Feed-in-Tariffs (FiT) and metered export payments

Part A: Proposal for discussion

A. Purpose

This document sets out Energy UK’s preferred way forward to the challenges faced by electricity suppliers (both energy retailers and FiT Licensees) when seeking to comply with their Standard Licence Condition (SLC) to measure FiT export by way of meter readings where an export, or export capable, meter is fitted.

EXECUTIVE SUMMARY

Energy UK:

- believes that under the current FiT arrangements it is highly unlikely that FiT Licensees will be able to deliver consistently against BEIS’s policy intent and comply consistently with their existing supply licence conditions.
- believes that the current industry arrangements do not support a positive customer journey for smart meter customers who have microgeneration on site, and as such we have identified a considerable risk to the public’s perception of the smart meter rollout.
- supports the switch from deemed to metered FIT export payments being decoupled from the physical installation of a smart meter and the adoption of a hard deadline when all FIT installations would be switched over from deemed to metered FIT export payments.

We therefore, propose changes to the current FiT arrangements to ensure that they support the delivery of BEIS’s policy intent, and protect the customer journey related to the installation of smart meters at FiT sites.

B. Background

In accordance with the Electricity Supply Licence, where a smart meter is installed at a FiT generation site the FiT Generator (customer) should receive FiT payments based on their metered export from their FiT Licensee, rather than at the deemed rate applicable where there is no meter capable of measuring export on site.\(^1\) It is BEIS’s policy intent to end deemed export payments for all FiT installs and see the entire scheme move to export tariff payment based on actual meter reads on the completion of the smart roll-out. Deemed export payments were only ever intended to be temporary. Energy UK and its members support BEIS’s stated policy intent.

However, there are a number of challenges associated with the process related to the FiTs Licensee making FIT payments based on export meter reads. Without a consistent industry-wide solution, FiT Licensees will have to pursue manual, ad-hoc solutions which place a burden on the consumer to facilitate some of the process.

Therefore, under the current FiT arrangements, it is highly unlikely that industry will be able to deliver against BEIS’s policy intent or fully comply with their licence conditions. Furthermore, it is clear that

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\(^1\) Schedule A to Standard Condition 33 of the Electricity Supply Licence.
attempting to deliver against the current arrangements is likely to result in a poor smart meter customer experience for FiT Generators and potentially increased costs for all electricity customers.

We propose a solution to the challenges faced by FiT Licensees over export meter payments. In Section D the considered solutions are explored, providing supporting evidence for the way forward.

C. Operational challenges

The compliance challenges facing FiT Licensees are:

- knowing that a smart meter has been installed at a relevant FiT site where they are not the import supplier; and
- accessing export data from the smart meter installed.

In addition, the current regulatory landscape makes it difficult for cost recovery for export payments potentially leading to increased costs for all electricity customers.

In order to change the Generator’s FIT payment tariff from deemed to metered the FiT Licensee must be notified of a smart meter being installed at the site. However, there is currently no standard industry process to ensure that a FiT Licensee is made aware of a smart installation at a relevant FiT site where they are not also the Import Supplier responsible for installing the meter. We understand that the FiT Licensee is not the import supplier for an average of 46% of their sites.²

Without an established industry process, FiT Licensees are reliant on either:

- the Generator, for whom they are not the Import Supplier, notifying them of the smart meter installation, which is not a reliable process; or
- a periodic search of either the online or offline versions of the MRA Electricity Central Online Enquiry Service (ECOES) database. ECOES is updated by the installing party within ten working days of the meter installation and so using this would result in a period of non-compliance.

Furthermore, querying the online ECOES database is a resource intensive process as there is no existing batch reporting process, and unique searches of the online databases are limited to 3,000 queries per Licensee per day. Suppliers may download data cuts that they are better able to interact with, however these are only available on a monthly basis. Relying on the ECOES system alone would provide an inconsistent solution the efficacy of which is dependent on a number of parties and processes. Therefore, it is likely there would be a lag between the meter installation and the FiT Licensee becoming aware of it, creating a period of unavoidable non-compliance. Instead, Energy UK supports the development of a robust, long-term solution which will enable FiT Licensees to identify sites where a smart meter is installed promptly following the installation.

Furthermore, in order to pay metered FIT export payments, the FiT Licensee must have access to the registered export readings recorded by the meter. This could be through either remote access or through manual reads. The DCC is well placed to support the provision of remote reads on an ongoing basis. There are a number of prerequisites that are required to set up a meter and access Export Register reads in the DCC, these include:

- The FiT Licensee must be a DCC User in the Role of Export Supplier.
- The meter must be registered on the DCC.
- An export MPAN is required to access export register reads.
- The Import MPAN and Global Unique Identification (GUID) of the meter are required to assign the Export MPAN to the meter.

However, there are currently challenges with each of these prerequisites:

- Not all FiT Licensees are (or intended to be) a DCC User in the Role of Export Supplier.

² According to an RFI by Energy UK to which 11 FiT Licensees responded (July 2018).
• SMETS1 meters will only be registered on the DCC post enrolment and adoption. We understand that most SMSOs do not support remote access to export register reads from SMETS1 meters.
• There are an estimated 923,000 FiT installations in GB, of which 93% are Solar PV <4kW and are unlikely to have an existing export meter and export MPAN. Therefore, Licensees will need to request a high volume of export MPANs from DNOs. Given the high volume of export MPAN’s likely to be required, this may cause an unsustainable administrative burden for both Supplier’s and DNO’s if required within the term of the smart meter rollout. It is worth noting that the creation of Export MPANs may be required for mandatory half-hourly settlement, an area under Ofgem review (via the Half-hourly Settlement Code Review).
• If you are not also the Import Supplier you do not currently have access to the Import MPAN or GUID.

Ensuring these challenges are addressed may require modifications to the SEC or other industry codes/processes.

The alternative of asking the customer to provide manual reads offers a poor smart customer experience, as this is an additional requirement on the customer as a direct result of the installation of the smart meter. This would entail the FIT licensee coaching the Generator in how to read that particular meter and for the Generator to have easy access to read the meter. Consequently, there is a potential risk to the perception of smart metering. This could have far reaching implications on the smart meter roll-out, the success of which is dependent on customer engagement and support. Whilst the Smart Meter Implementation Programme (SMIP) and FiTs Scheme are both Government initiatives, for customers, both initiatives are delivered by suppliers, as such a lack of holism is likely to lead to supplier criticism.

In addition, without an export MPAN, and associated registered export meter readings, exported energy from FiT installs cannot be settled on the market. FIT policy design also means that the costs of metered export payments cannot be socialised via levelisation the same way deemed payments are. Where there is not an Export MPAN in place, Licensees must meet the export costs of their FIT portfolio entirely through other commercial activities. Where they are an energy supplier this will affect their import customer base – having a distortive effect on the retail energy market. This effect is particularly acute where a supplier’s share of the FIT market differs significantly from their share of the retail market, as this will result in significant imbalance in the costs faced by different customer groups – purely as a result of their choice of supplier.”

Energy UK believes that these challenges are significant and recognises the need for timely resolutions to enable both the supply licence conditions and policy intent to be met effectively. FIT Licensees need a robust and reliable process that supports them in complying with their licence conditions in such a way that offers a consistent and satisfactory customer journey and meets customers’ expectations of smart. The costs must be proportionate and complement the long-term objectives of industry so as to minimise the risk of sunken costs.

D. Way forwards

To address the first challenge of knowing a smart meter has been installed, Energy UK’s preferred solution is for the either one of or both the DCC and ECOES to be linked to the Central FIT Register (CFR), enabling FIT Licensees to receive a notification when a smart meter is installed at a FIT site relevant to them. This would enable the FIT Licensee to change the Generator to metered FIT export payments in a timely and appropriate manner.

In relation to the second challenge, FIT Licensees, should be able to access the relevant export register reads via the DCC for all SMETS2 meters and all SMETS1 meters post enrolment and adoption. However, Export MPANs will need to be created at all FIT sites to facilitate this, and a mechanism to provide the FIT Licensee, where they are not the Import Supplier, with the Import MPAN and GUID will be needed.³ We recognise that this will require FiT Licensees to be a DCC User in the Role of Export Supplier.

³ Subject to any data protection issues, this could be facilitated as part of the solution to the first challenge if the DCC is linked to the Central FIT Register – DCC are currently looking at this.
Export MPANs would then enable FiT exports to be settled on the market. Alternatively, metered export could be introduced into levelisation, which could provide greater market stability.

Energy UK believes that the way forward outlined above best enable BEIS’s FiT policy intent to be realised effectively, whilst protecting the smart customer journey in such a way that is complementary of potential future change, most notably the Half Hourly Settlement Significant Code Review which could mandate export settlement on a half-hourly basis, necessitating the need for remote reads and the creation of Export MPANs, independent of FiT policy.

Further, we think that the realisation of this policy should be de-coupled from the smart meter roll-out, with the introduction of a cut-over date at which time export FiT payments are introduced to the entire FiTs portfolio based on the arrangements developed in the intervening period. This would protect the roll out from any unintended consequences of this policy and offer a consistent customer experience for both Smart and FiTs. It would also provide the necessary time for the solution above to be developed, implemented and tested by industry, especially given the role of the DCC in the proposed solutions and the concurrent pressures on the DCC.

E. Next steps and timelines

We understand DCC are currently exploring with users via the Smart Energy Code Administrator and Secretariat (SECAS) the potential of:

a. linking Ofgem CFR to the DCC;
b. altering the DUIS (DCC User Interface Specification) to ensure the different users are able to utilise the Import and Export Supplier user profiles harmoniously, and;
c. developing a DCC DUIS alert system to notify FIT Licensees of relevant smart meter installations. These changes will require the SEC Modification Process to be followed, which can take up to two years. DCC will then require at least 13 months to implement any change.

To ease the time and cost burden on exploring these solutions, DCC are also considering an interim solution to the development of a DUIS DCC alert system, a regular report produced by the DCC which will notify suppliers of relevant installations and any information required to assign an export MPAN to the meter, noting there will likely be a small associated compliance lag.

Simultaneously, suppliers via the Joint Market Intelligence Service Design Group (JMDG) are exploring the proposed solution of linking the Ofgem Central FiTs Register (CFR) with ECOES (see Part B, where this solution is discussed). We understand that Ofgem met with the JMDG on 5th December to discuss this solution.

Further to this, there are two MRA MAP changes which a Supplier/FiT Licensee has raised to facilitate the creation of Export MPANs. These changes have been agreed, and will introduce SLA’s for DNO’s to respond to a request to create MPAN’s within 10 working days of the request from the Supplier/ FiT Licensee, up to a maximum of 50 requests per supplier per DNO per day. Requests exceeding this would need to be discussed via bilateral arrangements. The second change facilitates this by ensuring that new MPANs will be requested through ECOES, and that the party raising the MPAN will be able to track their open/outstanding requests. The implementation date is 19 February 2019.

Should Export MPANs be mandated to settle export energy, further code modifications may be required. These could be raised by any relevant party, and would likely take 12 months to be agreed and implemented. Should levelisation be pursued this would be a matter for Government to implement.
Part B: Considered solutions

F. Introduction

This section considers the potential solutions to the technical challenges facing Feed-in-Tariff Licensees in relation to paying Generators metered rather than deemed export payments when a smart meter, capable of measuring export, is installed at a FiT Generation site. Where possible anticipated costs and timelines are identified.

G. Operational challenges (re-cap)

The operational challenges associated with moving to metered export payments where a smart meter is installed at a FiT Generation site, which are explored here are:

- Knowing that a smart meter has been installed at a relevant FiT site;
- Being able to access the smart meter’s export data;
- Recovering the costs of FiT export payments.

H. Considerations

In identifying the most effective solution to these challenges the following key factors have been considered:

- **Effectiveness** - It is necessary that the chosen solution is reliable in every instance so as to ensure compliance with the Licence. To support this, the solution should provide accurate and timely information and the roles and responsibilities of the active parties should be formally agreed;
- **Customer experience** - It is essential that the customer’s (FiT Generator) experience is not negatively affected by the installation of a smart meter. This supports a solution with minimal requirements on the FiT Generator to undertake actions.
- **Cost** - The cost of the relevant changes must be proportionate and not place unnecessary cost on customers’ bills in either the short or long term, as far as is foreseeable.

In addition, Energy UK is mindful of concurrent industry change. Additional considerations beyond the operation of the FiT scheme which must be accounted for when considering the effective functioning of the scheme as part of a holistic policy landscape.

i. Smart meter roll-out

The FiT scheme should not undermine the Smart meter roll out.

The customers’ smart meter journey is crucial to the perception of smart meters and, therefore, the success of the roll out. We do not support any policies that jeopardise this experience.

In addition, we are aware that in some cases FiT Generators will receive reduced FiT payments as a result of the switch to metered export reads. We do not know what proportion of FiT Generators will be affected in this way, however, there is a risk of this incidence causing negative media attention in relation to smart metering. Moreover, it is reasonable to consider customers with FiT Generation to be keen adopters of smart metering technology as they are engaged in the market. These concerns will disproportionally affect this group which may otherwise advocate the technology.

ii. Half Hourly Settlement (HHS) Significant Code Review (SCR)

Ofgem is currently revising settlement arrangements as part of the mandatory HHS SCR. As part of the SCR, Ofgem will be considering whether to mandate the creation of Export MPANs and will also be looking at whether such MPANs would need to be settled on a half hourly basis.\(^4\) It is vital that Ofgem

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\(^4\) Currently export can be settled either on a half-hourly or on a non-half-hourly basis, but to-date Licensees have been required to settle larger export sites on a half-hourly basis, whilst non-half-hourly settlement has only happened in association with a small
and Elexon carefully consider FiT as part of the SCR to avoid sunken costs. As noted above, if the SCR mandates export settlement on a half hourly basis, this will necessitate the need for remote reads and the creation of Export MPANs, independent of FiTs policy.

iii. Additional concurrent change

In addition to policy areas directly affected by changes to the FiT scheme, consideration must be given to broader policy change which may have a significant impact on the speed and cost of change.

iv. Effect on competition

Not all FiT Licensees are DCC Users, some solutions would require them to become DCC users which would introduce additional costs and may be a barrier to market participation that would have inconsistent impacts across the market.

I. Considered solutions

1. Knowing that a smart meter has been installed at a relevant FiT site

Considered Solution 1: Notified by Generator

The FiT Licensee is informed by the Generator (customer) when a smart meter has been installed at the premises. This is requested through a change in Generators FiT Statement of Terms and would be effective for all SMETS meters.

Required changes
- A change to FiT Generators Statement of Terms;
- Some changes to FiT Licensee systems to enable them to receive notifications from customers.

Effectiveness
Where the customer notifies their FiT Licensee of a smart meter installation at the premises this solution will prove an effective remedy.

However, customers may not notify their FiTs Licensee of their smart meter installation, or may not do so immediately, and FiT Licensees lack the ability to monitor and enforce this requirement. As such this is not a reliable solution for FiT Licensees to use to ensure that they are making export meter payments where a smart meter is installed.

Customer compliance may be affected by the potential effect of a change in FiT payment arrangements (from deemed to metered). Similarly, it may be affected by unrelated factors such as forgetfulness or disengagement.

Customer Experience
The requirement on the customer to notify the FiT Licensee is not a positive customer experience. The impacts of this on the effectiveness of the solution are reflected above.

Cost
Whilst this solution avoids the costs of system development there will be costs associated with changes to FiT Generators Statement of Terms and any further relevant outbound customer engagement, such as prompts and reminders.

Conclusion
Whilst a possible interim option, this is not a reliable solution due to its dependency on the actions of the customer and so does not effectively support the policy intent. Therefore, it is not an appropriate long-term solution that is feasible at scale.

Considered Solution 2: FiT Licensee queries ECOES

number of FiT related MPANs, system development for non-half-hourly settlement would incur sunken costs if half hourly settlement is later mandated.
FIT Licensees periodically query the MRA Electricity Central Online Enquiry Service (ECOES) database for smart meter installations at relevant sites, either through an online check or by downloading monthly data reports.

**Required changes**
- Relevant permissions put in place, to allow FIT Licensees to query the ECOES database for smart meter installations at sites relevant to them.
- FIT Licensees to develop approaches suitable to searching the ECOES database, either manually or the development of an automated search function.
- Regulatory support for this approach, recognising its inconsistency because of time lags.
- Customer engagement over the solution and the impact upon their FiT export payments.

**Effectiveness**
ECOES records are not always correct as there is a ten-day period in which the installing party are permitted to update ECOES. This affects the precision of this solution. This lack of reliability would affect FIT Licensees’ ability to comply with the License. This solution would not support the policy intent satisfactorily.

Currently, it is not possible to query the live ECOES database in batches. It is a manual process restricted to 3,000 queries per day creating the potential for additional lag. The size of the FiT portfolio of Licensees will therefore affect their ability to identify smart meter installations. It should be noted that, as per MAP 15, consolidated offline monthly reports are made available to each Licensee. Again, this introduces potential further time lags.

Furthermore, this solution would not provide the FIT Licensee, where they are not the Import supplier with all the information they need (i.e. GUID) to assign an export MPAN to the meter on the DCC. The FIT Licensee would need to look elsewhere for this information, potentially the SMI, but there are currently no processes in place for the FIT Licensee to know to look there.

**Customer experience**
This solution has little impact on the consumer experience except in the instance of a delay in the process, which will result in the Generator receiving an incorrect FiT payment for that period. This inconsistency may lead to confusion and customer dissatisfaction.

**Cost**
Querying the inventory would either need to be completed manually requiring significant resource from the FIT Licensee, or automated, requiring system investment. The greater the frequency of database checks, the more resource intensive this solution would be.

It should be noted that the MRA are in the process of developing a commercial Application Programme Interface (API) to facilitate automated checks. However, these will be run individually against a specified search criterion and will not provide the full automation required for this solution to be effective.

**Conclusion**
This would be a resource intensive solution that does not offer the consistency required to satisfactorily meet the policy intent or current licence conditions. Where the costs are mitigated, so too is the effectiveness. Therefore, we do not think that it would be proportionate solution.

**Considered Solution 3: Linked ECOES database and CFR**
The Ofgem CFR is linked to the MRA ECOES database so that when a smart meter installation is flagged to the ECOES database, ECOES is able to determine whether or not the premises is a FiT Generator and who the FiT Licensee for the premises is. The MRA then notifies the relevant FiT Licensee.

This solution is currently being explored by Ofgem and the Joint Market Intelligence Service Development Group (JMDG).

An alternative to this solution is where ECOES notifies the CFR of smart meter installations and the CFR notifies the relevant FiT Licensees.
Required changes

- The CFR to be shared with the MRA enabling FiT sites to be identified in the ECOES database along with the relevant FiT Licensee and updates to be made in accordance with any changes to the CFR, or alternatively, ECOES records to be linked with Ofgem in the same way to enable sites with smart meters to be identified;
- The CFR to be shared with the MRA and the ECOES database updated in accordance with any changes to the CFR;
- The development of a notification process between the MRA and FiT Licensees, or between Ofgem and FiT Licensees in the alternative solution;
- Some changes to FiT Licensee systems to enable them to receive these notifications from the MRA or Ofgem;
- Customer engagement over the solution and the impact upon their FiT export payments.

Effectiveness

ECOES records are not always correct, affecting the accuracy of this solution, and there can be delays in ECOES being updated, affecting the consistency of this solution. This lack of reliability would affect FiT Licensees ability to immediately comply with the Licensee.

The mechanism by which ECOES and the CFR are linked requires further consideration. Regardless, this will take time to develop.

The solution will work for all FiT Licensees and will not require them to be a DCC User. However, it would not provide the FIT Licensee, where they are not the Import supplier with all the information they need (i.e. GUID) to assign an export MPAN to the meter on the DCC. The FIT Licensee would need to look elsewhere for this information, potentially the SMI, but there are currently no processes in place for the Fit Licensee to know to look there.

Customer Experience

This solution has little impact on the consumer experience except in the instance of a delay in the process, which will result in the Generator receiving an incorrect FiT payment for that period. This inconsistency may lead to confusion and customer dissatisfaction.

Cost

The MRA does not currently have the necessary communications functionality, the costs of developing and running this may be significant.

Conclusion

This solution could provide one route to allow suppliers to be notified of a smart meter installation (subject to any delays in the Import Supplier updating ECOES). If adopted, an additional mechanism would also need to be created to ensure the Export Supplier has all the information they need (i.e. GUID) to assign an export MPAN to the meter on the DCC.

Considered Solution 4: Linked DCC and CFR

The CFR is linked to the DCC so that when a smart meter is installed and commissioned to the DCC, the DCC is able to determine whether or not the premises is a FiT site, and if so, notify the relevant FiT Licensee and provide them with the necessary information to assign an export MPAN to the meter. This notification could be an automated alert or via a regular report.

Required changes

- The creation of a DCC inventory featuring a unique identifier designated to the FiT site which is connected to the DCC smart database in order to determine which smart installations have an associated Fit;
- The CFR to be shared with the DCC and the DCC inventory updated in accordance with any changes to the CFR;
- The development of a notification process from the DCC to the FiT Licensee, either via a DCC DUIS (DCC User Interface Specification) alert or a regular report and/or the development of a

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5 Commissioning is whereby the DCC acknowledges a smart meter on its network, this occurs as part of the installation.
regular report to notify FiT Licensees of relevant smart meter installations. Clarity around back-dating export register access will also be required, along with data protection considerations (as the customer’s import MPAN is their personal data);

- Changes to FiT Licensee systems to enable them to receive these notifications from the DCC/query reports.

**Effectiveness**

Once established, this solution would provide timely and reliable updates to the FiT Licensee of a relevant smart meter install. A DCC DUIS alert would be the most effective way of doing this as the notification would be automated at the time the smart meter is commissioned. Alternatively, the DCC could produce a regular report which FiT Licensees could access. This approach would be less timely and lead to a short but variable period of non-compliance.

This solution would require significant lead time as DCC systems would need to be developed, the introduction of a DUIS alert would require a SEC Mod and so take longer to implement than a regular report. As such it would not be available in the near future.

This solution would only be suitable for SMETS2 meters, until enrolment and adoption has been completed. This is scheduled to commence in May 201, but is likely to take a significant amount of time to conclude.

**Customer Experience**

The process is automated by industry and so provides a positive customer journey. If there is no immediate alert process, there will be a period of non-compliance. Depending on the length of this time, this may or may not affect the customers experience and/or payments.

**Cost**

The DCC does not currently have the necessary functionality, the costs and resources required to develop and run this may be significant.

Similarly, FiT Licensees will need to develop the capability to interact with the DCC and conduct the necessary security and privacy assessments. We understand that this is not currently the case for all FiT Licensees.

Whilst both DCC notification processes would have associated costs, it is likely that the costs of developing DCC DUIS alerts would notably more than a regular reporting process.

The creation of export MPANs would be an additional cost.

**Conclusion**

This solution would be effective in delivering the policy intent in a way which is satisfactory for the majority of parties in the long-term. However, due to the required changes, there would be a significant implementation lag. As such, we propose the DCC, once it is linked to the CFR, produce a regular report of relevant commissioned smart installations for FiT Licensees. Furthermore, there are significant cost implications.

2. **Access to export data**

**Considered Solution 1: Manual meter reads**

Export data is available at the meter interface. Export meter reads could then be provided to the FiT Licensee via manual reads from the Generator (customer).

**Required changes**

- FiTs Licensees would need to communicate the need for export readings to customers.
- Consolidation of information on meter variants and how customers should access their export meter reads.
- Some changes to FiT Licensee systems to enable them to collect and validate these reads from customers.
Effectiveness
This solution is not robust as it requires an action on the part of the customer, which is outside of the FiT Licensee’s control. In addition to failure to provide the required export meter readings, there is a risk of error and/or inconsistent reporting from the customer. Regular manual validation reads from FiT Licensees could be used to validate customer reads.

The issue of obtaining customer reads is likely to be complicated by meter variants related to the import supplier. Where they are not the import supplier, the FiT Licensee will have no way of knowing what meter type the customer has, nor how the read is accessed.

Where the FiT generation is associated to multi-site generation, it may also not be possible to obtain accurate manual meter reads from the customer. As such, an alternative solution would be required in this instance to enable multi-site generators to receive export meter payments.

Finally, manual meter reads are not a feasible option if FiT licensees are required to settle on a half hourly basis in order realise the full benefits of half-hourly settlement.

Customer Experience
This solution would present a poor customer journey given a primary benefit of smart meters is the automation of meter reads. Consequently, there could be potential risk to the perception of smart metering associated to this solution. Furthermore, depending on the how the import supplier has set up the customer’s In-Home Display, the customer may have to take these reads from the physical meter which may not be easily accessible, and may not be customer-friendly to use.

Regular manual validation reads would augment the poor customer journey of this solution.

Cost
Regular manual validation reads would have an associated cost.

Conclusion
This solution is not sufficiently robust, in addition it offers a poor customer journey that conflicts with the customer benefits of smart metering. This would have a significant negative impact on the smart meter journey for the customer.

Furthermore, it does not work for multi-site generators.

Considered Solutions 2: Access via DCC
Where a smart meter is installed at the FiT premises, export data from SMETS compliant meter can be accessed by the FiT Licensee via the DCC. This is done by the FiT Licensee using the DCC user role ‘Export Supplier’ to assign an export MPAN to the meter and access export register reads.

Required changes
- DCC to finalise scope the proof of concept and ensure that the Export Supplier profile is able to access the export register reads of an Export MPAN for a FiT site.
- Export MPANs would need to be raised by the export supplier at all smart eligible FiT Generation sites to provide the necessary unique identifier for the site and associated export register reads to facilitate this solution by enabling the DCC User in the Role of Export Supplier to access the meter's export register. The approach for this will require further consideration (see below);
- A SEC Modification to prevent the Import Supplier User from being able to attach an Export MPAN to a site record. DCC are already developing this in the next DUIS uplift, for consultation in May 2019;
- The export supplier needs access to the GUID and Import MPAN of the smart meter on site. This is currently being explored by SECAS (see Considered Solution 4: Linked DCC and CFR above);
- Additional modifications to the DCC process may also be required to ensure that the DCC processes are agnostic to how the smart meter installed at a given site is set up;
- Clarifications with regards to the capability of SMETS1 meters to be updated as necessary to enable them to provide the DCC meter export data following enrolment and adoption;
- Customer engagement to enable FiT Licensees to receive necessary customer permissions, in line with the SEC Privacy Framework and GDPR, to access export data - consideration of possible recourse should this permission not be granted.

**Effectiveness**
Any necessary DCC changes will take time given the change process and concurrent changes being prioritised.

In addition, raising the required volume of Export MPANs would not be feasible in the short term. This could be done on a site-by-site basis in accordance with when and where smart meters are installed, however this approach would lead to a delay in accessing export meter reads and therefore a delay in compliance. A wholesale approach to the creation of Export MPANs at FiTs sites may be more effective but would have resource implications which would likely have implications for implementation timelines.

This solution is not available for SMETS1 meters prior to enrolment and adoption into the DCC. This is scheduled to commence in May 2019. However, it is likely to take a significant amount of time to conclude. As there will be a significant implementation lag associated with this solution, this may not be relevant.

All FiT Licensees would also need to hold a supply licence and be registered as a DCC User in the Role of Export Supplier.

**Customer Experience**
There is no requirement on the customer to act so this solution provides a simple and satisfactory customer experience. However, the customer will be required to give consent to the FiT Licensee accessing their export data.

**Cost**
Any necessary system changes to the DCC would incur significant costs (currently unknown). Similarly, FiT Licensees will need to develop the capability to interact with the DCC and conduct the necessary security and privacy assessments. We understand that this is not currently the case for all FiT Licensees.

There are also costs associated with raising Export MPANs at all smart eligible FiT Generation sites (see Considered Solution 2: Settlement via Export MPANs below).

**Conclusion**
This solution would create a long-term stable and robust framework enabling FiT Licensees to independently comply with their licence, whilst providing a simple and seamless customer journey.

However, the costs of this solution have not yet been identified, and a significant implementation period is likely. As such, it would not be available in the near future.

### 3. Cost recovery for FiT Export payments

**Considered Solution 1: Levelisation**
Levelisation introduced for FiT sites enabling FiT Licensees to recover the costs of metered FiT Export payments for these premises in the same way as deemed FiT Export payments.

**Required changes**
- A Statutory Instrument amending the levelisation element of the FiT legislation.

**Effectiveness**
The inclusion of metered export into levelisation would provide an accurate and reliable cost recovery mechanism at a market-appropriate level for FiT Licensees for the relevant premises.

**Cost**
This solution would have no significant cost implications for FiT Licensees, however there would be an associated policy administration cost.

**Conclusion**
Levelisation is an effective means of enabling FiTs Licensees to recover the scheme costs. Whilst levelisation is a market intervention it protects the cost of capital in the market and so supports continued investment in the small-scale renewable market.

**Considered Solution 2: Settlement via Export MPANs**
The creation of Export MPANs at all FiT sites would enable FiT Licensees to settle electricity generated from microgeneration via the market, following the installation of a smart meter.

**Required changes**
- The formalisation of the requirement for Export MPANs to be created for all FiT sites.
- MRA code arrangements to enable DNOs to undertake the creation of Export MPANs at all relevant sites. Changes to this effect are currently being progressed via the MRA, an MRA Change Proposal (CP) has been approved, putting in place a process and set of SLAs for how a DNO should handle requests to raise new Export MPANs. This allows DNOs 10 ten working days to respond to the request to create an MPAN, and FiT Licensees to each request up to 50 Export MPANs per DNO per day. This CP has an implementation date of 19 February 2019.
- Clarity on whether suppliers will be expected to settle on a half-hourly or non-half-hourly basis.

**Effectiveness**
This solution would enable all FiT sites with a smart meter to export electricity in accordance with the Balancing and Settlement Code.

This solution would create financial risk for FiT Licensees over microgeneration assets as the cost recovery mechanism would be subject to market changes. This may affect engagement in this section of the market and could reduce investment.

However, there are time and resource limitations on both FiT Licensees and DNOs to raise the requisite number of Export MPANs. It is highly likely that the maximum number of requests permitted of each DNO per day would be insufficient to keep pace with the roll out of smart meters to FiT sites as each FiT Licensee may only request 50 Export MPANs per day per DNO.

Existing Export MPANs would not be affected by this as they are already measuring export and settling it via either guaranteed or variable power purchasing arrangements.

**Cost**
There will be a significant cost to create Export MPANs at all FiTs sites. However, should half-hourly settlement be pursued Export MPANs will be necessary, removing this cost from a project-specific perspective.

A wholesale approach to the creation of Export MPANs at FiTs sites may be more cost efficient but would have associated resource restrictions.

The creation of Export MPANs and these being assigned to meters within he DCC will also create additional ongoing costs DCC costs for DNOs. This needs further consideration.

Without clarity on whether settlement is expected on a half-hourly or non-half-hourly basis there is a risk of system development costs being stranded.

**Conclusion**
This solution provides a consistent long-term solution which is in accordance with the spirit of the FiT legislation, although, it is not reliable in the short-term due to reasons above. It will go some way to opening up opportunities for innovation in products and services longer term. Therefore, consideration of this approach should be closely aligned with the ongoing industry work on half-hourly settlement, multiple supplier solutions and the supplier hub to ensure that there is policy alignment.