 2016³. Analysis by Bulb⁴ highlighted that ppm customers continue to pay over the odds for their energy. This is backed up by the CMA's recent provisional recommendation to extend the Prepayment Charge Restriction (PCR) because 'the conditions of competition in the prepayment segments have not improved significantly since the introduction of the PCR.'⁵ One of the causes identified by the CMA was slow progress in the smart meter rollout.

I would argue that prepayment should be retained as a standalone theme within the 2025 strategy because of the scale of problems that persist in the prepayment market and because of the potential for smart prepayment to transform access and affordability of energy for many consumers beyond just existing prepayment users. More weight needs to be given to addressing debt and affordability issues in the 2025 strategy as well (affordability will be picked up below under question 2).

I will expand on these and other points under separate theme headings below.

³ Ofgem (2019) <u>Draft Consumer Vulnerability Strategy 2025</u>

⁴ The Metro (2019) <u>Poorest families 'overcharged £250,000,000 for prepay energy meters'</u>

⁵ CMA (2019) <u>Review of the Energy Market Investigation (Prepayment Charge Restriction) Order 2016</u>

1. Improving identification of vulnerability and smart use of data

Improving the identification of vulnerability and smarter use of data are both valuable outcomes. However, in my view they are very closely related to two other themes on improving customer service for vulnerable households and working with partners to tackle issues that cut across multiple sectors. A clear example of this is Outcome 1C: 'We want to see better use of data across regulated sectors to enable more holistic and targeted support for consumers in vulnerable situations.' This appears to sit more naturally under theme 5 on working with others to solve cross-cutting issues. It may be worthwhile reviewing these three objectives to see if they could be synthesised differently to achieve greater impact. This could also free up space in the strategy for an additional theme!

Smart use of data to identify vulnerability

For me improving identification of vulnerability and smart use of data should recognise existing realities in the market and use these to inform approaches that simplify the task of identifying vulnerable households and maintaining PSR databases. It is useful to recognise that vulnerability often has a geographical or place-based dimension and this can be used to help identify potentially vulnerable households.

- Example 1: there are established indicators such as indices of multiple deprivation which can allow suppliers to determine with reasonable accuracy the likelihood of a particular household facing significant deprivation and hence being potentially vulnerable
- Example 2: there are other characteristics that may quickly point to a high-probability of vulnerability. For example, purpose-built flats for elderly or disabled residents are likely to always contain relatively vulnerable households. When there is a change of occupier in such a property it makes sense to assume that the new resident may have a need for PSR services and hence to engage with that household to establish what additional support they require
- DNOs and GDNs and other location-specific actors such as meter engineers are more likely
 to be familiar with a particular area and hence are better placed to both identify and in the
 case of the former to hold records of vulnerability. On this basis I would agree that local
 monopolies such as DNOs and GDNs should be taking an increased role to achieve more
 targeted support to consumers in vulnerable situations. In fact, I would go as far as to
 advocate for a radical change in approach here with DNOs and GDNs taking on a regulated
 role as the keepers PSR databases with suppliers accessing this information, with customer
 consent, to inform which services they offer to customers
- It is worth considering that customers tend to trust local network operators more than suppliers, presumably because customers understand that their business models and profits do not depend on which supplier a customer is with. Hence customers may be more willing to share sensitive information with network operators, especially if they are also given a choice over who has access to this information going forward

Smart use of smart meter data

Smart meter data should increasingly provide opportunities for spotting vulnerable situations – in particular self-disconnections for prepayment meters. Ofgem should encourage suppliers to actively develop management information systems that can automatically flag these events. Ofgem should also consider its own need for access to smart meter data to support effective monitoring and oversight of suppliers and networks. In this regard I'd encourage Ofgem to support the work of the Smart Meter Data Public Interest Advisory Group in advocating for the public interest case for access to smart meter data.

2. Supporting those struggling with their bills

Poor outcomes for people in Debt

In relation to addressing 'poor outcomes for people in debt', it is a concern that several significant and arguably distinct outcomes have been grouped together under **outcome 2C**. This is likely to limit the effectiveness of action in these areas. It would be more effective to split outcome 2C into two separate outcomes such as:

- consumers in payment difficulties are proactively supported and are put on an affordable payment plan (*possibly move as a separate outcome under the 'customer service' theme*)
- more consumers become debt free and levels of debt come down overall by ensuring all suppliers offer competitively priced smart prepayment to all their customers (move this outcome under a new prepayment/smart prepayment theme)

I would argue that the actions designed to achieve the second part of Outcome 2C lack teeth. Ofgem could increase the impact of the strategy here in several ways (having probably first ruled out debt write-off and more grants to clear debts as ineffective in the long-term because they don't prevent future occurrence of new debt) through an emphasis on expanding access to smart ppm.

Smart prepayment offers a fundamentally new option for existing prepayment customers and households on low-fixed incomes because:

- it is recognised as providing the best method for avoiding arrears and debt. This is one of the key reasons why as CSE found, customers value prepayment⁶. It is very difficult to accrue significant new debts on a prepayment meter and should be even less common under smart prepayment
- it offers comparable convenience to direct debits and standard credit as customers can topup in multiple ways and easily check their balance or activate emergency credit without having to climb up a ladder or venture outside to the meter on a cold winter's night
- Emphasising smart prepayment in the strategy will help to kick-start competition in a failing segment of the market which should rapidly help to bring down the costs of these tariffs
- Actions to reduce the costs of prepayment tariffs through increased competition will also help prepayment customers in debt to clear this from their meters more quickly.
- Refer to Appendix 2 for a breakdown of smart meter benefits for different consumers

Opportunities for specific action on debt will be explored further below.

The difficulty of accruing debt on prepayment meters

As noted by the CMA in 2016, prepayment customers 'cannot incur energy-related debt (except in certain limited circumstances and then for small amounts)'⁷ because they pay for their energy in advance. In most cases, the debt has accrued under another payment type - either standard credit or direct debit and the customer debt has been transferred to prepayment, either voluntarily or under warrant. This highlights the difficulties many consumers on low incomes face in trying to manage their energy costs via non-prepayment options.

The only obvious exception where customers may accrue new debt on a prepayment meter is where debt accrues from unpaid standing charges because the meter has not been topped. For example,

⁶ CSE (2015) <u>'Lesson 2: Prepayment meters are popular with some users' (pg8)</u>

⁷ CMA (2016) <u>Energy Market Investigation, Appendix 9.8: Analysis of indirect costs by payment method</u>, (paragraph 60)

gas customers may choose not to top-up over the summer when heating is not needed without realising standing charges are still being applied resulting in arrears on their meter. Other customers may stop topping up because they cannot keep up with the weekly debt repayments. In both cases debt becomes 'owed to the meter' including unpaid standing charges (perhaps £2+ per week) and weekly debt repayment amounts (e.g. £5 or £10 per week). When debt is 'owed to the meter' existing rules allow suppliers to use up to 70%⁸ of the customer's gas top-up⁹ and 100%¹⁰ for electricity¹¹ to recover this money, irrespective of the agreed weekly debt repayment amount.

The rules governing how credit and debt is managed within a 'traditional' prepayment meter are complex and may be difficult to follow even for the average customer, especially as written guides from most suppliers often only touch on these areas without providing detailed explanations.

For someone on a fixed low income, seeing the meter gobble up 70% or 100% of the weekly top-up credit in a single go for debt recovery can be extremely distressing and can leave them facing the real prospect of going without heating or light until they receive their next income payment. While suppliers can reset a traditional prepayment meter, this usually requires an engineer to be called out to the customers home. This can take several hours to arrange and depends on the customer being aware that this option exists and having enough credit on their phone to call the supplier.

Smart prepayment should allow these kinds of troublesome situations to be avoided in future as it will be possible for suppliers to spot self-disconnections quickly and take proactive steps to resolve the issue. Suppliers should be able to reset smart meters remotely without the need for an engineer callout. Other remedies include offering more appropriate tariffs for low users that combine the standing charge into the unit price to avoid future debt accrual and reducing debt recovery rates to manageable amounts. It should hopefully also be easier for suppliers to spot when one customer is paying off a previous user's debt and to fix this by creating a new customer account.

Greater Action to Transform the Prepayment Market

The Prepayment market in the UK continues to be a failing market. The majority of prepayment customers remain stuck on traditional dumb meters with terrible service, costly tariffs and increased risk of disconnection. The CMA's Energy Market Investigation made it clear that smart meters are the necessary solution: replacing existing ppm infrastructure will remove technical barriers that block competition and deter new entrants by limiting the number of tariffs that suppliers can offer.

Prepayment customers cannot and should not have to keep waiting for the glacially slow rollout of smart prepayment by suppliers who have unsurprisingly put them at the back of the queue because of their smaller numbers. What the market needs is shock treatment to kick-start competition, drive down prices and stir suppliers to innovate to win their share of a growing smart ppm market.

Smart ppm is popular with the customers and it is likely to transform affordable access to energy for many low-income consumers by giving them control of their energy budget without compromising on price, convenience or service. The wider benefits of smart meters for prepayment and low-income households are likely to far outweigh those for more affluent consumers in the near future¹².

⁸ SSE (2017) Gas: Your Pay As You Go meter guide

⁹ NPOWER (2013) How your gas prepayment meter works

¹⁰ SSE (2018) Electricity: Your Pay As You Go meter guide

¹¹ EON (2014) Your guide to prepayment meters

¹² Policypith.wordress.com (2016) <u>Smart meters in flats: will more deprived households have to wait longer for</u> their meters?

To date the Government has advocated a cautious approach when rolling out smart meters to vulnerable households. This is to ensure they get the right training and support at installation to benefit from cost savings through their smart meters. However, projected cost savings are low and will be even smaller for households on less than average consumption. Hence, this cautious approach risks leaving behind those with the most to gain.

The wider benefits resulting from greater budgetary control, radically improved customer service, reduced risk of self-disconnection and ultimately competitively priced smart prepayment tariffs far outweigh potential cost savings for vulnerable and low-income households including ppm users.

For these reasons I believe BEIS, Ofgem and suppliers should reprioritise and accelerate the rollout of smart meters to vulnerable low-income, fuel poor and ppm households, while also promoting smart ppm as an effective means of tackling debt. Consequently, I would suggest changes to the draft 2025 strategy to put a competitive smart ppm market front and centre as a core objective.

To achieve this, I would like to propose an additional priority theme for the 2025 strategy focused on smart prepayment:

An additional theme: "A competitive smart prepayment market"

Under this new theme I would like to propose a number of additional outcomes along with specific actions to help achieve them.

<u>Additional Outcome 1 (Smart PPM):</u> "More consumers become debt free and levels of debt come down overall, because all suppliers offer Smart PPM as an effective alternative for managing energy costs"

Two actions could help to achieve this outcome:

Action 1: Enforce the New and Replacement Obligation and set norms for 'all reasonable steps'

Ofgem should enforce the New and Replacement Obligation (NRO)¹⁴, activated from 30/06/2019, as a means to force suppliers to open up smart prepayment to all consumers.

- If consumers ask for a prepayment meter, they should receive a SMETS2 smart prepayment meter and tariff. This should be open to all consumers, not just existing ppm users.
- Ofgem should highlight the NRO to suppliers, the courts and consumer groups and ensure it is reflected in court warrants that permit installation of ppm to recover debt to mitigate negative outcomes for those forced to accept ppm under warrant.
- Ofgem should work to establish norms for what constitutes 'all reasonable steps' in the context of the NRO by engaging with suppliers, meter installers, the Alt-HANs company, Citizens Advice etc. If 868MHz meters or Alt-HANs will enable connectivity suppliers should be expected to explore these options before adopting inferior solutions like traditional ppm.
- Smart prepayment customers should receive tailored advice on the smart prepayment functions of their IHD and smart prepayment phone Apps.

Action 2: Require all suppliers to have a Smart PPM offer open to all customers within 12 months

• Ofgem should use its powers to require all suppliers to have a smart ppm offer (meters and tariffs) open to all customers within 12 months of the launch of the vulnerability strategy.

¹⁴ SEC (2019) <u>Government Response to January 2019 Consultation on the New and Replacement Obligation</u> (NRO) Activation Date

- New entrants to the market should also be required to have a smart ppm offer available to all customers within 12 months of commencing trading.
- Requiring suppliers to offer smart prepayment will directly help to address the technical barriers to competition in the prepayment market identified by the CMA¹⁵.
- Competition should drive down ppm prices to more competitive levels and spur innovation as suppliers compete to win and retain customers.
- Ofgem, BEIS and Smart Energy GB could also do more to highlight the specific benefits of smart meters and particularly smart prepayment for vulnerable groups.

Additional Outcome 2 (Smart PPM): "Vulnerable and low-income households and existing ppm customers are prioritised in the remaining smart meter rollout, because they have most to gain"

This outcome would probably require joint action with BEIS and would depend on a shift in the approach taken to supporting vulnerable consumers in the smart meter rollout. To date the focus has been on ensuring that vulnerable households receive tailored advice to access the benefits of smart meters. This is arguably at the expense of a slower rollout for these groups.

Presumably the Government's rationale here is that cost savings from reduced energy consumption form the primary benefit for consumers in the original cost-benefit analysis used to justify the smart meter rollout¹⁶. This is premised on expected behaviour change resulting from direct feedback through In-Home Displays (IHDs). However, **this approach doesn't recognise that many vulnerable households have lower than average consumption and hence less opportunity to benefit from energy cost savings**. Considering savings were projected to be only £11 per year by 2020¹⁷ for the average household (assuming the smart meter rollout had finished by then), savings for low users are likely to be tiny. Many vulnerable households also underheat their homes meaning any energy savings are likely to be absorbed as increases in comfort rather than as actual cost savings.

An emphasis on potential cost-savings from direct feedback also fails to recognise the extensive wider benefits that smart meters offer to vulnerable groups¹⁸. This includes the ability to control energy costs and avoid debt without having to compromise on convenience or service. It also includes the expected improvements in price as this market is opened up to effective competition¹⁹.

Traditional prepayment meters represent one of the most complicated ways to pay for energy due especially to the confusing and poorly communicated rules around debt repayment. It is also difficult for suppliers to provide practical support because they can't check the meter except with an engineer visit. Suppliers can seem very remote due to limited contact with their customers. All these factors add to the difficulty prepayment users face in maintaining their supply and paying for their energy. Smart prepayment promises to transform this picture.

For the reasons discussed above, I would argue that vulnerable consumers have far more to gain from an accelerated rollout of smart meters, with a particular emphasis on smart prepayment. This could easily be targeted using existing supplier-held data and the impact increased by linking it to a national information campaign emphasising the benefits of smart prepayment for vulnerable groups.

¹⁵ CMA (2015) Addendum to provisions findings (prepayment), Appendix A

¹⁶ BEIS (2016) Smart Meter Rollout Cost-Benefit Analysis

¹⁷ BEIS (2016) <u>Smart Meter Rollout Cost-Benefit Analysis – Part 1</u>

¹⁸ See this online article for an analysis of the benefits of smart meters for different groups: <u>smart-meters-in-</u> flats-will-more-deprived-households-have-to-wait-longer-for-their-meters-2/

¹⁹ CMA (2016) Energy Market Investigation – Summary of final report

Action 1: Target vulnerable households for priority rollout of smart meters using existing supplierheld data, with an emphasis on promoting smart prepayment options

- Suppliers could use a range of existing data that they already hold to target vulnerable households for prioritisation in the smart meter rollout including:
 - existing PSR registers
 - o existing payment type data, particularly prepayment customers
 - o current and previous Warm Home Discount recipients
 - o customers with a history of arrears, debt or self-disconnection
- Work with suppliers, consumer groups and specialist support providers to develop messaging to promote the benefits of smart ppm for vulnerable groups including:
 - Improved budget management
 - o greater convenience and customer service compared to traditional ppm
 - o increasingly competitive ppm tariffs

Action 2: Consider centralising the rollout of smart meters to remaining vulnerable households to accelerate delivery and improve outcomes for vulnerable groups

With only around 40% of domestic smart meters installed to date, there is still time to apply new approaches to accelerate and improve the experience of vulnerable households during the remaining rollout.

BEIS has recognised the technical challenges posed by smart metering in flats and has taken decisive action to ensure that suppliers work together to deliver efficient solutions to the Alternative Home Area Network problem (Alt-HANs) through the Alt-HAN Company.

The legal framework underpinning Alt-HANs could be extended to provide a legal basis for a more effective, centralised rollout of smart meters to remaining vulnerable households. Such an approach could involve the following elements:

- suppliers could use existing data to identify potentially vulnerable households (as noted above). These customers could then be referred, with their permission, to a shared centralised customer service centre for assessment and prioritisation
- With additional scope and powers, the Alt-HAN company could centrally commission providers to install smart meters in priority households
- The Alt-HAN company could separately commission specialist providers to deliver tailored advice and training for specific vulnerable groups (e.g. deaf, visually impaired, specific language groups etc), resulting in improved outcomes for users whilst also freeing up installers to focus on the technical task of fitting the meters as quickly as possible
- By centrally procuring smart meters for vulnerable groups, it would be possible to select the best technology for each household based on their specific circumstances. For example, if a particular IHD was better suited for visually impaired users, central procurement would allow this meter type to be rolled out to every household with this vulnerability. This kind of tailoring is probably more difficult for individual suppliers to do because of the smaller numbers involved and the need to procure meters in bulk to minimise costs

A centralised approach could accelerate the rollout of smart meters to vulnerable households and improve outcomes for vulnerable groups while at the same time delivering potential cost savings through central procurement and through reducing the need for suppliers to invest in expensive training for installers to deliver tailored energy advice to individual groups.

Centrally procuring area-based contracts to rollout smart meters could also help to reduce technical training costs for installers as a team approach could be used instead of individual installers having to do every task (electrician, gas fitter, meter commissioner, advice provider etc). This could accelerate the rate at which new installers can be trained and put into service. Such area-based approaches have been used on the Thames Water smart metering programme in London.

Action 3: Recognise that Alt-HANs issues in flats may disproportionately affect more deprived households and ensure tenants and landlords aren't prejudiced by the solutions implemented

Previous analysis by this author²⁰ highlighted that the Alt-HANs issue may disproportionately affect more deprived households with a particular impact in London²¹. In some London boroughs, flats make up as much as 80% of the housing stock meaning alternatives to 2.4GHz meters could be required in up to 40% of homes. There is a lack of information available to help understand the impact of this problem at a local level both in terms of which properties are affected and the demographics of households in these buildings. It would be in the public interest to make more information available so that the distributional impact of Alt-HANs can be understood. If Alt-HANs do affect more deprived households there could be a case for extra protections to ensure these households don't miss out on the benefits of smart meters because of delays in receiving them.

The technical solutions devised to resolve the Alt-HANs issue have focused on overcoming the connectivity issues in problem buildings. A reading of the literature on Alt-HANs suggests that multiple solutions – 2.4GHz, 868MHz and Alt-HANs - could be employed in the same building. While this approach may cut costs for the Alt-HAN programme, it is not entirely clear whether any detriment could arise as a result.

It is certainly known that 868MHz smart meters will support fewer high bandwidth connections (4 high bandwidth connections for 868MHz versus 24 high bandwidth connections for 2.4GHz)²². This means fewer 'smart devices' can be connected. Smart devices include In-Home Displays, 'Consumer Access Devices' (CAD), smart appliances and prepayment devices. It is not clear how many connections a typical home of the future will require or whether multiple smart appliances can be connected through a single CAD.

If multiple HAN solutions in the same block could disadvantage some households then perhaps a 'lowest common denominator' approach might be more appropriate. This would safeguard the interests of consumers, and ensure 'equity issues' aren't being stored up for landlords in the future once smart appliances become mainstream, sometime after the smart meter rollout is complete. It is worth being clear about this now before 868MHz and Alt-HAN solutions are rolled out.

3. Driving significant improvements in customer service for vulnerable groups

The better use of data by Ofgem to track standards of customer service in a consistent way seems like an obvious way to address customer service failings across the industry, including for vulnerable consumers. Paragraph 5.1 in the draft strategy provides a useful starting point for a list of basic tasks and transactions that all suppliers should be able to consistently deliver to a high standard for all customers. This could provide the starting point for an analytical framework for assessing the quality of customer service provide by different suppliers. It would also provide a starting point for suppliers to begin analysing and improving areas of their own customer service in an 'agile' way, one

²⁰ Policypith.wordress.com (2016) <u>Smart meters in flats: will more deprived households have to wait longer for</u> their meters?

²¹ Policypith.wordress.com (2016) <u>Smart Meters in Flats: Quantifying the Problem in London and Other Urban Areas</u>

²² DECC (2015) Government Response on Home Area Network Solutions: Implementation of 868MHz

task at a time and building up a picture of what effective delivery looks like for each core group such as customers on different payment types and customers with different vulnerabilities. I've also noted elsewhere in this response some suggestions around using tools such as AI and machine learning to improve outcomes for general customers and vulnerable customers in particular.

The onus should be placed on suppliers to describe what good customer service looks like, including road-testing these descriptions with their own customers, and then to demonstrate how they intend to deliver to the standard they have defined. In that way Ofgem could co-develop indicators for good customer service with suppliers that are also meaningful to consumers. This could also allow suppliers to develop and improve their own understanding of vulnerability and pin-point data and sources of information useful for identifying vulnerability.

Ofgem indicators based on supplier-defined descriptions of good customer service could also provide the basis for more transparency allowing energy advice providers including local authorities and the 3rd-sector to support all consumers to make better, more well-informed choices over switching supplier. At present this remains a difficult task with limited information available about the quality of customer service to inform reliable guidance for consumers on anything but price.

As noted above there is strong crossover between the customer service theme and the first theme of 'improving identification of vulnerability and smart use of data'. Outcome 3A states 'We want energy companies to have a corporate culture that focuses their efforts to identify [and support] consumers in vulnerable situations' which would appear to sit squarely under the 'identifying vulnerability theme as does the first part of Outcome 3D: 'We want consumers to be effectively identified as eligible for priority services'. It would be better to either move these items to that other theme or considering combining the two themes into one.

Outcome 3C dealing with ensuring new entrants provide adequate service for vulnerable consumers may not be applying the most efficient approach and could even risk stifling innovation. It seems healthier to minimise obstacles to new entrants as this is likely to drive the greatest innovation in the market with potential benefits for all consumers including vulnerable consumers.

I imagine developing the sophistication to support diverse vulnerable users is challenging for new entrants. They will initially have very low customer numbers and potentially even fewer vulnerable customers due to low switching rate amongst these groups. It may be more realistic to acknowledge this fact and consider a different approach. For example, this could require suppliers to become certified as being capable of providing comprehensive support for vulnerable consumers, with a mandatory size threshold at which new suppliers must complete this process or risk license penalties. Prior to that new suppliers could be exempted from the need to provide a full service for vulnerable customers, but only on the basis that this is clearly advertised in their marketing materials and on price comparison sites etc. An exception could be where a particular new market entrant's business model is focused on supporting vulnerable consumers.

4. Encouraging positive and inclusive innovation

It is highly relevant and appropriate to have a theme focused on positive and inclusive innovation in the 2025 vulnerability strategy, especially at a time of such unprecedented technology-driven change in the market place. Ofgem has rightly recognised the need to put measures in place to ensure that consumers in vulnerable situations do not miss out on the benefits of this market transformation, especially considering that they are also paying for it through their energy bills. However, the outcomes specified in the draft 2025 strategy are quite vague and fail to address

Timothy Hendry - Response to Ofgem Consultation: Consumer Vulnerability Strategy 2025

either 'the what' or 'the how' of what innovation can do to improve outcomes for consumers in vulnerable situations.

As noted above, many of the key issues faced by vulnerable consumers in 2013 remain current today. Of particular significance are:

- affordability in particular for ppm customers
- budget management, arrears and debt
- access to consistent and reliable customer service including extra support

In addition, within the timeframe of this vulnerability strategy it seems reasonable to expect some particular areas of technology and process change to have greater impact and move more quickly than others. Key to this is, as recognised by Ofgem, BEIS and the CMA are smart meters. As the core technology finally reaches every home and as suppliers begin to implement the new and sophisticated systems and processes that smart metering will support, there are numerous opportunities for innovation to benefit consumers in vulnerable situations. But it is not a given that suppliers will take up these opportunities. It is the job of the regulator to ensure they do!

In my view Ofgem should grasp this chance to set out a bold vision that targets specific problem areas for vulnerable groups under the innovation theme. For me these should be:

- Tackling debt and preventing arrears
- improving customer service experiences for vulnerable groups

As already noted above, accelerating the rollout of smart prepayment will provide real alternatives for low-income and vulnerable households, especially in relation to managing their budgets and avoiding debt. An increasingly competitive prepayment market is likely to be a trigger for greater innovation by suppliers to win and retain prepayment customers, including vulnerable ones.

It's easy to imagine numerous other ways in which both suppliers and the regulator could help to deliver new products and services to substantially reduce the occurrence of arrears and debt in the market and to radically improve the customer service experienced by all consumers including those in vulnerable situations.

Enabling Innovations to tackle consumer debt

Three ideas for innovations to prevent debt are explored below.

'Digital Savings Stamps' to help ppm users prepare for winter

One of the best ways to prevent debt is to encourage consumers to save in advance for their energy costs. Ovo's innovative 'Winter Wallet' product lets ppm customers save up credit for winter with the chance to win prizes of free credit. Similarly, savings stamp schemes are popular with shoppers with savers earning up to 6% from individual supermarkets²³. A national 'Digital Savings Stamps' could benefit all ppm customers and encourage positive behavioural outcomes. Ofgem could look at creating a regulatory framework to support this including a central fund to safeguard customer monies, perhaps in partnership with <u>NS&I</u>. This would complement the warm home discount and help consumers manage winter fuel costs.

²³ Money Saving Expert (2018) <u>Supermarket Xmas Boost</u>

Making DAP more attractive to suppliers and consumers

The debt assignment protocol (DAP) provides a useful option for ppm customers to switch with debt but success rates are low²⁴. There could be scope to increase success rates by improving the appeal of DAP to both suppliers and consumers. Acquiring suppliers already have incentives because they purchase DAP debt at a 10% discount. This predictable discount rate might appeal to financial institutions willing to finance debt acquisition in return for reliable income streams to fund products like pensions annuities. Ofgem could help to facilitate such tie-ups by engaging with the financial sector. With access to low-cost finance, DAP could become a customer acquisition strategy helping to increase the value of successful DAP transfers for suppliers. Acquiring suppliers could use part of the 10% discount to reward customers who keep up their repayments while increased DAP success rates will help more indebted customers to access new products and competitive tariffs.

Dual-mode credit/prepayment tariffs

Ofgem could look to pilot new tariffs that harness the capability of SMETS2 smart meters to operate in both credit and prepayment modes. Credit tariffs incorporating pre-agreed weekly or monthly credit limits could automatically trigger meters to switch to prepayment mode once the limit was reached (with appropriate alerts and warnings issued to the customer first). Customers would clear their balance to return to credit mode. It might be possible to transfer credit limits between suppliers using a 'no claims bonus' style system like the insurance industry. Such tariffs could benefit standard credit customers while reducing credit risk and cost to serve for suppliers. They might not be suitable for gas use and could pose additional risks for certain vulnerable households. Specific safeguards would be needed to ensure consumers didn't become trapped on prepayment.

Innovations to improve Customer Service

There are a range of existing and new technologies that could help to improve the quality and consistency of customer service experiences for all customers including those in vulnerable situations. Ofgem could consider setting up additional dedicated funds or supplier allowances for innovation to enable developments in these areas. Some obvious opportunities would include machine learning and artificial intelligence (AI) combined with increasingly sophisticated interactive voice response (IVR) systems and automated online support.

- machine learning could be used to automatically identify common characteristics of vulnerable consumers from phone-based and digital interactions allowing potentially vulnerable consumers to be flagged automatically for extra support.
- Machine learning could also be used to spot early warning signs of customers facing payment difficulties. This would allow suppliers to offer timely support and alternative payment options such as smart ppm before customers get into arrears or debt.
- Automated IVR systems using AI could be employed to deliver faster and more consistent service for all customers seeking to carry out routine tasks such as taking readings (hopefully soon a thing of the past), checking balances, checking tariffs and updating contact details while retaining phone-based services. This could also enable better support for non-English speakers. AI powered 'Chat bots' could achieve similar results for digital customers.

²⁴ Ofgem (2018) <u>Vulnerable Consumers in the Energy Market: 2018</u>

5. Working with partners to tackle issues that cut across multiple sectors

I agree that regulators working across sectors can add significant value in terms of more effective support for vulnerable consumers in all essential utility markets. However, for this to justify itself as a standalone theme in the updated Ofgem Consumer Vulnerability Strategy 2025 I feel the level of ambition would need to be much higher. However, it is debatable whether Ofgem has sufficient powers to deliver more ambitious outcomes in isolation. For example, implementing new cross-sector tracking of vulnerable users would make a lot of sense. Yet Ofgem cannot mandate this. They could only engage with other regulators and government departments in the hope of establishing such mechanisms. I would argue that it may be more effective to keep the focus of the strategy on areas where Ofgem has more direct control – for example expanded action in the prepayment energy market.

I am not sure there is a need to include better information sharing with 3rd-sector organisations as a specific outcome in the strategy. This is surely within Ofgem's power to deliver in their day to day practice and will only be welcomed by the 3rd-sector so is not necessarily an outcome that needs explicit inclusion in this strategy.

The two outcomes listed under the heading of 'More clearly defining our role and that of government' also appear a bit woolly. Outcome 5C sounds like 'continuous improvement' which should be applied as a guiding principle across the board and not just under this theme, while Outcome 5D seems to undershoot on ambition. While stakeholders may want the Government and Ofgem to better define their roles and responsibilities on supporting vulnerable consumers, this might be a matter for government. Hence it might be better to use this space in the strategy to focus on core vulnerability issues that Ofgem can directly influence.

One exception here that is presumably within Ofgem's control and could be considered as a form of cross-sector working would be a revision of the roles of DNOs, GDNs and suppliers in supporting vulnerable consumers with the emphasis shifting to the network operators to build and maintain PSR registers with suppliers accessing these, with consumer consent, to inform which extra support services they offer to customers.

Question 2: Do you agree with our approach on affordability?

Question 2 full text: Do you agree with our approach on affordability? While we recognise this is a concern for many consumers in vulnerable situations, we think addressing wider affordability pressures is mainly a matter for government to address.

Affordability remains a key issue for many consumers. It is a concern that it has been rolled in with prepayment and debt under a single theme 'Supporting those struggling with their bills' in the draft 2025 strategy. This suggests these issues may have slipped down the agenda for Ofgem.

I agree that wider affordability pressures such as reduced household incomes are a matter for government. However, affordability issues arising from a failure of competition do fall within Ofgem's remit. The CMA's recent provisional recommendation for Ofgem to extend the Prepayment Charge Restriction²⁵ confirms that this market is still not working for consumers. Hence, I would argue that Ofgem can and should take further action to address these ppm market failures. This will also benefit many low-income households at risk of debt on direct debit or standard credit tariffs.

²⁵ CMA (2019) Review of the Energy Market Investigation (Prepayment Charge Restriction) Order 2016

The landscape has changed since the CMA originally prescribed the PCR. The SMETS1 end date for credit meters passed in December 2018 and for ppm in March 2019. In June the New and Replacement Obligation came into force requiring suppliers to take all reasonable steps to use SMETS2 compliant meters whenever new or replacement meters are installed. This means in the Government's view there are now no market impediments to stop suppliers rolling out SMETS2. It is therefore an appropriate time for Ofgem to consider bolder action to accelerate the transition to smart prepayment. I have suggested several actions to achieve this under question one above.

The case for accelerating smart prepayment

- Smart prepayment offers something different for consumers because it gives them control over their fuel costs. As both CSE²⁶ and Ofgem²⁷ have previously noted this is something consumers really value, despite the high costs and service deficiencies of ppm. This explains why 1 in 6 consumers still prefer ppm.
- smart prepay is already transforming the experience of prepayment for the ppm customers that have received their smart meters. BEIS²⁸ report higher rates of satisfaction and more likelihood of recommending smart meters to others amongst this group. They also found that 9 in 10 smart ppm users said topping up was easier with 86% saying it was a lot easier.
- There is evidence to suggest that the ppm share of the market will increase as competition and innovation improves prices and service. Utilita²⁹ predicted in 2014 that over the next 10 years 10 million households (40% of the market) would adopt smart ppm due to the increased convenience of it offers. They also highlight significantly lower costs to serve for smart ppm. Evidence from other markets also suggests significant growth in prepayment is likely. A good example is the mobile phone market where prepay still accounted for 30% of mobile phone contracts in 2017³⁰, despite the popularity of monthly contracts to spread the costs of expensive smart phones for web-browsing. This is almost double the proportion of ppm in the energy market.
- Prepayment customers make up a disproportionate share of fuel poor households but have the lowest average fuel poverty gap meaning they should be the cheapest to lift out of fuel poverty. Analysis of the latest BEIS fuel poverty statistics³¹ confirms that ppm accounts for 14.9% of electricity users but 31% of fuel poor users. Similarly, for gas ppm accounts for 13.5% of users but 26% of all fuel poor gas customers (excluding non-gas customers). Yet the fuel poverty gap for these users is the lowest at £254 for electricity and £205 for gas. As recent analysis by Bulb highlighted, the gap between the cheapest ppm and non-ppm tariffs could be as much as £222. It's clear that effective competition in the prepayment market could have a big impact on reducing fuel poverty for these ppm users.

All these reasons mean there is as strong case for action now by Ofgem to accelerate the rollout of smart prepayment to help address affordability issues.

²⁶ CSE (2015) Financial Statements 2015

²⁷ Ofgem (2015) Consumer Vulnerability Strategy Progress Report

²⁸ BEIS (2018) <u>Smart meter progress report 2018</u>

²⁹ Utilita (2014) Utilita (2014) Smart Prepayment Journey

³⁰ Ofcom (2018) <u>Communications Market Report</u>, pg57

³¹ BEIS (2019) Fuel Poverty Detailed Tables (2017 Data)

Question 3: What more could be done through energy regulation ...?

Question 3 full text: What more could be done through energy regulation to assist consumers in vulnerable situations in the longer term? How should any such further measures be funded?

I have already discussed a number of areas where Ofgem could take additional action through regulation to assist vulnerable customers including:

- Regulation to accelerate smart prepay through mandating smart prepayment tariffs for all suppliers and developing rules and norms to enforce the NRO
- Setting rules to prioritise vulnerable households in the smart meter rollout based on similar criteria as warm home discount eligibility
- Extending the Alt-HAN regulatory framework to support centralised rollout of smart meters with tailoring of equipment and training to specific vulnerable groups

In addition to these areas of potential regulatory change, Ofgem could also take additional action on regulating debt recovery and WHD payment arrangements.

Regulation around debt recovery on smart meters and avoiding consumer crises

Ofgem should establish a working group involving suppliers, network operators, meter manufacturers and consumer groups including debt specialists to set new metering codes to govern the management and collection of debt through smart prepayment meters. This should include:

- requiring suppliers to automatically flag accounts to review debt recovery rates when customers fall behind with top-ups to their meter or repeatedly invoke emergency credit
- Simplify debt recovery rules on smart prepayment meters by outlawing higher recovery rates for money 'owed to the meter'
- requiring suppliers to investigate self-disconnections within 24-48 hours, perhaps including referrals to local social care agencies if the supplier cannot make contact with the customer
- requiring suppliers to be proactive in regularly verifying ppm account holders to avoid scenarios where one customer ends up paying off a previous customer's debt
- recognising that legitimate scenarios do exist where customers may not top-up for a period (e.g. low/no gas use over the summer) and considering appropriate safeguards in this area
- encouraging all suppliers to offer alternative tariffs for low users that combine standing charges in the unit price to avoid debt accruing if the meter is not topped up for a while

In many cases these kinds of changes could be funded by suppliers by offsetting costs against reduced debt recovery costs. Increased engagement and proactive support for smart prepayment customers including regular verification of account holders and additional engagement to support potentially vulnerable customers could be offset against reduced costs from engineer callouts to reset meters. At the same time higher costs to serve for traditional ppm meters resulting from higher meter costs and rental charges should disappear with the rollout of smart meters³² making it more appropriate for suppliers to average customer service costs across all payment types.

Prioritising ppm customers for early payment of the Warm Home Discount

The warm home discount (WHD) is used by many prepayment customers to help with their winter fuel costs. However, recipients of the WHD on prepayment are at a disadvantage because the WHD

³² CMA (2016) <u>Appendix 9.8: Analysis of indirect costs by payment method, paragraph 3</u>

is generally paid out by suppliers towards the end of winter in March. This is too late to help prepayment customers with their winter fuel costs as they have to pay for their energy in advance.

Ofgem could take action to require suppliers to prioritise prepayment customers in the same way that pensioners are prioritised for early WHD payment to ensure that prepayment customers receive their payment when it is most useful to them - i.e. before they have to pay for their winter fuel.

Prepayment customers are disproportionately likely to be in fuel poverty than consumers using other payment methods³³ and often also fit into groups that qualify for the WHD including single parents and those on disability allowances. Therefore, prioritising WHD for ppm customers would probably also disproportionately benefit the fuel poor.

Ofgem should also encourage all suppliers to offer the full range of smart prepayment features available in the market including a 'single wallet' that allow customers to transfer credit between their electricity and gas accounts³⁴. As 85% of households use gas for heating it makes more sense for the WHD to be available to cover gas costs but for practical reasons it is paid out through electricity accounts and so easy transfer between the two is vital.

It's difficult to guess what the cost impact of such a change would be for suppliers but it doesn't seem unreasonable to expect suppliers to tailor the service they deliver to suit the payment method of the customer receiving the WHD. Otherwise these customers will continue to be penalised by delayed payment of the WHD until after the key time when it would be useful to them has passed. The fact that this long-standing issue with the WHD scheme might remain outstanding serves to highlight just how badly prepayment consumers continue to be treated in the market in general.

³³ 23.1% gas ppm customers are fuel poor versus 7.2% for direct debit. BEIS (2018) <u>Annual Fuel Poverty</u> <u>Statistics Report, 2018</u>

³⁴ PrepaidEnergyHub.com (2015) 7 top-up innovations your prepaid energy customers will love

Question 4: Do you agree with our proposals for the first year of the strategy?

I generally agree with the proposals for the first year of the strategy except that I think action on prepayment issues needs to be expanded significantly beyond just strengthening protections for consumers in vulnerable situations who self-disconnect from their meters.

As described above, Ofgem has the opportunity to take some relatively simple but powerful steps to aid and accelerate the transformation of the market for prepayment customers and other customers who would benefit from accessible, convenient and competitive smart prepayment offers.

I would like to see Ofgem taking a variety of actions in the next 12 months including:

- mandating all suppliers have a smart ppm offer open to all customers within 12 months
- engage with various market actors to establish norms and enforce the NRO to accelerate the smart meter rollout
- engage with BEIS and suppliers with a view to prioritising vulnerable, low-income and ppm households in the remaining smart meter rollout based on existing supplier held information
- investigate opportunities and issues relating to the implementation of Alt-HANs and consider any additional safeguards that might be required as well as opportunities for using this framework to improve the smart meter rollout for vulnerable consumers

Appendix 1: Author's Qualifications and Experience

- 2011: Completed an MSc in Energy Policy, University of Exeter
- 2013-2017: managed and delivered energy advice and fuel poverty services for Islington, Hackney and Camden councils including debt support and consumer advocacy with suppliers
- 2015: worked with Citizens Advice to jointly write and produce a series of consumer advice films on prepayment meters, available <u>here</u>
- April 2016: 'Extra Savings From Smart Prepay', online article highlighting how smart prepayment can drive greater energy savings than credit smart meters, available <u>here</u>
- July 2016: 'Smart meters in flats: will more deprived households have to wait longer for their meters?', online article featuring original statistical analysis on the greater impact of the Alt-HANs issue on more deprived households, available <u>here</u>
- August 2016: 'Smart Meters in Flats: Quantifying the Problem in London and Other Urban Areas', follow-up article featuring original statistical analysis quantifying the potential impact of Alt-HANs in selected high-density London boroughs, available here
- November 2016: Participated in a BEIS smart meters workshop on post-installation support for vulnerable consumers
- January 2017: 'On Tackling Fuel Poverty with Smart Prepayment Meters', online article featuring original statistical analysis highlighting the cost-effective policy opportunities offered by smart PPM for reducing fuel poverty, available <u>here</u>
- April 2017: became a member of the JRF Project Advisory Group for their research on 'Supporting vulnerable households to benefit from smart meters' (and shadowed a smart meter installer for a day)
- May 2017: **'Supporting vulnerable residents to benefit from smart meters'**, presentation to the BEIS smart meters Consumer Reference Group
- February 2018: 'Smart, Effective and Efficient: Transforming the Smart Meter Rollout', online article proposing new approaches to benefit vulnerable consumers, available <u>here</u>
- March 2018: interviewed as part of research by the Smart Meter Data Public Interest Advisory Group, convened by Sustainability First and CSE

Appendix 2: Comparing Benefits and Disadvantages of Smart Meters for Different Consumers

The following table compares the benefits of smart meters for prepayment customers, low-income credit customers and affluent credit customers. This table was originally featured in the online article **'Smart meters in flats: will more deprived households have to wait longer for their meters?'** produced in July 2016 and available <u>here</u>. Numbered references in brackets can be viewed in the online article.

Benefit		enefits?		
		Low Income Credit	Affluent Credit	Now or Future?
Competitive prepay pricing: CAB ⁽⁷⁾ estimate that prepay costs £226 more a year. Smart meters remove technical barriers to effective competition in the prepay market ⁽⁸⁾	Y	N	N	Already happening
Greater convenience for prepay customers: multiple top-up channels make smart prepay far more convenient	Y	N	N	Already available
Less chance of self-disconnection: In-Home Displays can alert users when credit is running low so they can top-up before credit runs out	Y	N	N	Already available
Direct connectivity improves customer service: Suppliers can update meters directly without customer involvement meaning faster resolution of problems	Y	N	N	Already available
An end to estimated billing: 'Real-time' readings will help low-income credit customers in particular by stopping over or under-charging	n/a	Y	Y	Already available
Smart Prepay offers a new option for low-income households to avoid debt: better pricing and service make it an attractive option for low-income households	Y	Y	N	Already available
Better Warm Home Discount payment options for prepay: The WHD can be credited direct to meters and 'Single wallets' for dual fuel mean the WHD can easily be spent on winter gas costs	Y	N	N	Already available

Table 1: Comparing Benefits and Disadvantages of Smart Meters for Different Consumers

Timothy Hendry - Response to Ofgem Consultation: Consumer Vulnerability Strategy 2025

Lower 'cost to serve' may cut bills: Suppliers are				Future Benefit:
already reporting lower 'cost to serve' ⁽⁹⁾ for smart meters which could benefit consumers in future	Y	Y	Y	depends on suppliers passing on savings
Easier to switch payment method or supplier: smart meters will make it much easier to switch between credit and prepay modes and to switch supplier too	Y	Y	Y	Future Benefit: depends on DCC infrastructure and SMETS2 meters
Real-time feedback encourages saving: In-Home Displays alert users to save energy and cut bills. Some evidence suggests this may be more enduring for smart prepay users – see <u>here</u>	Y	Y	Y	Already available with existing smart meters
Smart Appliances and Energy Storage: Smart meters enable these technologies to help manage household demand. Affluent consumers will be able to afford these new technologies sooner	Y	Y	Y	Future Benefit: these technologies are already on the market but not yet mainstream
Time-of-Use Tariffs: Smart meters enable TOU tariffs that could create further savings by incentivising reductions in peak demand	Y	Y	Y	Future Benefit: depends on substantial innovation in the energy market
Disadvantages				
Smart meter inter-operability issues: this may impede smart-meter users from switching supplier until SMETS2 meters arrive. Even so, legacy prepay & low-income consumers may still be better off on smart prepay	Y	Y	Y	This existing limitation will be resolved by SMETS2 meters (and enrolling SMETS1 in the DCC)
The Alternative HAN issue delays smart meters for some: this discussion suggests deprived households are more affected than affluent ones	Y	Y	Y	This issue is the subject of this blog!