Open Networks Project 2019 Work plan Consultation

Summary & Actions

(For publishing)
In January 2019, ENA’s Open Networks Project opened a consultation to present the 2019 Work Programme.

- We asked stakeholders ten key questions focused on whether the right areas of work had been included for 2018 and also how, as stakeholders, they would like to be engaged.

- We had an encouraging response – our thanks goes to all of the respondents who provided feedback, whether directly or via the webinar.

- Feedback is important to us - we are actively using it to adapt the Open Networks Project; and our plans are set out in the following slides.

- Although the consultation has now closed, we still welcome your feedback and would like to encourage all stakeholders to continue to engage with us via the following channels:

- **E-mail**: E-mail us your questions, or to join the mailing list for the quarterly newsletter.

- **Events**: Details on our forthcoming meetings, events & other project milestones.

- **Consultations**: Details on our current and past consultations.

- **YouTube**: Watch the Introduction to Open Networks Project animation, Past events / webinar recordings.

- **Twitter**: Follow us on Twitter @energynetworks for real-time updates.

- **Fact Sheets**: For more information on how we are transforming the networks, download our fact sheets.
Consultation Questions & Themes

Products
1. Which specific areas of 2019 work or Products are most important to you and why?
2. Are there any other areas of work or Products you would like to see included in the Open Networks Phase 3 work plan and if yes, why and how should they be prioritised compared with other work?
3. Should any areas of work or Products be removed or deferred and if yes, why?

Consultations & Dependencies
4. Do you agree with the proposed Products for wider consultation and what other work should be consulted on and why?
5. Do you agree with the defined Dependencies, have we prioritised dependencies inappropriately or are there any missing?
6. Is one consultation per quarter a suitable number and frequency, can you only support fewer or would you rather see more?

Whole Energy Systems
7. Do you agree with the proposed Whole Energy Systems Workstream 4 and can you please provide any relevant Whole Energy Systems projects, initiatives or views that you would like considered as part of that new workstream?

Stakeholder Engagement
8. How would you like to provide input to the Open Networks Project and be kept informed of developments?
9. In what ways might the Open Networks Project improve the way it consults with stakeholders, beyond the Stakeholder Advisory Group?
10. Do you feel the Open Networks Project has held enough stakeholder engagement events in 2018? What type of events would you like to see more of in 2019?
No responses received from aggregators, public authorities, Academics and Community Groups
At a Glance
Key messages & our response
At a Glance – Summary of Responses

High Priority Areas

WS1A Flexibility Services
WS3 DSO Transition & Future Worlds
WS2 P1 System Wide Resource Register
WS2 P2 Queue Management
WS1B P3 Real Time Data Exchange
WS1B P2 Whole System FES

Whole Energy Systems – Electricity system & wider (WS1B & WS4)
Implementation of short term customer and T D improvements (WS1B & WS2)

Potential Additional Areas for Consideration Highlighted

Explore DNO DSO separation/ conflicts of interest
Role of networks in heat decarbonisation
Principles of commercial optimisation of flexibility services
Capacity Management

Areas for wider engagement/consultation

WS1A P2 DSO Procurement Processes
WS1A P4 Commercial Arrangements
WS1A P6 Facilitation of new markets
WS2 P1 System Wide Resource Register (1)
WS3 P3 Key Enablers & Decisions required (1)

Additional Stakeholder Engagement

• Generally consultations seem proportionate – increase scope across workstreams
• More workshops & webinars with wider stakeholders for development of products
• Use of short term web-surveys or “sprint” consultations where full consultation is not feasible
• More transparency – we need to better highlight the channels that are available
• More industry engagement events pre and post consultation.

Additional dependencies

Alignment with RIIO2, Market wide HHS, SNAPS & ESO Forward Plan, Non-SCR Access work, A&D Fees, DCMS and Ofcom for telecoms, NIA project RecorDER (WS2 P1), Flexibility Exchange Demonstrator Competition (WS1A P2)
Generally be more specific on dependencies
At a Glance – Key Messages

- Vast majority of stakeholders agree with the work and consultations set out. Work on Flexibility Services, Future Worlds and implementation is high priority and no work should be de-scoped or deferred.
- Stakeholders generally supportive of splitting out Flexibility Services into a separate workstream.
- Majority of support for progressing whole energy developments in WS4, but concerns raised by a number that it will result in losing focus and momentum on progressing implementation of change in other workstreams.
- Some stakeholders highlighted project developments (e.g. WS3) that could be subject to Ofgem/BEIS policy guidance and support and may be premature to develop without policy guidance. Examples: conflicts of interest/DNO DSO separation; roles for DNOs as DSOs; A&D Fees. Some questions on an evidence pack for Ofgem/BEIS.
- Some stakeholders explicitly welcomed Monitoring Implementation initiative and link to DNO ICE plans
- Stakeholders generally believe that we have engaged well in 2018 and some commented on improvements in 2017. Number of consultations proportionate generally but should consider expanding topics/products.
- We should consider wider stakeholder engagement for product development through workshops and webinars to give the wider industry a chance to provide input.
- Further dependencies identified, as above, and more detail required on interactions. RIIO2 key.
High priority products

- We will treat these products and areas of work as high priority to closely monitor progress and ensure delivery to agreed timescales. In addition, we will ensure that stakeholders get more regular updates and opportunities for input on these products through the Advisory Group and wider stakeholder workshops.

Potential Additional Areas for Consideration Highlighted

- Conflicts of interest – We will continue to ensure that appropriate activities are identified in the work plan to further understand potential conflicts of interest between network and system operation functions and ensure appropriate measures are put in place for independent decision making in the best interests of customers. This work will be progressed through the following products this year:
  - WS1A P1 Flexibility Market Principles – This product is looking at principles to guide the right behaviour in the flexibility market for all players involved, including the DSO. This product will define principles to ensure neutral market facilitation and ensure independence, fairness and transparency in decision making.
  - WS3 – In light of your comments, we have revised our activity plan and have included a new product to explicitly address this issue and provide more visibility to stakeholders of work that we are undertaking to explore this issue. This product team will work closely with stakeholders to identify and understand potential conflicts of interest and mitigating measures. Please see P7 in the revised version of the PID for details.
Potential Additional Areas for Consideration Highlighted

- Role of networks in heat decarbonisation – We are going to include the role of heat networks and heat more generally in the use cases for the products in Workstream 4.

- Principles of commercial optimisation of flexibility services – Upon further clarification from the respondent, we can confirm that as part of WS1A P1 Flexibility Market Principles, we are looking at principles that need to apply to DNOs, ESO, TOs and market participants, including flexibility service providers to ensure a fair marketplace that delivers the best value for the consumer.

- Capacity management – As part of our scope for 2018, we set out a product to look at options for management of capacity, however, given the overlap with Ofgem’s work on access and forward looking charges, a decision was made to de-scope this in 2018 and this is now being covered by the Ofgem SCR and Industry Led Access Working Group developments. The scope for the Industry Led Working Group can be found here.

- A number of stakeholders have asked questions about how the access work outlined in Ofgem’s letter in December for the industry to lead is being taken forward – as above.
At a Glance – Our Response

• STA would welcome clarification on storage (currently treated as generation) and co-location further than current Engineering Recommendations. This is out of scope for Open Networks and as outlined in the Smart Systems & Flexibility Plan 2018 update (action 1.2), this is being progressed by Ofgem and Government through changes to the generation licence to include storage and through definition of storage in primary legislation. ENA have published a guide on storage for communities and independent developers.

Additional Dependencies
• We have reviewed the additional dependencies that have been highlighted by stakeholders at a project and also at a product level. The PID has been revised to highlight the links with these initiatives.
Areas for wider consultation/stakeholder engagement

Stakeholders believe that the number of consultations are proportionate however they would like more involvement in the development of these products. Reflecting on this feedback, we will:

• Expand the scope of the WS1A Product 1 consultation in June to include other products from the workstream to give stakeholders the opportunity to feed into all products.

• Plan further engagement on the development of products through wider stakeholder workshops.

Based on your feedback, we are maintain an events calendar on our website to give visibility of these events. This can be found here

• Reach out with more proactive engagement and the offer is there for Open Networks to present at industry committees and events where they can be supported.
At a Glance – Our Response

Additional Stakeholder Engagement

• Taking your feedback on board, we are now planning more workshops and webinars with wider stakeholders for development of products (WS1A P1 and others) and are providing visibility of it through our events calendar on our website which can be found here.

• We offer a number of channels for wider stakeholder engagement and have provided a quick guide on how interested parties can get involved. This can be found here on our stakeholder engagement page here.

• Some stakeholders suggested the use of web-surveys as a tool to get stakeholder feedback. We will be trialling the use of this as part of WS2 P1 System Wide Resource Register to give stakeholders the opportunity to provide us feedback on the central webpage linking existing sources of data provided by networks. This central webpage is the proposed interim solution to improve information provision and stakeholder feedback will help us to design the longer term and more enduring solution.

• Based on your feedback, we will now be hosting webinars post consultation to ensure that wider stakeholders have the opportunity to hear from us.
Detailed Comments
WS1A
You said

The creation of WS1A is welcomed and all work on flexibility services is high priority to stakeholders. Some stakeholders have specified that the following products within WS1A are key areas for development:

- P1 Flexibility Market Principles
- P2 Procurement Processes
- P4 Commercial Arrangements
- P6 Facilitation of new markets

Stakeholders do not believe that any products in this workstream should be deferred or removed.

We will

Treat these products as high priority products in the project to closely monitor progress and ensure delivery to agreed timescales.
You said

Consider wider consultation/engagement on the following products through focused industry workshops or shorter and more targeted consultations:

**WS1A P2 Procurement Processes**

**WS1A P4 Commercial Arrangements**

**WS1A P6 Facilitation of new Markets**

Stakeholders believe this will also help to remove lack of clarity around revenue stacking and ‘exclusivity’ terms for potential service providers.

Energy UK are looking to compile research on market principles (WS1A P1). This will be provided as input to ONP.

We will

Widen the scope of the WS1A public consultation in June to include elements from these products to ensure that stakeholders are given the opportunity to feed into them.

Maintain a calendar of stakeholder events on our website to plan and publicise stakeholder focus group sessions and webinars with wider audiences.

As part of our development work under WS1A P4, we will seek to provide greater clarity to stakeholders on revenue stacking and exclusivity terms in July.
Alignment of WS1A developments with National Grid ESO’s Forward Plan and SNAPS is important.

The scope of WS1A P1 Flexibility Market Principles is unclear as to whether or not it will identify and mitigate conflicts of interest and how it will link in with WS3’s work on Future Worlds. (Innogy and Energy UK)

Consider additional work on alignment of principles of commercial optimisation of flexibility services. (AMT-Sybex).

The project currently has ESO representation at a workstream and product level to feed into the development work and we will continue to ensure that processes and practices developed through this workstream are aligned with the ESO’s work.

This product is looking at principles to guide the right behaviour in the flexibility market for all players involved, including the DSO. This product will define principles to ensure neutral market facilitation to ensure independence, fairness and transparency in decision making. Principles identified through this product will inform work that will be undertaken in WS3 under the new product that we have now commissioned to explore conflicts of interest and mitigating actions.

Upon further clarification from the respondent, we can confirm that as part of WS1A P1 Flexibility Market Principles, we are looking at principles that need to apply to DNOs and market participants, including flexibility service providers to ensure a fair marketplace that delivers the best value for the consumer.
ELEXON have flagged the following considerations for products and have offered expertise:

WS1A P1 Flexibility Market Principles - need to consider full suite of interactions and adjustments (incl. from balancing and settlement perspective)

WS1A P3 Dispatch & Settlement - important to align DSO dispatch and settlement with current arrangements. Need to consider utilising existing infrastructure for settlement.

WS1A P4 Commercial Arrangements - can provide input on validation of service provision and feedback. Consider building on ELEXON's Performance Assurance Framework.

WS1A P5 Conflict Management & Co-optimisation - interested in real-time conflict management. Need to consider balancing and settlement impacts.

WS1A P6 Facilitation of new markets - new market design needs to consider interactions with balancing and settlement. - common mechanism for flex platforms to report data into settlement.

Flexibility Exchange Demonstrator Competition should be considered a dependency for WS1A P2 Procurement Processes. (Electron)

We will take these considerations on board as required in our product development and will approach stakeholders for expertise when required.
Detailed Comments
WS1B
You said

Implementation of whole system solutions, including T and D improvements is high priority. Development of the following whole electricity system products is important:

WS1B P3 Real Time Data Exchange
WS1B P2 Whole System FES (Energy UK)

No products should be deferred or de-scoped. No additional areas of work have been identified, however a number of considerations have been proposed for products.

We will

Treat these products as high priority products in the project to closely monitor progress and ensure delivery to agreed timescales.
We will continue to focus on coordination and alignment between T, ESO and D as part of this workstream to ensure a whole electricity system approach.

We recognise the need for coordination between products and across workstream and with this comment in mind, we have explicitly called our the link between WS1B data exchange products and the work being done under WS3 in the next layers down in detailed SGAM modelling in our PID.

You said

There is a need for coordination across products when developing network comms capabilities (JRC)

All processes developed under this workstream should be aligned with existing ESO processes. (Energy UK)
WS1B P3 Real Time Data Exchange should consider:

a) Alignment of DSO and ESO timescales and accountability for delays in development and implementation. (UKPR)

b) Common approach and one-stop-shop for market data reporting, to ensure simple and fair access to market data for participants and providers of value-add data services. (ELEXON)

You said

We will

a) The DNOs and the ESO are fully committed to working together to establish the best practical method for data exchange which reduces cost and facilitates transparent access of customers to services and network capacity. Regional Development Programs (RDPs) and P3 aims to achieve enhanced transmission/distribution system coordination and control with effective data exchange through ICCP links. The methodologies and data exchange signals adopted through this product will help to ensure that all customers have access to services and network capacity.

a) The focus of this product is on network operations related data exchange in real time between DNOs and the ESO, including items such as circuit breaker statuses, N-3 MW volumes per GSP etc. Given the operational nature of this data, this focus of this product is not market data. However, UKPN’s RDP algorithm which is facilitated by the ANM scheme and UKPN’s Power Potential algorithm facilitated by DERMS are equipped with ‘settlement and data recording’ functionalities. Hence all the market optimisation results and dispatch signals (including customer’s response at their Point of Connection) are recorded and available to be published (i.e. once the mechanism is approved). Power Potential’s Work Stream 2 (Commercial Markets) are looking into how to publish market data available (from ANM and DERMS) both in real-time and after settlement periods. There are a number of other products in ONP such as WS2 P1 System Wide Resource Register that will be focussed on improved information provision for the market.
Detailed Comments
WS2
**You said**

WS2 P1 System Wide Resource Register and WS2 P2 Queue Management are high priority and stakeholders strongly support WS2's role in implementing short term improvements based on good practice guides from last year.

No products should be removed or deferred.

**We will**

Treat these products as high priority products in the project to closely monitor progress and ensure delivery to agreed timescales.

We will continue to focus on monitoring implementation of good practice guides from last year as well as outputs from this year as they get developed.
You said
Consider further consultation/engagement on WS2 P1 System Wide Resource Register to ensure that this provides the transparency to market and is practical. (Centrica)

We will
The aim of this product is to improve information provision and provide greater transparency. Recognising that this product is high priority to stakeholders, we will be organising workshops to ensure that stakeholders get the opportunity to feed into the development work. The details for ON events and workshops can be found in our events calendar that can be found here.
We will

As outlined in Ofgem’s SCR launch letter, the networks are progressing work to implement incremental changes to capacity management. This work is being led by the ENA under the Industry Led Access Working group as part of Product 2 Exchange of Access Rights between users and the project scope can be found here.

You said

Capacity Management – Need to ensure that the work under 2018 WS2 P2 Capacity Management is continued in the scope of activities across the industry. (Centrica)

System monitoring - Consider additional work area to set out best practice for monitoring capabilities across secondary substation, medium voltage and low voltage network assets to accurately indicate state of the networks. This will indicate the state of the network and will establish greater investment signals for networks and market actors. (Energy UK)

Although this was highlighted as an additional area for WS2, this has previously been considered as a potential product under WS1B. It was de-scoped on the basis that it was lower priority than other activities and that there are a number of network led initiatives looking at monitoring of LV networks and system monitoring does not present issues at present. Our decision and reasoning has been referenced in our Least Regrets Update Document.
You said

EV readiness (for WS2 & WS4)

“Further consideration of EV readiness should be integrated into workstream 2 and workstream 4 of the project. Whilst the Low Carbon Technologies Working Group has produced useful events and outputs, it remains a closed group consisting of ENA members. Incorporating considerations of the need to continue to decarbonise power, heat and transport and a focus on the whole electricity system impact of this will aid in ensuring that changing requirements for future networks are taken into account.” (Energy UK)

We will

As part of ONP, we are taking a technology neutral approach to ensure that networks can facilitate connection and operation of new technologies for demand, generation and storage to facilitate decarbonisation of power, heat and transport.

The Low Carbon Technologies (LCT) Working Group is progressing work to explicitly look at the impact of EV rollout on the networks and we are closely engaging with this group to ensure alignment of outcomes. The LCT group have facilitated a number of forums for stakeholders to provide input and will be facilitating workshops to support the modelling work in the coming months. These events will be advertised on the ENA website and we encourage stakeholders to provide input through these forums.

Recognising that the LCT Working Group is only looking at EVs and Heat Pumps, as part of WS4, we will consider how we can build on this work.
You said

Include NIA project RecorDER as a dependency for WS2 P1 System Wide Resource Register (Electron)

A&D Fees – Need to establish link with working group looking to progress work on harmonisation of A&D fees (Centrica)
STA have expressed their view that re-introduction of A&D fees is not a good means to avoiding multiple applications as the issue stems from visibility of local constraints and inconsistency across DNO connection processes.

We will

Initial meetings have been held with Electron to understand the RecorDER project further and the interdependencies. Ongoing interaction will be maintained for key milestones to ensure alignment.

The ENA are working closely with stakeholders though the DER Connections Steering Group to consider issues raised. We expect approaches to A&D fees to evolve as a result.
Concerned that alignment of our Queue Management work under WS2 P2 b) won’t be possible as SCR outcomes will not be available in those timescales. We need to be mindful of the risk of developing arrangements that are later unsuitable as a result of the SCR. (UKPR)

Ensure appropriate level of engagement with Ofgem on the SCR to ensure that the direction of travel is understood to mitigate against the risk.

For WS2 P1 System Wide Resource Register, accuracy and availability of data is key, specially in the content of the end of FIT schemes as unsubsidised projects are no longer tracked centrally and storage as this is not currently tracked. We should also consider including resources under 1MW to include small scale generation.

Consider including this as part of a later phase, as concentrating on >1MW in the short to medium term will allow us to get a working solution in place much faster. As part of any options that we develop this year, scalability and scope for expansion will be a key assessment criteria to ensure that we have a future proof system in place.
Detailed Comments
WS3
You said

Vast majority believe that our work on WS3 and Future Worlds is high priority as it informs the DSO transition.

JRC see value in further SGAM modelling under WS3 P6, in particular to establish operational telecom capabilities needed for DSO.

Majority of stakeholders state no products should be deferred. Energy UK and Innogy view that there may not be enough time in the current plan for us to meaningfully review the responses and take them on board as necessary.

We will

Treat products from this workstream as high priority products in the project to closely monitor progress and ensure delivery to agreed timescales. The next level of SGAM modelling will further consider communications.

In light of this comment, we have revisited our timelines and are comfortable that we have allowed enough time to meaningfully review and act on responses whilst maintain pace of delivery. Similar to previous years, the project will maintain an agile approach and will keep channels open for stakeholders and where additional time may be required for us to act on feedback, we will be open to revisiting our plan.
A number of stakeholders including E.ON, UKPR, Energy UK, Centrica and Innogy have expressed that the implicit assumption that DNOs will become DSOs needs to be challenged.

- Stakeholders feel that we have been silent on the issue of DNO DSO conflicts of interest and have not acknowledged previous feedback from stakeholders to explore this issue.
- E.ON recognise that the Future Worlds are a vital evidential step to finding the correct solution.
- Energy UK believe that ONP should continue the exploration of conflicts of interest beyond the Impact Assessment timeline and provide clarity on whether ONP will assess the legal separation issue.
- Multiple stakeholders have referred to an “evidence pack”.

The five Future Worlds are explicit in not just assuming that the DNOs undertake all DSO functions. The different Future Worlds effectively allocate DSO functions and activities to different parties within the industry. Our work on Future Worlds is a key step in helping us understand where responsibilities may sit in the future and what the relative impacts of that might be.

We will continue to ensure that appropriate activities are identified in the work plan for 2019 and beyond to further understand potential conflicts of interest between network and system operation functions and ensure appropriate measures are put in place for independent decision making in the best interests of customers. We have now explicitly called this out as a separate activity that will be progressed through WS3 P7 this year.

We will maintain a transparent approach and will publish our development work as it is completed. With all our deliverables available publicly, we do not feel the need for a separate “evidence pack” and have clarified this further in our PID.
Energy UK and Innogy have expressed concerns around WS3 products being undertaken before Ofgem and BEIS have made key decisions on areas that have been identified by ONP as more appropriate for them to address (as per our FW response slide 13).

1. DNO – DSO separation
2. DNO participation in flexibility markets as a provider
3. Neutral market facilitator as a regulated activity
4. Clarification of when it is appropriate to use of flexibility of the network itself
5. Need for backstop when the market fails to deliver
6. Some respondents suggested the pace of change implies that an incremental approach to transition is the only viable option.
7. A recognition that to implement some of the next steps will require the support of regulator and broader industry (e.g.. Charging, planning standards and codes).

Suggested that we pass these on to Ofgem now and remove related elements from our scope as they rely on a decision on these decisions.

"In lieu of removing Workstream 3 completely, the ENA could instead set out the limitations of each product in initial scoping of those products. Establishing specific requirements and limits for products, as has been for the entire project in the PID, will enable the development of further analysis in those areas by Ofgem and BEIS in parallel to the work of the ONP. This is a potentially significant issue with the progression of the 2019 work plan, and should be directly addressed in the PID." (Energy UK)

- ONP is progressing the assessment of Future Worlds, identification of Conflicts of Interest and key enablers to help to inform policy makers and to ensure that progress is made in timely way to feed into RIIO2 developments.
- Identifying any regulatory developments (e.g. Code Changes) is a key part of the key enablers – key to discuss
- Comments on transition covered by Impact Assessment consultation and the potential pathways to DSO
JRC have suggested a further consultation for WS3 P4 Key Enablers to ensure a clear understanding by industry on the role of enablers.

Based on stakeholder feedback, we are mindful of not increasing the number of consultations that we have planned for this year but do recognise the need to give stakeholders the opportunity to feed into the development of this product. To facilitate this, we will undertake wider engagement with stakeholders through workshops on this product to ensure that their input is fed into the development work. Our planned events and workshops for the year can be found on our [events calendar](#).
Link between T.E.F and ONP - FPSA recommend that stakeholders should not have to necessarily engage with both ONP and T.E.F to understand the interaction and implications for WS3.

Establishment of enhanced operational telecoms capability will be a key enabler for the DSO transition. Need coordination across products when developing network comms capability. In particular, WS3 P7 Further Modelling should take into consideration processes developed under WS1B to reflect any system/data/architecture requirements (JRC & Innogy).

The T.E.F projects are a key dependency for the project as they build upon the DSO functionality developed through ONP and help to trial and test Future World elements such as platforms, forecasting systems and flexibility markets. The learnings from these trials will be brought back into the project to help inform further development. ONP will also inform the T.E.F. projects in terms of identifying what they might trial to support progress. We have clarified this interaction further in the PID.

Our product on further modelling will take into account the development work under other workstreams, particular the data exchange products under WS1B to reflect system needs required for Future Worlds. The PID has been updated to reflect this interaction.
You said

JRC suggested that we should engage with Government Department Digital Culture Media & Sport (DCMS) and Office of Communications Regulation (Ofcom) as part of understanding future system requirements.

WS3 P4 Roadmap should undertake a review of DSO strategies to ensure a holistic view of developments, including those outside ONP. (Energy UK & Innogy)

RIIO ED2 methodology that will be published this year is seen as a dependency for WS3 (Renewable UK)

We will

Include DCMS and Ofcom in stakeholder list for WS3 P4 Key Enablers and P6 Further modelling for engagement at an appropriate time when we have the next level of detail in the SGAM to understand system needs and common data infrastructure.

We have now included a review of DSO strategies in our scope to WS3 P4 to ensure that it reflects the developments and direction of the industry. The PID has been updated to reflect this.

Ofgem are providing ongoing input to the ONP through participation in the Steering Group and Workstreams and we will assess any relevant publications as part of the ONP.
Detailed Comments
WS4
Majority of stakeholders support or strongly support progressing WS4 to varying levels
Some concerns raised on closely managing the risk of losing momentum on progressing development and implementation of developments in other workstreams.

Some stakeholders have warned that there are a number of initiatives in this space and we need to manage the risk of duplication.

This appears to be pre-mature and will delay progress on whole electricity optimisation. “not clear that investment in a gas network with declining utilisation can aid a stressed electricity network“ (EON UK)

Ensure that overlap in resources between WS4 and other workstreams is minimised whilst retaining Open Networks knowledge

Steering Group to monitor and ensure no loss of focus of delivery in other priority areas

Invite participants in the workstream from other industry initiatives (e.g. Energy Systems Catapult) and be open to increasing the membership for others

Generally this was supported, but will be subject to Steering Group decision to progress reflecting on demonstrable customer benefits.
You said

ESC suggested to consider an additional work on the role of networks in heat decarbonisation. In particular, to investigate the role of local area energy planning to inform a cost effective/low carbon heat transition.

We will

Network planning potential product includes:
• Case study creation: Coventry / Warwickshire new developments
• Local council cooperation
Other products to consider heat in the Use Cases to analyse
Opportunity for ESC to feed in any other aspects through their membership of the Workstream
Additional Areas for Work

You said

EV readiness (for WS2 & WS4)

“Further consideration of EV readiness should be integrated into workstream 2 and workstream 4 of the project. Whilst the Low Carbon Technologies Working Group has produced useful events and outputs, it remains a closed group consisting of ENA members. Incorporating considerations of the need to continue to decarbonise power, heat and transport and a focus on the whole electricity system impact of this will aid in ensuring that changing requirements for future networks are taken into account.” (Energy UK)

We will

As part of ONP, we are taking a technology neutral approach to ensure that networks can facilitate connection and operation of new technologies for demand, generation and storage to facilitate decarbonisation of power, heat and transport.

The Low Carbon Technologies (LCT) Working Group is progressing work to explicitly look at the impact of EV rollout on the networks and we are closely engaging with this group to ensure alignment of outcomes. The LCT group have facilitated a number of forums for stakeholders to provide input and will be facilitating workshops to support the modelling work in the in the coming months. These events will be advertised on the ENA website and we encourage stakeholders to provide input through these forums.

Recognising that the LCT Working Group is only looking at EVs and Heat Pumps, as part of WS4, we will consider how we can build on this work.
You said

FPSt have referenced ESC's work on local area energy planning work in Local Authorities. This has considered true whole system interactions and trade-offs in light of local requirements and priorities.

They have mentioned other work (no specific reference) on multi-vector challenges, opportunities with decarbonisation of heat, trials with consumers to understand whole system implications on both sides of the meter.

ESC have developed a range of tools and capabilities that could help inform analysis in this workstream.

We will

As per ESC comments on previous slide. We will consider this.

ESC participation in the Workstream gives opportunity to provide this input.
You said

FPSA have suggested to consider rebadging the workstream to "Integrated Energy Networks" as it is more reflective of the scope.

The concern with using whole energy systems with the title is that it implies inclusion of customers' devices which we are currently not considering.

FPSA have offered to share their recent letter of Ofgem where they have expressed concerns with Ofgem's definition of whole energy system being limited to licensed networks.

Renewable UK suggested to consider [CCC's recommendation](#) on new homes not connecting to gas post 2025 - implication on networks.

UKPR suggested not to focus on data sharing mechanisms (covered by Data Taskforce) and governance (covered by FPSA) and that we should have representation from ESC to coordinate input.

We will

We are seeking to make the distinction between whole electricity system (historically the focus of the project with T-D interfaces) and whole energy system (opening this up to other vectors).

To consider.

We have ESC representation on the Workstream.

We need to avoid duplication so to consider these other initiatives in scoping.
You said

- Need to make WS4 membership clear.

Energy UK are undertaking work on Future of Energy and this could be an input into this workstream.

We will

- Publish list of representatives on ENA ONP website

- Energy UK represented on the Workstream, so have the opportunity to feed this in
Stakeholders believe that we have engaged well in 2018 and have significantly improved from 2017. Stakeholders have suggested some improvements for how we engage with this this year.

**You said**

Consider wider stakeholder engagement for product development through workshops and webinars to give the wider industry a chance to provide input.

Events should be more focussed on development rather than dissemination. More use of open workshops

Ensure that everyone feels that they can contribute to closed groups such as the Advisory Group.

More visibility of planned events and when material becomes available on website. Stakeholders should be made aware of how to effectively engage and feed into the project.

Consider how we engage as much as possible with new service providers, grid edge actors and disruptors (FPSA).

**We will**

Update wording on website to clarify current channels.

Include newsletter article on accessing information and the opportunity for input.

We are challenging across all workstreams to include stakeholder input to their products through development and communicate this through ENA website, Advisory Group and email distribution. (1st workshop WS1A P1 11/4)

Ask Advisory Group and respondents who and how to get to disruptors
Stakeholders believe that we have engaged well in 2018 and have significantly improved from 2017. Stakeholders have suggested some improvements for how we engage with this this year.

**You said**

- Should make available details of events such as number of attendees, which sectors to give an understanding of where increased engagement may be needed. (Energy UK)
- Wider engagement before and after consultation.
- More transparency - Set out on website what events ONP is presenting at, who is attending and what will be covered. (Energy UK)
- Make Steering Group material available. (Elexon)
- More regular newsletters & material such as the annual review reports

**We will**

- IA consultation – 2 events and 2 webinars with open door to communication. Running 1:1 opportunity for project to scribe stakeholder responses there and then at events to minimise effort
- Provide event attendee summaries after events with feedback publication
- Look to publish event schedule
- We will not publish Steering Group material, as it contains commercial and sensitive material – the focus for us is to publish and share output for stakeholders
- Maintain newsletters