

**Phase**

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

## P321 'Publication of Trading Unit Delivery Mode'

P321 proposes to publish information on the direction of delivery (delivering or offtaking) of Trading Units in each Settlement Period. The Proposer is seeking for this to be explicitly provided to give customers better access to this information.



The BSC Panel initially recommends **approval** of P321

This Modification is expected to impact:

- The Balancing Mechanism Reporting Agent (BMRA)
- The Settlement Administration Agent (SAA)
- The Supplier Volume Allocation Agent (SVAA)

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## About This Document

This is the P321 Draft Modification Report, which ELEXON will present to the Balancing and Settlement Code (BSC) Panel at its meeting on 8 October 2015. It includes the responses received to the Report Phase Consultation on the Panel's initial recommendations. The Panel will consider all responses, and will agree whether P321 should be progressed as a Self-Governance Modification. If it agrees this, and the Authority does not object, the Panel will then make its final decision on whether the change should be made; otherwise, it will make its final recommendation to the Authority on this matter.

There are five parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. It also summarises the Workgroup's key views on the areas set by the Panel in its Terms of Reference, and contains details of the Workgroup's membership and full Terms of Reference.
- Attachment A contains the draft redlined changes to the BSC for P321.
- Attachment B contains the draft redlined changes to impacted Code Subsidiary Documents (CSDs) for P321.
- Attachment C contains the full responses received to the Workgroup's Assessment Procedure Consultation.
- Attachment D contains the full responses received to the Panel's Report Phase Consultation.



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### Why Change?

A Trading Unit's delivering/offtaking status (its 'delivery mode') impacts the allocation of various BSC and non-BSC charges, which some Suppliers pass on to their customers. However, there is no explicitly-provided information on whether a Trading Unit is delivering or offtaking in a given Settlement Period. The Proposer contends that this lack of visibility can hinder customers' ability to independently verify their bills or assess which type of contract is right for them.

### Solution

P321 proposes to publish each Trading Unit's delivery mode, gross export volume and gross import volume for each Settlement Period on the Balancing Mechanism Reporting Service (BMRS) website.

### Impacts & Costs

P321 will impact the Balancing Mechanism Reporting Agent (BMRA), the Settlement Administration Agent (SAA) and the Supplier Volume Allocation Agent (SVAA), with central implementation costs of approximately £120k.

No impact is anticipated on BSC Parties or Party Agents to implement P321.

### Implementation

P321 is proposed for implementation on **30 June 2016** as part of the June 2016 BSC Systems Release.

### Recommendation

The Panel initially considers that P321 would better facilitate Applicable BSC Objectives (b) and (c) and unanimously recommends that P321 should be **approved**.



### What is a Trading Unit?

A Trading Unit is a collection of one or more Balancing Mechanism (BM) Units that have been grouped together in one of the following ways:

- Each Grid Supply Point (GSP) Group has a Base Trading Unit associated with it, and all Supplier BM Units within that GSP Group are automatically allocated to this Trading Unit. Exempt Export BM Units can also join the relevant Base Trading Unit if the Lead Party wishes.
- Other BM Units can be allocated to their own Trading Unit in accordance with [BSC Section K 'Classification and Registration of Metering Systems and BM Units'](#).
- Any BM Unit that is not allocated to a Base Trading Unit or to another Trading Unit is deemed a Sole Trading Unit (a Trading Unit consisting of only one BM Unit).

A BM Unit can only belong to one Trading Unit at any given time.

BM Units within a Trading Unit can realise certain benefits from being considered collectively, in particular the determination of the Production/Consumption (P/C) Flag and delivering/offtaking status for each BM Unit within the Trading Unit.

### Impact on the Production/Consumption Flag

Many BM Units in a Trading Unit will have their P/C Flag set based on the Generation and Demand Capacities (GC/DC) of each BM Unit in the Trading Unit, with all BM Units taking the same Flag. Exceptions are Supplier and Interconnector BM Units, whose P/C Flags are fixed, and Exempt Export BM Units, whose P/C Flags are set by the Lead Party.

This Flag is predominantly used to determine which Energy Account the BM Unit's Metered Volumes are allocated to, meaning that Lead Parties of generation sites can net the Metered Volumes from both their generation and demand BM Units into a single Energy Account.

A BM Unit's P/C Flag applies on an enduring basis, and is only re-determined when the GC/DC values of BM Units within the Trading Unit are re-declared. The P/C Flag of each BM Unit is reported in numerous places, such as through the complete list of [Registered BM Units](#) on the ELEXON Portal.

### Impact on delivering/offtaking status

In a particular Settlement Period a Trading Unit is treated as:

- **delivering** if the sum of the Metered Volume of all the BM Units within the Trading Unit is positive; or
- **offtaking** if the sum of the Metered Volume of all the BM Units within the Trading Unit is negative or zero.

All BM Units in that Trading Unit are then treated as delivering or offtaking based on the Trading Unit's net position, and all will take this same status irrespective of individual performance.

#### Further information

Further information on **BM Units** and **Trading Units** can be found on the [BM Units](#) and [Trading Units](#) pages of our website.

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This affects the following areas:

- The application of Transmission Loss Multipliers (TLMs), which are applied to each BM Unit based on its delivering/offtaking status in the relevant Settlement Period. This affects whether the BM Unit's Metered Volumes are increased (when the Trading Unit is offtaking) or decreased (when delivering) in magnitude to account for losses on the Transmission System.
- The calculation of:
  - certain BSC Funding Shares used to allocate BSC Company (BSCCo) Charges;
  - Residual Cashflow Reallocation Cashflow (RCRC) charges; and
  - Balancing Services Use of System (BSUoS) charges

are all affected by whether a Party's Metered Volumes originated from delivering or offtaking Trading Units.

Unlike the P/C Flag, a BM Unit or Trading Unit's delivering/offtaking status is calculated on a Settlement Period basis, and is not explicitly reported anywhere. Instead, a Trading Unit's delivering/offtaking status can be inferred from other sources such as which TLM was applied to the BM Units within the Trading Unit.

It should be noted that delivering/offtaking status is determined independently from the P/C Flag, and so it is possible for a Production BM Unit to be deemed offtaking in an individual Settlement Period, or vice versa.

## What is the issue?

The Proposer highlights the recent trend for some Base Trading Units to change from net offtaking to net delivering in some Settlement Periods. They believe that this event is likely to become more regular and occur in more GSP Groups as the levels of embedded generation increases. They note the effects that a Trading Unit's delivering/offtaking status can have on some charges, and highlight that under some contractual arrangements Suppliers pass these charges on to the customer.

The Proposer considers that there is a lack of transparency for end customers as to whether a Trading Unit was delivering or offtaking in a Settlement Period, and that this can make it difficult for them to verify any bills that the Supplier passes on to them. This lack of transparency could also hinder a customer in making informed decisions on whether to take a fixed or pass-through contract with a Supplier. The Proposer believes that a Trading Unit's delivering/offtaking status should be easily accessible to such end customers.



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### Further information

Further information on the calculation and application of **TLMs** can be found on the [Losses](#) page of our website.

Further information on the calculation and allocation of **RCRC** can be found on the [Trading Charges](#) page of our website.

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## Proposed solution

P321 'Publication of Trading Unit Delivery Mode' proposes to publish information on whether each Trading Unit was net delivering or net offtaking (its delivering/offtaking status, which will be referred to under P321 as its 'delivery mode') in each Settlement Period, updated at each Settlement Run. Under the proposed solution, the delivery mode, the gross export volume and the gross import volume for each Trading Unit will be provided. This will enable a user to assess the Trading Unit's direction and how close this may have come to changing.

For Supplier BM Units, the gross export and import volumes will be determined using volumes at the Consumption Component Class (CCC) level. For all other types of BM Unit, the BM Unit Metered Volume will be used. These volumes would all be aggregated to produce a Trading Unit Export Volume and a Trading Unit Import Volume, and it is these volumes that would be reported.

This information will be published on the BMRS, and will be available for users of the website to download in both .csv (Comma Separated Values) and XML (Extensible Markup Language) format. The BMRS will provide this information for all Trading Units, including Sole Trading Units.

To assist end customers in determining which GSP Group they are in, a map of Great Britain will be produced that will show the GSP Group boundaries in relation to key landmarks such as major cities. This map will also be published on the BMRS and available to download in .pdf (Portable Document Format) format.

## Legal text

The proposed changes to the BSC to deliver P321 can be found in Attachment A.

We have made some minor amendments to the legal text following comments received in the Assessment Procedure Consultation, and these are included in the attached redlining. The full comments made by respondents can be found in Attachment C.

We have also taken this opportunity to include some housekeeping changes identified within the Code Sections impacted by P321, which are included in Attachment A. If P321 is approved, these housekeeping changes would be made as part of its implementation.

We have also prepared the changes to impacted CSDs where possible, and these can be found in Attachment B. These were not consulted upon in the Assessment Procedure Consultation, but the Panel did consult upon these as part of the Report Phase Consultation.

## Progression as a Self-Governance Modification

The Workgroup believes that P321 would not have any material impacts on participants or competition and so would meet the Self-Governance Criteria. It therefore considers that P321 should be progressed as a Self-Governance Modification. All respondents to the Assessment Procedure Consultation agreed with this view.



### What are the Self-Governance Criteria?

A Modification that, if implemented:

- (a) is unlikely to have a material effect on:
  - (i) existing or future electricity consumers; and
  - (ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
  - (iii) the operation of the national electricity transmission system; and
  - (iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
  - (v) the Code's governance procedures or modification procedures; and
- (b) is unlikely to discriminate between different classes of Parties.

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## Are there any alternative solutions?

The Workgroup has considered several potential alternative solutions to P321, but concluded that none would better facilitate the Applicable BSC Objectives compared to the Proposed Modification. It has therefore not raised an Alternative Modification.

This section summarises the alternative solutions considered by the Workgroup. The Workgroup's detailed discussions on each option can be found in Section 6, and the views from Assessment Procedure Consultation respondents can be found in Attachment C.

### Making the information available on the ELEXON Portal

In addition to being published on the BMRS, the Workgroup considered making the information proposed by P321 available to download through the ELEXON Portal. Under this approach, the data uploaded to the BMRS each day would also be consolidated into a single .csv file that would be zipped and published on the ELEXON Portal. Users of the Portal would then be able to download these files for use within their systems.

Respondents to the Assessment Procedure Consultation were not convinced by this option, believing it to be unnecessary additional work that was unlikely to be used by the target audience for the information. The Workgroup noted these views and agreed not to include this option under P321.

### Extending the solution to include individual Grid Supply Points

The Transmission Company representative proposed extending the solution to also report the delivery mode and associated export and import volumes for individual GSPs. They note that the Transmission Company has considered reflecting exporting GSPs in the Transmission Network Use of System (TNUoS) methodology, which would require charging arrangements to be at the GSP level in order to be properly cost reflective. They believe that extending P321 to include individual GSPs would facilitate this, and consider that it would be more efficient to include this under P321 rather than raise a separate change that would likely be implemented at a later date.

Respondents to the Assessment Procedure Consultation did not believe that this option should be progressed under P321, but instead should be progressed as a separate Modification. They did not disagree with the proposal, but believed that the issue was wider than that of publishing Trading Unit data and warranted further discussion first. The Workgroup also considered that the solution could be more complex than originally thought, and further development and assessment of this option would impact the overall progression of P321. Overall, the Workgroup agreed not to progress this option under P321, but was supportive of separate investigations into such reporting.

### Inclusion of data from the D0276 data flow

The Workgroup initially believed that, in addition to making the gross export and import volumes at a Trading Unit level available, it would be beneficial to also publish the information contained in the [D0276 'GSP Group Consumption Totals Report'](#) data flow on the ELEXON Portal. This would allow BSC Parties and other participants the ability to 'drill down' into the data behind the Trading Unit level volumes should they wish.

However, the Workgroup noted that publication of this information is already being considered under Proposed Modification [P315 'Publication of Gross Supplier Market Share Data'](#), and that the development of a solution was at a far more advanced stage under that Modification. The Workgroup also noted considerations under P315 around making this data available, such as whether a licence was needed for it, and felt that its inclusion in P321 could add unnecessary complexity to what should be a fairly straightforward change. The Proposer highlighted that this level of information was far beyond what they had sought from P321, and elected not to include it in the Proposed Modification. The Workgroup subsequently agreed not to progress this option any further, and did not consult upon this option.



### Estimated central implementation costs of P321

The central implementation costs of P321 are approximately £120k. These costs consist of:

- approximately £105k in BSC Agent costs to make the necessary changes to central systems and the BMRS to calculate and publish the information sought by P321; and
- approximately £15k in ELEXON effort in implementing P321.

There are no on-going costs associated with P321.

### Indicative industry costs of P321

The implementation of P321 is not expected to require any effort from any BSC Party or Party Agent, as all the changes will be to central systems. Equally, no on-going costs or impacts from industry participants are anticipated. Respondents to the Assessment Procedure Consultation indicated minor impacts and associated costs if they elected to make use of the data themselves, but no mandatory implementation impact was identified.

### P321 impacts

#### Impact on BSC Parties and Party Agents

None anticipated.

#### Impact on Transmission Company

None anticipated.

#### Impact on BSCCo

None anticipated.

#### Impact on BSC Systems and process

BSC System/Process	Impact
BMRA/BMRS	The BMRA will be required to publish Trading Unit Delivery Modes and Export and Import Volumes on the BMRS.
SAA	The SAA will be required to calculate Trading Unit Export and Import Volumes and submit these to the BMRA.
SVAA	The SVAA will be required to submit Corrected Component values to the SAA for use in calculating Trading Unit Export and Import Volumes.

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Impact on Code	
Code Section	Impact
Section S Annex S-2	Changes will be required to deliver the proposed solution. <i>The proposed changes can be found in Attachment A.</i>
Section T	
Section V	
Section X Annex X-2	

Impact on Code Subsidiary Documents	
CSD	Impact
BMRA Service Description	Changes will be required to these documents for P321. <i>The proposed changes can be found in Attachment B.</i>
SAA Service Description	
BMRA User Requirement Specification	
SAA User Requirement Specification	
NETA Interface Definition and Design	Changes will be required to these documents for P321. <i>The changes will be prepared as part of P321's implementation, if approved, once the details of the relevant flows have been finalised.</i>

### Recommended Implementation Date

The P321 Workgroup proposes the following implementation approaches depending on whether P321 is progressed as a Self-Governance Modification:

- If P321 **is** progressed as a Self-Governance Modification then the Panel is currently expected to make the final decision at its meeting on 8 October 2015. If this is the case then the Workgroup recommends an Implementation Date for P321 of **30 June 2016** (June 2016 Release).
- If P321 **is not** progressed as a Self-Governance Modification then the Final Modification Report is currently expected to be issued to the Authority for decision by mid-October 2015. If this is the case then the Workgroup recommends an Implementation Date for P321 of **30 June 2016** (June 2016 Release) if the Authority's decision is received on or before 14 January 2016.

These dates are based on the lead time for the central system changes, which has been assessed at 24 weeks for the proposed solution. This means that the June 2016 Release is the earliest viable Release that can be targeted.

All five Assessment Procedure Consultation Respondents considered this an appropriate implementation approach.

### Why is this information required?

The Proposer noted that the reason for seeking this information was to better enable customers to make decisions on whether to take a fixed contract or a pass-through contract. This information would help them assess which type of contract was better for them based on how frequently a given Base Trading Unit's delivery mode would change from net offtaking to net delivering. Under a fixed contract a customer's bills are fixed irrespective of what the Trading Unit does, but under a pass-through contract any embedded benefits from a Trading Unit changing delivery mode would be passed through to the customer. However, the Proposer believes that there is not an independent source of information available to customers on the direction of a Trading Unit in a given Settlement Period, which also hinders their ability to independently verify the bills issued by their Supplier. They highlighted that it has only been in the last couple of years that the issue of Base Trading Units changing delivery mode has become an issue, considering that this is likely due to embedded generation on the Distribution System.

The Proposer noted that they were most interested in ensuring that information for the Base Trading Units was provided, as these are the key Trading Units for customers to have visibility of. However, they felt that expanding the solution to include all Trading Units would ensure completeness in reporting. The Workgroup considered whether people would be interested in Trading Units other than the Base Trading Units, but felt it would be more transparent to include all Trading Units and would future-proof the solution. One Assessment Procedure Consultation respondent did highlight the large number of Sole Trading Units that would be reported, and queried if doing so would add value. However, the solution that will be implemented can be configured to allow BMRS users to filter Sole Trading Units out of their search results.

To further facilitate transparency, the Workgroup also considered whether historical data for Settlement Dates before the P321 Implementation Date could be included when P321 went live. ELEXON assessed this possibility, but noted that the information needed to produce such historic data is not stored in an easily accessible format. This is because the relevant data is only needed by central systems at the time the calculations are made, and it then gets archived to save space. As a result, calculating historical information would be a highly manual task that would increase the cost and lead time of the solution. The Proposer felt that while historical information would be good, they were content with only having data for the P321 Implementation Date onwards.

One Workgroup member believed that it would also be beneficial to produce a map of Great Britain showing the GSP Group boundaries in relation to key locations such as major cities. This would enable a customer to better identify which GSP Group they were in so they could look at the right Base Trading Unit's information. They noted that a lot of the maps currently available show boundaries in relation to power stations, which makes it much harder for a customer to orientate. The Workgroup agreed that such a map should be produced, although another member commented that a customer could just contact their Supplier for this information, which they would only need to do once. It was considered that customer service departments already receive these queries.

## Should Trading Unit export and import volumes be shown?

The Workgroup noted that information on the Trading Unit's delivery mode (i.e. whether the Trading Unit was delivering or offtaking) was a mandatory part of the Proposer's proposed solution, but that they also considered the inclusion of gross export and import volumes to be desirable, to allow users to see how close a Trading Unit came to changing delivery mode. The Workgroup agreed that including these volumes would be beneficial.

The Workgroup considered whether the Total Trading Unit Metered Volume, as reported in the SAA-I014 'Settlement Report' flow, should be used, or whether the volumes should be split into export and import volumes. Members felt that the net volume would not show enough information about how close a Trading Unit came to changing delivery mode. In this scenario, it would not be possible to assess whether a net volume close to zero was due to large but fairly equal volumes of export and import, or whether there was simply a very small volume of energy to begin with. Only by splitting the volume into its export and import components would it be possible to assess this.

It was believed that gross export and import volumes could not simply be calculated by summing the positive and negative values of BM Unit Metered volumes respectively, due to the way the Metered Volumes for Supplier BM Units are calculated. Should a Supplier BM Unit's Metered Volume be taken, as reported in the SAA-I014 flow, this would be net of all consumption and embedded generation within the BM Unit. This would mean that both the export and import volumes reported for a given Base Trading Unit would be too small in magnitude, albeit by the same volume.

As an example, consider a Supplier BM Unit with three importing Metering Systems each consuming 50MWh and one embedded generation Metering System generating 50MWh in a given Settlement Period. This means that, in reality, the BM Unit contains 150MWh of demand and 50MWh of generation. However, the BM Unit's Metered Volume would be reported as 100MWh of demand (and zero generation), as the volumes of all four Metering Systems would ultimately be netted to produce this single volume. By using the BM Unit Metered Volume, both the gross export and gross import value reported for the relevant Trading Unit would be 50MWh smaller in magnitude than they should actually be.

This issue would not occur for other types of BM Units. This is because Directly Connected and Embedded BM Units tend to consist of only a single Central Volume Allocation (CVA) registered Metering System, while Interconnector BM Units come in pairs with generation and demand volumes allocated to separate BM Units. This means there are no issues with generation and demand volumes netting off within a BM Unit and so the BM Unit Metered Volumes can be used.

To mitigate the issue with Supplier BM Units, it was agreed that the calculation would involve splitting Supplier BM Unit Metered Volumes into export and import using volumes at the CCC level, as one of the ways that CCCs are split is by whether they contain consumption or Supplier Volume Allocation (SVA) generation. For each Base Trading Unit, the Supplier BM Unit export and import volumes would be obtained by adding up the 'active export' CCC volumes and 'active import' CCC volumes respectively. These volumes would then be added to the relevant volumes from non-Supplier BM Units to produce the total export and import volumes for the Trading Unit. It would only be these final totals that would be reported. This will improve the accuracy of the Trading Unit volumes reported.



### **What is a Consumption Component Class?**

A CCC is used to split Consumption into groups determined by combinations of various elements, such as whether the Consumption was import or export, half hourly or non-half hourly, or metered or unmetered. Each SVA Metering System will be allocated to an appropriate CCC.

The full list of CCCs can be found in BSC Section X Annex X-2 Table X-8.

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## Should more detailed underlying information be provided?

A couple of Workgroup members felt that it would be useful to provide more granular underlying information alongside the Trading Unit level volumes. This would allow users to be able to 'drill down' into the data should they wish, to assess for themselves how the overall volumes were composed. The Workgroup noted the D0276 data flow, which reports the Metered Volumes within each GSP Group at the CCC level, and which is currently issued to Suppliers. It was considered whether the contents of this flow should be made available to other users.

The Proposer noted that the intent of P321 was to enable customers to be able to easily access information on the Trading Unit delivery mode for use in validating their bills. They considered that the contents of the D0276 data flow was far more than they had intended to be made available under P321, and felt that this should not be included in the proposed solution. A concern was also raised as to whether P321 was at risk of 'incremental creep', with increasing amounts of additional data being added beyond the core solution requirements. If too much data was included or the solution over-engineered then this could risk over-complicating the core solution and rendering it meaningless. The Workgroup was encouraged to focus on what it was that P321 was seeking and the intended audience for this information.

Workgroup members felt that the detailed information would be of more use to users such as account managers looking at contracts. However, members felt that the organisations of such users could develop internal IT processes now to derive this information from existing sources should they so wish. They again noted that the intent of the Modification is to allow customers access to an independent source of data on Trading Unit delivery mode, especially in areas where this is likely to change more frequently.

One member queried whether the core information could be available on the BMRS with the underlying data available through a separate downloadable file. The Workgroup assessed the option to include the information from D0276 data flows as a single downloadable file available via the ELEXON Portal, and noted that this would incur an additional cost of around £30k when added to the proposed P321 solution.

However, members noted that publication of the data from D0276 data flows is already being considered under P315, and that the development of a solution was much further developed under that Modification. Furthermore, it was highlighted that there were many areas that the P315 Workgroup had needed to consider in the development of the solution that suggested that it may not be as simple as first considered. In particular, the P315 Workgroup had considered who should be able to access the data and whether licences were needed for non-BSC Parties who wanted to receive the data. These areas would also need to be considered by the P321 Workgroup if it was to be included as part of P321.

The P321 Workgroup concluded that while the additional information from D0276 data flows was desirable, it did not consider it appropriate to further develop this option under P321 as it could add too much complexity to what should otherwise be a straightforward change. Instead, should P315 be rejected but participants still believe there is benefit in having the data from the D0276 data flows publically available, a BSC Party could raise a further BSC change to progress that solution separately.

## Where is the most appropriate place to publish this information?

The Workgroup agreed that the core information sought by P321 should be published on the BMRS website, with the option for users to download this data in .csv and XML formats. The BMRS is the main reporting website for BSC-related information, and the Workgroup agreed that the information that P321 would provide should be added to this website.

The Workgroup also considered whether data should be made available through the ELEXON Portal. They explored a Portal-based solution that would act as an add-on to the P321 proposed solution. Under this option, the data would continue to be published on the BMRS as proposed, but the information would also be made available to download as daily .csv files from the ELEXON Portal. Including this option in the proposed solution would have incurred an additional £30k in central implementation costs.

Some Workgroup members were unconvinced that a Portal-based solution was necessary or would provide any value for the extra costs that it would incur, and noted that users would need to log in to the Portal to be able to access this information. It was considered that the target audience for the data, such as end customers, would most likely obtain the data from the BMRS and would not use the Portal. They therefore felt that having just the BMRS-based solution would be the most effective option. Other members felt it would be beneficial to assess the option and the appetite for it before deciding whether or not to include it.

Three of the five Assessment Procedure Consultation respondents believed that the Portal-based solution should not be progressed. They considered the solution to be unnecessary and did not see the benefit it would offer for the additional costs that would be incurred. One respondent considered that typical users of the data, such as account managers, would likely access the data only a couple of times a year, and would likely do so via the BMRS. One other respondent felt there would be benefit in the Portal option if this would make it more practical for downloading the data. However, we note that the BMRS solution would facilitate easy downloading of the data, and the Portal would offer no additional benefit over the BMRS in this area.

Noting these views, the Proposer elected not to include the Portal option in their proposed solution. The other Workgroup members supported this decision.

## Should the solution be expanded to include individual Grid Supply Points?

### Transmission Company's proposal

The Transmission Company representative highlighted to the Workgroup National Grid's evolving proposals regarding reflecting exporting GSPs in the TNUoS methodology. These proposals have been progressed as part of National Grid's [Review of Embedded \(Distributed\) Generation Benefit](#) and have been presented to the Transmission Charging Methodology Forum (TCMF) on a number of occasions. The representative noted that any such charging arrangement would have to be at the GSP level to be properly cost reflective. They also noted that National Grid had issued an [Informal Consultation on Potential Transmission Charging Arrangements at Exporting Grid Supply Points](#).

The representative put forward a potential alternative solution that would extend the publication of the gross export and import data proposed by P321 down to the lower granularity of individual GSPs. Should any changes to the TNUoS methodology for



### What is a Grid Supply Point?

A GSP is a point of connection between the Transmission System (including Offshore Transmission Systems) and a Distribution System.

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charging exporting GSPs be progressed under the Connection and Use of System Code (CUSC), customers will need to see the GSP's exports and imports to help validate any such charges. They considered that including this change now as part of P321 would future-proof the publication of data and be more efficient than raising a further BSC Modification at a later date.

The representative believed that this extension would fall within the scope of P321, as they consider the change to be seeking to increase visibility of information that would impact commercial decisions. Such improvements could come through increased data visibility or the production of more accurate forecasts. By making this information available for GSPs, the Transmission Company would be able to increase the accuracy of their forecasts. While the information would mainly benefit the Transmission Company and its forecasts, the representative believed that increased accuracy of forecasts would facilitate better commercial decisions.

### **Workgroup's consideration of the proposal**

Other Workgroup members initially considered that the proposal seemed a sensible approach, as making all the changes in one go would likely result in cost-savings compared to extending the solution at a later date. They also considered that the availability of data such as this would become more important due to the increase in embedded generation within Distribution Systems. However, the Workgroup was asked whether this could be another case of 'incremental creep', and also whether including the reporting of GSPs' delivery mode under P321 could be seen as pre-empting any decision on the TNUoS methodology changes.

One member queried whether this could cause competition issues should a particular GSP have only one or a small number of sites connected to it. If this was the case, it may be possible for users to infer the performance of those specific customers from this information. Another member felt that this is likely to be an issue only in North Scotland and possibly the South-West, and considered that many such sites would already need to be reported on individually under other obligations. The Transmission Company representative confirmed that there are no GSPs with only a single customer, and that a GSP, by its nature, serves multiple customers. If a GSP did serve only a single customer then that would make that customer a directly connected Transmission customer.

One member highlighted that there is currently no reports that link individual customers to a particular GSP, and that such links were removed in 1998 as part of the changes to the arrangements made at that time. It was therefore unclear how knowing whether a GSP was exporting or importing would benefit commercial users in making commercial decisions. They also noted that GSPs are labelled on a geographic basis, but any reporting would need to ensure that GSP labels were intuitive to all users.

The Workgroup considered how the gross export and import volumes could be calculated. A method was proposed whereby the volumes from all the active export Meters for a GSP could be summed to form its export volume while the volumes from all the active import Meters could be summed to form an import volume. This solution would incur an additional £40k if added to the P321 proposed solution. However, members noted that the relevant Metering Systems only report the net flow passing through it at a given time, which would be very difficult to split into gross export and import. This method would therefore not provide the level of detail that the Transmission Company sought.



Members felt that the right solution was likely to be much more complex than this, and that BSC Agents may not have the appropriate data to be able to provide what was being sought. It was believed that it would not be possible to fully develop this part of the solution within the current P321 timetable, so if this was to be taken further under this Modification then an extension would need to be sought. Members were not convinced that the publication of Trading Unit data should be delayed over this.

One member highlighted that the information sought by the Transmission Company could be available in the CDCA-I049 'Total Demand per GSP' data flow, which is sent to the System Operator and can be made available to other BSC Parties upon request. The information from the D0276 data flow may also be of use to them. The member also noted that this area could be explored as part of other work streams relating to the increase in embedded generation, which they felt is becoming a growing issue. The Transmission Company representative did agree that these data flows might be able to improve the forecasting process, but noted that neither specifically contains gross export and import volumes at the GSP level, and so would not satisfy this specific requirement.

Overall, the Workgroup considered there to be merit in the Transmission Company's proposal. However, they noted that the solution that had been assessed was unlikely to fulfil the Transmission Company's needs, and felt that any solution would be too complex to develop under P321. The Proposer did not elect to include this as part of their Proposed Modification, and the other members were not convinced of the case for raising this as an Alternative Modification. They believed it would be beneficial to further explore and develop this area separately, and to raise a subsequent Modification Proposal should such changes still be sought. The Transmission Company representative accepted these views.

### **Assessment Procedure Consultation respondents' views**

Four of the five Assessment Procedure Consultation respondents believed that P321 should not be extended to include GSPs. These respondents generally felt that the issues raised by reporting the data for GSPs would be wider than for Trading Units, such as around commercial sensitivity, and believed that the changes should be raised under a separate Modification. One respondent considered that including the data now could be pre-empting the outcomes of National Grid's review, while another felt it would be better to raise the change later once the revised methodology has been fully developed, in parallel with the corresponding CUSC change.

The fifth respondent disagreed with these views, believing that GSP data would allow for more efficient generator dispatch decisions. They also felt that making these changes now would ease the administrative burden later when the CUSC changes were raised.



### Workgroup's final recommendation

The Workgroup believes that P321 **would** better facilitate the Applicable BSC Objectives compared to the current baseline and so unanimously recommends that P321 should be **approved**.

The views given by the Proposer, Workgroup members and Assessment Procedure Consultation respondents against the Applicable BSC Objectives are summarised below.

### Proposer's views against the Applicable BSC Objectives

#### Applicable BSC Objective (b)

The Proposer believes that there is a lack of knowledge about the impact of the Trading Unit's delivery mode on embedded benefits and how a change in the mode can affect these. Publishing this information will make it easier for customers to engage with the market and make informed decisions about their generation or consumption. It should also assist in sending the right signals to encourage changes in behaviour, as generators, investors and developers should coordinate their generation or construction to maximise their embedded benefit. The Proposer considers that this will aid the balancing of the network.

Furthermore, investors in and developers of embedded generation will be able to make a more informed decision about the financial risks associated with connecting to certain GSP Groups. The pattern of development of embedded generation will therefore be more likely to evolve in a way consistent with balanced outcomes.

The Proposer also considers that the changing of the Trading Unit direction between delivering and offtaking is designed to provide a price signal to help better balance the network. However, as long as generators cannot predict or validate when this occurs, and given that knowledge of the process is insufficient, they believe this price signal will not have any impact.

#### Applicable BSC Objective (c)

The Proposer believes that knowledge of the likelihood of changes to the Trading Unit delivery mode will make it easier for customers to make informed decisions about opting between fixed and pass-through contracts. Suppliers have this information, so it is considered only fair that customers do too. However, because the information is either derived or part of a net BSUoS bill, it is not possible for Suppliers to point to an independent source of the data. Customers will be able to scrutinise their bills more effectively, which will help to boost their trust in their Supplier and prevent misunderstandings arising between them.

### Workgroup's views against the Applicable BSC Objectives

All four of the other Workgroup members present at the final meeting agree with the views and reasons put forward by the Proposer that P321 would better facilitate Applicable BSC Objective (c).

#### What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

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Three of these members stated that, while they agree with the views and reasons put forward by the Proposer under Applicable BSC Objective (b), they consider these arguments to be weak. They consider the arguments put forward under Applicable BSC Objective (c) to be the stronger arguments in support of P321. The remaining member believed P321 was neutral against Applicable BSC Objective (b).

Does P321 better facilitate the Applicable BSC Objectives? <sup>1</sup>		
Obj	Proposer's Views	Other Workgroup Members' Views
(a)	<b>Neutral</b>	<b>Neutral</b>
(b)	<b>Yes</b> <ul style="list-style-type: none"> <li>• Sends the right behavioural signals, which will aid with the balancing of the network</li> <li>• Allows more informed investment decisions to be made as to which GSP Groups to connect to</li> <li>• Aids in sending pricing signals</li> </ul>	<b>Yes (3 out of 4)</b> <ul style="list-style-type: none"> <li>• Agree with Proposer, but noting that the arguments are weak</li> </ul> <b>Neutral (1 out of 4)</b>
(c)	<b>Yes</b> <ul style="list-style-type: none"> <li>• Easier for customers to make informed decisions between contracts</li> <li>• Increases data transparency for customers</li> </ul>	<b>Yes (unanimous)</b> <ul style="list-style-type: none"> <li>• Agree with the Proposer</li> </ul>
(d)	<b>Neutral</b>	<b>Neutral</b>
(e)	<b>Neutral</b>	<b>Neutral</b>
(f)	<b>Neutral</b>	<b>Neutral</b>

## Assessment Consultation respondents' views against the Applicable BSC Objectives

All five respondents to the Assessment Procedure Consultation agreed that P321 would better facilitate Applicable BSC Objectives (b) and (c) for the same reasons as the Workgroup. Additionally, one respondent also considered that P321 would assist in identifying possible constraints in the system and the reasons behind balancing actions taken by the Transmission Company. This would aid participants in their price formation, better facilitating competition.

One respondent believed there could be a slight detrimental impact on Applicable BSC Objective (d), as P321 would incur costs and effort but would not benefit the central arrangements. However, the benefits under the other Applicable BSC Objectives would outweigh this. There could also be a slight benefit against Applicable BSC Objective (d) as participants would not need to determine the Trading Unit delivery mode for themselves.

You can find the full responses received in Attachment C.

<sup>1</sup> Five voting Workgroup members were present at the final meeting, including the Proposer.

### Panel's initial recommendations

#### Applicable BSC Objectives

The Panel unanimously agreed that P321 **would better facilitate Applicable BSC Objectives (b) and (c)** for the same reasons given by the Proposer and the Workgroup in Section 7. Some Panel Members noted that they supported the Proposer's views against Applicable BSC Objective (b), believing that publishing this information could be of benefit to the Transmission Company.

The Panel therefore initially unanimously recommends that P321 should be **approved**.

#### Self-Governance

The Panel unanimously agreed that P321 would meet the Self-Governance Criteria as there would be no material impact on participants or competition. It therefore believed that P321 should be progressed as a Self-Governance Modification. The Ofgem Representative supported this view.

#### Legal text

The Panel unanimously agreed that the draft redlined changes to the BSC in Attachment A and to the relevant CSDs in Attachment B deliver the intention of P321.

#### Implementation Date

The Panel unanimously agreed with the Workgroup's recommended Implementation Date of 30 June 2016 as part of the June 2016 Release, as put forward in Section 5.

## 9 Report Phase Consultation Responses

This section summarises the responses to the Panel's Report Phase Consultation on its initial recommendations. You can find the full responses in Attachment D.

We received four responses to the P321 Report Phase Consultation, with all the respondents having replied to the Assessment Procedure Consultation. Some observations were also received from a fifth participant, who had similarly responded to the previous consultation.

Summary of P321 Report Phase Consultation Responses				
Question	Yes	No	Neutral/ No Comment	Other
Do you agree with the Panel's initial unanimous recommendation that P321 should be approved?	4	0	0	0
Do you agree with the Panel's initial unanimous view that P321 should be treated as a Self-Governance Modification?	4	0	0	0
Do you agree with the Panel that the redlined changes to the BSC and CSDs deliver the intent of P321?	2	0	2	0
Do you agree with the Panel's recommended Implementation Date?	4	0	0	0
Do you have any further comments on P321?	1	3	0	0

### Views on P321 and the Applicable BSC Objectives

All four respondents agreed with the Panel's view that P321 better facilitates Applicable BSC Objectives (b) and (c) for the reasons put forward by the Panel.

One respondent also considered a further benefit by assisting in the identification of possible constraints on the system, helping to explain the Transmission Company's balancing actions. This will allow market participants to make better informed judgements in pricing, thereby facilitating efficient price formation, benefitting Objective (c).

One respondent expressed a minor concern that by mandating the provision of this data, P321 is denying Suppliers an opportunity to provide a differentiating service, stifling a potential competitive advantage. However, the respondent considered that the benefits of P321 would outweigh this minor concern so overall believes that P321 should be approved.

The fifth participant who provided separate comments noted that P321 would be publishing data for all Trading Units, including Sole Trading Units. This would result in a lot of potentially unnecessary information being published. They also observed that, for Sole Trading Units, P321 would amount to publishing BM Unit level data, which is currently only available to BSC Parties and other licenced recipients. They were not concerned about this, but considered whether other participants may object.

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## Views on Self-Governance

All four respondents agreed with the Panel's view that P321 should be progressed as a Self-Governance Modification for the reasons expressed by the Panel.

## Views on the legal text and CSD redlining

Respondents that reviewed the legal text and CSD changes all agreed that it delivers the intent of P321.

Following the Report Phase Consultation being issued, we have made some minor administrative amendments to the CSD changes to convert some specific new paragraph and flow numbers to a 'to be determined' state. This is to pre-empt any potential number clashes that may otherwise be created should other changes be approved and implemented between the Panel's approving P321 and it being implemented. The relevant numbers will be determined and inserted when the P321 changes are implemented. We highlight that the substance of the CSD changes has not changed from that issued in the Report Phase Consultation.

## Views on the Implementation Date

All four respondents agreed with the proposed Implementation Date of 30 June 2016.

## 10 Recommendations

We invite the Panel to:

- **AGREE** that P321:
  - **DOES** better facilitate Applicable BSC Objective (b); and
  - **DOES** better facilitate Applicable BSC Objective (c);
- **DETERMINE** (in the absence of any Authority direction) that P321 is a Self-Governance Modification Proposal;
- **APPROVE** P321;
- **APPROVE** an Implementation Date for P321 of 30 June 2016;
- **APPROVE** the draft legal text and CSD changes for P321; and
- Either:
  - **APPROVE** the P321 Modification Report; or
  - **INSTRUCT** the Modification Secretary to make such changes to the report as the Panel may specify.

### Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P321 Terms of Reference

What additional information on each Trading Unit beyond its direction should be published?

In what format(s) and location(s) should the information be made available?

What changes are needed to BSC documents, systems and processes to support P321 and what are the related costs and lead times?

What is the appropriate Implementation Date for P321?

Are there any Alternative Modifications?

Should P321 be progressed as a Self-Governance Modification?

Does P321 better facilitate the Applicable BSC Objectives than the current baseline?

### Assessment Procedure timetable

#### P321 Assessment Timetable

Event	Date
Panel submits P321 to Assessment Procedure	14 May 15
Workgroup Meeting 1	20 May 15
Central Impact Assessment	03 Jun 15 – 23 Jun 15
Workgroup Meeting 2	29 Jun 15
Assessment Procedure Consultation	09 Jul 15 – 07 Aug 15
Workgroup Meeting 3	12 Aug 15
Panel considers Workgroup's Assessment Report	10 Sep 15



## Workgroup membership and attendance

P321 Workgroup Attendance				
Name	Organisation	20 May 15	29 Jun 15	12 Aug 15
Members				
Claire Kerr	ELEXON ( <i>Chair</i> )	✓	✓	✓
David Kemp	ELEXON ( <i>Lead Analyst</i> )	✓	✓	✓
Colin Prestwich	SmartestEnergy ( <i>Proposer</i> )	✗	✗	✓
Miles Macallister	SmartestEnergy ( <i>Proposer's Representative</i> )	✓	✓	✗
Dave Corby	National Grid ( <i>Transmission Company Representative</i> )	✓	✓	✓
Andy Colley	SSE	✓	✗	✓
Lisa Waters	Waters Wye Associates	✓	✗	✗
Delveer Johal	RWE npower	✓	☎	✗
Gary Henderson	Scottish Power	✓	✗	✓
Lin Gao	E.ON	✓	✓	✓
Attendees				
Max O'Connor	ELEXON ( <i>Market Design Authority</i> )	✓	✗	✗
Matthew McKeon	ELEXON ( <i>Market Design Authority</i> )	✗	✓	✓
Nanu Miah	ELEXON ( <i>Technical Design Authority</i> )	✗	✓	✗
Nick Brown	ELEXON ( <i>Lead Lawyer</i> )	✗	✗	✗
Rory Edwards	Ofgem	✗	✗	✗
Francesca Scucces	National Grid	✓	✗	✗
Antony Giblin	CGI ( <i>BPO service provider</i> )	✓	☎	☎

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## Appendix 2: Glossary & References

### Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
BM	Balancing Mechanism
BMRA	Balancing Mechanism Reporting Agent ( <i>BSC Agent</i> )
BMRS	Balancing Mechanism Reporting Service
BSC	Balancing and Settlement Code ( <i>industry Code</i> )
BSCCo	Balancing and Settlement Code Company ( <i>Code Administrator; ELEXON</i> )
BSUoS	Balancing Services Use of System ( <i>charge</i> )
CCC	Consumption Component Class
CSD	Code Subsidiary Document
.csv	Comma Separated Values ( <i>file format</i> )
CUSC	Connection and Use of System Code ( <i>industry Code</i> )
CVA	Central Volume Allocation
DC	Demand Capacity ( <i>parameter</i> )
GC	Generation Capacity ( <i>parameter</i> )
GSP	Grid Supply Point
.pdf	Portable Document Format ( <i>file format</i> )
RCRC	Residual Cashflow Reallocation Cashflow ( <i>charge</i> )
SAA	Settlement Administration Agent ( <i>BSC Agent</i> )
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent ( <i>BSC Agent</i> )
TCMF	Transmission Charging Methodology Forum ( <i>industry group</i> )
TLM	Transmission Loss Multiplier ( <i>value</i> )
TNUoS	Transmission Network Use of System ( <i>charge</i> )
XML	Extensible Markup Language ( <i>file format</i> )

### DTC data flows and data items

DTC data flows and data items referenced in this document are listed in the table below.

DTC Data Flows and Data Items	
Number	Name
D0276	GSP Group Consumption Totals Report

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## External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
4	BSC Sections page on the ELEXON website	<a href="https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/">https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/</a>
4	Registered BM Units page on the ELEXON Portal <i>(a free login account is required to view this page)</i>	<a href="https://www.elexonportal.co.uk/registeredbmunits">https://www.elexonportal.co.uk/registeredbmunits</a>
4	Balancing Mechanism Units page on the ELEXON website	<a href="https://www.elexon.co.uk/reference/technical-operations/balancing-mechanism-units/">https://www.elexon.co.uk/reference/technical-operations/balancing-mechanism-units/</a>
4	Aggregation Rules and Trading Units page on the ELEXON website	<a href="https://www.elexon.co.uk/reference/technical-operations/metering/aggregation-rules-trading-units/">https://www.elexon.co.uk/reference/technical-operations/metering/aggregation-rules-trading-units/</a>
5	Losses page on the ELEXON website	<a href="https://www.elexon.co.uk/reference/technical-operations/losses/">https://www.elexon.co.uk/reference/technical-operations/losses/</a>
5	Trading Charges page on the ELEXON website	<a href="https://www.elexon.co.uk/reference/credit-pricing/trading-charges/">https://www.elexon.co.uk/reference/credit-pricing/trading-charges/</a>
6	P321 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p321/">https://www.elexon.co.uk/mod-proposal/p321/</a>
7	D0276 entry in the Data Transfer Catalogue	<a href="http://dtc.mrasco.com/DataFlow.aspx?FlowCounter=0276&amp;FlowVers=2&amp;searchMockFlows=False">http://dtc.mrasco.com/DataFlow.aspx?FlowCounter=0276&amp;FlowVers=2&amp;searchMockFlows=False</a>
8	P315 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p315/">https://www.elexon.co.uk/mod-proposal/p315/</a>
15	Review of Embedded (Distributed) Generation Benefit page on the National Grid website	<a href="http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Transmission-Network-Use-of-System-Charges/Embedded-Benefit-Review/">http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Transmission-Network-Use-of-System-Charges/Embedded-Benefit-Review/</a>
15	Transmission Charges Open Letters page on the National Grid website	<a href="http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Transmission-Network-Use-of-System-Charges/Transmission-Charges-Open-Letters/">http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Transmission-Network-Use-of-System-Charges/Transmission-Charges-Open-Letters/</a>

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