# CP Assessment Report

# CP1516 'New Interconnector Fuel Type Categories: ElecLink & IFA2'

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## About This Document

This document is the Change Proposal (CP) Assessment Report for CP1516, which ELEXON will present to the BSC Panel at its meeting on 11 July 2019. The BSC Panel will consider the proposed solution and the responses received to the CP Consultation before making a decision on whether to approve CP1516. CP1516 is being presented to the BSC Panel for decision, for the reasons outlined under 'Governance' in section two of this paper.

There are four parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, and proposed implementation approach. It also summarises the Imbalance Settlement Group's (ISG's) initial views on the proposed changes and the views of respondents to the CP Consultation.
- Attachment A contains the CP1516 Proposal Form.
- Attachment B contains the proposed redlined changes to deliver the CP1516 solution.
- Attachment C contains the full responses received to the CP Consultation.

**Committee**

BSC Panel

**Recommendation**

Approve

**Implementation Date**

30 November 2019 (Ad-hoc Release)


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# 1 Why Change?

## What is the issue?

Two new High-Voltage Direct Current (HVDC) Interconnectors (ElecLink and Interconnexion France – Angleterre 2 (IFA2)) are currently being constructed, and are due to go-live in December 2019 or January 2020, and June 2020 respectively. It is necessary to make BSC Central System changes to the Balancing Mechanism Reporting Service (BMRS), to include the two new Interconnector fuel types, before the Interconnectors become operational, in order that the Interconnector data can be published in a transparent manner.

## Background

ElecLink and IFA2 will both be 1000MW (1GW) Interconnectors between Great Britain (GB) and France carrying electricity to and from the France Bidding Zone.

The existing arrangements, as set out in BSC Section Q 'Balancing Services Activities', require a separate 'Fuel Type Category' to be defined for each Interconnector, for data reporting purposes. These fuel types are then published on the BMRS platform, and recognised within the documents New Electricity Trading Arrangements (NETA) Interface Definition and Design (IDD) Document Part 1 – Interfaces with BSC Parties and their Agents and NETA IDD Part 1 spreadsheet.

BSC Section Q Paragraph 6.1.8 requires National Grid Electricity System Operator (NGESO) as the National Electricity Transmission System Operator (NETSO) to send to the Balancing Mechanism Reporting Agent (BMRA) the data relating to the Interconnector Fuel Type Categories for publication on the BMRS.

### BMRS

The BMRS is the primary channel for providing operational data relating to the GB Electricity Balancing and Settlement arrangements in a prompt manner. Market participants utilise the data BMRS portrays to inform trading decisions and understand market dynamics, as well as being a means of accessing historic data.

BMRS receives, stores and publishes data relating to the Interconnectors to GB. This information is made available to BMRS users via several graphs, tables and XML / CSV downloads, along with API, Data Push services and TIBCO services. The BMRS contains information and data on generation by Interconnector. This generation data can be subsequently separated by 'Fuel Type Category', with the list of required fuel types recorded in BSC Section Q.

### Addition of New Fuel Type Categories

BSC Modification P244 'Provision of BritNed flow data to the BMRS' introduced provisions to allow the BSC Panel to approve new external Interconnector flows, as further Fuel Type Categories, without the need for a BSC Modification. This was progressed on efficiency grounds to remove the need for a Modification to be raised for each Interconnector that would subsequently be commissioned. Prior to P244, Fuel Type Categories were required to be introduced into BSC Section Q.

**What are Interconnectors?**

Electricity Interconnectors are the physical links which allow the transfer of electricity across country borders. There are currently operational Interconnectors linking the GB System to Ireland, France and the Netherlands.

**What is a Bidding Zone?**

A bidding zone is the largest geographical area within which market participants are able to exchange energy without capacity allocation.

**What is the Data Push Service?**

A near real-time information publication Capability from the BMRS system to industry participants.

**What are Application Programming Interfaces (APIs)?**

A set of programming instructions for participants to access BMRS data directly from their systems outside of the firewall.


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Therefore, a CP is required to gain approval for the system changes to the BMRS to enable the publication of the interconnector data through a fuel type category. Separately, the BSC Panel are required to approve the new fuel type categories.

These provisions were utilised in 2012 to add the East-West Interconnector (EWIC) to the BMRS (Panel 194/04), and again in 2018 to add the Nemo Link Interconnector (approval gained as part of the CP1506 Assessment Report) (Panel 280/09).

The BSC Panel approved the Nemo Link Interconnector through CP1506, on grounds of efficiency. CP1516 is taking the same approach, with further detail outlined in section two of this paper under 'Governance'.

**What is the TIBCO messaging service?**

A third party software and provides the mechanism for automated publication of BMRS data to market participants via a dedicated line.

**What is the BMRA?**

The Balancing Mechanism Reporting Agent (BMRA) collects and publishes information about the electricity system in Great Britain. Balancing Mechanism and System Related Information is sourced from National Grid, and Registration Information from the Central Registration Agent.



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# 2 Solution

## Proposed solution

CP1516 will incorporate the IFA2 and ElecLink Interconnector data on the BMRS through an interim solution, which aggregates the existing IFA data, alongside forthcoming ElecLink and IFA2 interconnector values into the existing IFA field in BMRS (INTFR). As a result, there will be no visibility of the disaggregated French interconnector flows or availabilities through existing BMRS content e.g. graphs, tables and XML / CSV downloads, along with API, Data Push services and TIBCO services.

To mitigate the impacts of this disaggregated data not being available through existing BMRS feeds, the ELEXON Portal will be utilised to process the disaggregated interconnector data. This disaggregated data will be published on a new webpage on the BMRS website, linked from the existing interconnector content. Users of TIBCO/Data Push/APIs will be able to access the disaggregated data from a new API, at the same frequency that Interconnector data can currently be accessed.

The Interconnector mapping table, which is managed by ELEXON's service provider, and the NETA IDD Part 1 Document and Spreadsheet documentation will require updating with two new Fuel Type Categories. These will be designated as **INTELEC** for ElecLink and **INTIFA2** for IFA2.

This solution is termed the 'interim solution' on the basis that CP1516, as mentioned above, is not delivering the interconnector data in a manner aligned to current publication formats.

### Why is there an interim solution?

P344 'Project TERRE implementation into GB market arrangements', P384 'The publication of European Electricity Balancing Guideline (EB GL) balancing data by BMRS' and this CP1516 all require changes to BMRS for implementation in the November to December 2019 time period. The delivery of these changes over the same timeframe has created constraints, that if not addressed would impact the delivery of P344.

As a result, an alternative CP1516 solution, reducing the impact on BMRS, has been adopted, to ensure it can be delivered in November 2019, without impacting the delivery of P344 or P384.

It is intended that this interim solution will remain in place until at least November 2020, and until further interconnector data changes are made to the BMRS.

### BMRS data submission/receipt

National Grid ESO will need to amend its Balancing Mechanism (BM) Systems and Electricity Balancing System (EBS) to include the relevant new Interconnector data in the flows submitted to the BMRS.

ELEXON will amend its flow loaders, which is the coding that reads the flows incoming from National Grid ESO, to include the two new Interconnectors' data in BSC Central System databases. Therefore, flow loaders for FUELINST, FUELHH, FOU2T14D, FOU2T52W, UOU2T14D, UOU2T52W (as displayed on the table below) will be modified to recognise the INTELEC and INTIFA2 Interconnector fuel types and add their values to the INTFR fuel type prior to data loading.


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| Flow Type ID | Flow Description | Receipt Frequency |
|---|---|---|
| **FUELINST** | Instantaneous Generation by Fuel Type | Every 2 minutes |
| **FUELHH** | Half-Hourly Generation by Fuel Type | Every 30 minutes |
| **FOU2T14D** | National Output Usable by Fuel Type, 2-14 days ahead | Every weekday |
| **FOU2T52W** | National Output Usable by Fuel Type, 2-52 weeks ahead | Once a week |
| **UOU2T14D** | National Output Usable by BM Unit and Fuel Type, 2-14 days ahead | Every weekday |
| **UOU2T52W** | National Output Usable by BM Unit and Fuel Type, 2-52 weeks ahead | Once a week |

The BMRS website will be modified to:

- Present information text on pages displaying fuel type breakdowns and the main site help page, informing users of the inclusion of INTELEC and INTIFA2 data into INTFR.
- Include a link to a new page on the BMRS website, which will display the disaggregated interconnector data sourced from the ELEXON Portal.

## Proposer's rationale

The ElecLink and IFA2 Interconnectors must be incorporated into the BMRS before they become operational. BSC Section Q Paragraph 6.1.8 outlines the obligation for National Grid to send to the BMRA the data relating to the Interconnector Fuel Type Categories for publication on the BMRS. BSC Section V Paragraph 2.3.3 outlines the subsequent obligation that such data shall be made available on the BMRS.

This CP ensures market participants will continue to have access to market data relating to Interconnectors, with specific reference to the two new Interconnectors Eleclink & IFA2. Once the Panel approve the new fuel types, NEGSO and ELEXON will be required to publish the related data from the approved Implementation Date. This CP will ensure this obligation is met, by enabling the publication of such data

## Proposed redlining

Attachment B contains the proposed redlining to the NETA IDD: Part 1 Documentation – Interfaces with BSC Parties and their Agents. The redlining to the NETA IDD Part 1


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spreadsheet will be developed in parallel to the BSC Central System changes as part of the implementation phase of this CP. The spreadsheet is updated as part of the design phase, which is initiated following approval.

## Governance

BSC Section Q reserves the right for the Panel to approve Fuel Type Categories relating to further Interconnectors without making changes to the BSC itself.

However, as BSC Central System changes are required to enable the BMRS to publish data relating to the new Fuel Types (which in this case are two new Interconnectors), along with changes to associated documentation, a CP must also be progressed.

BSC Panel approval will be sought for both the addition of the Interconnectors as Fuel Type Categories, and for this CP1516, as part of this CP1516 Assessment Report for efficiency purposes. The impacted Configurable Items under CP1516 usually require approval solely by the ISG. However, as the BSC Panel is required to make the determination on the Fuel Type Category, and has oversight of the ISG as one of its sub-Committees, this Assessment Report will be presented directly to the BSC Panel at its meeting on 11 July 2019. This joint approval approach was previously utilised for CP1506 'New Interconnector fuel type'.


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# 3 Impacts and Costs

## Central impacts and costs

### Central impacts

Changes are required to the BMRS and ELEXON Portal to receive and validate the data received from National Grid ESO, subsequently making this available to market participants.

The NETA IDD: Part 1 Document and Spreadsheet will be updated with the proposed Fuel Type Category names for the ElecLink (INTELEC) and IFA2 (INTIFA2) Interconnectors.

Please note that the NETA IDD: Part 1 spreadsheet is not being consulted upon as part of this CP consultation. Due to design and development work that must be undertaken before the IDD can be produced, this document will be drafted to reflect the solution as described in the CP, and will be sent for industry consultation as part of a Release Circular prior to the Implementation Date.

| Central Impacts | |
|---|---|
| Document Impacts | System Impacts |
| • NETA IDD Part 1 Document<br>• NETA IDD Part 1 Spreadsheet | • BMRS<br>• ELEXON Portal |

### Central costs

The central implementation costs for CP1516 will be approximately £80,000. This includes the costs to amend the BMRS, ELEXON Portal and to implement the changes to the IDD documentation.

## BSC Party & Party Agent impacts and costs

### Participant impacts

Market participants can currently access Interconnector data at 5-minute intervals through TIBCO/Data Push/APIs to provide early indication of a trip on specific Interconnectors. Whilst the proposed solution will not make data available in a similar visual manner as present, it will be available to market participants in equivalent timescales through the proposed solution as detailed in section two of this paper. We note that market participants may need to amend systems to access the disaggregated Interconnector data via a new API.

One market participant that responded to the CP consultation confirmed they are not impacted by the solution to CP1516, whilst the other highlighted an impact as the published data relates to power flows over their interconnector. The market participant that noted impact requested that the final solution be implemented at the earliest opportunity, as outlined in section 6 of this paper.


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| BSC Party & Party Agent Impacts | |
|---|---|
| BSC Party/Party Agent | Impact |
| BMRS Users | Market Participants consuming the data from BMRS will need to be aware of the addition of the new Interconnectors, and may need to create new APIs if they wish to pull the disaggregated Interconnector data from the new BMRS webpage. |

| National Electricity Transmission System Operator (NETSO) Impacts |
|---|
| The NETSO has indicated though Impact Assessment its configuration costs to add the Eleclink and IFA2 Interconnectors to be approximately £20,000. |

## Participant costs

Neither market participant that responded to the CP1516 consultation outlined a cost that will result from the implementation of this CP.


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# 4 Implementation Approach

CP1516 is proposed for implementation on **30 November 2019** as part of an ad-hoc November 2019 BSC Release.

The first Interconnector to go-live, ElecLink, is due to go-live in the December 2019 to January 2020 period. Therefore, this CP must be implemented before this date in order that the Interconnector data can be transparently provided to market participants on the BMRS platform and ELEXON Portal.

As part of this CP Assessment Report, we additionally request that the BSC Panel approves the two new Interconnectors as BMRA Fuel Type Categories with effect from 30 November 2019 as outlined in Section two of this paper.

Both market participants that responded to the CP1516 consultation supported the Implementation Date of 30 November 2019, with one respondent noting they wish for an enduring solution to be implemented before November 2020.


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# 5 Initial Committee Views

## ISG's initial views

We presented CP1516 as a verbal update to the ISG for information on 19 February 2019 (ISG214/06).

We informed the ISG that CP1516 will follow the same progression route as CP1506 'New Interconnector fuel type', meaning it will be presented to the BSC Panel for final decision on 11 July 2019 following CP Consultation.

The ISG did not provide any comments or further areas for consideration before we published CP1516 for CP consultation.


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# 6 Industry Views

We published CP1516 for industry consultation over the period 17 May 2019 to 13 June 2019, to which we received two responses.

This section summarises the responses received to the CP Consultation. You can find the full responses in Attachment C.

Summary of CP1516 CP Consultation Responses

| Question | Yes | No | Neutral/ No Comment | Other |
|---|---|---|---|---|
| Do you agree with the CP1516 proposed solution? | 2 | 0 | 0 | 0 |
| Do you agree that the draft redlining delivers the intent of CP1516? | 2 | 0 | 0 | 0 |
| Will CP1516 impact your organisation? | 1 | 1 | 0 | 0 |
| Will your organisation incur any costs in implementing CP1516? | 0 | 2 | 0 | 0 |
| Do you agree with the proposed implementation approach for CP1516? | 2 | 0 | 0 | 0 |
| Do you have any further comments on CP1516? | 0 | 2 | - | - |

One market participant acknowledged that the solution to be delivered under this CP1516 is interim, and is likely to be in place until at least November 2020, or until further Interconnectors require adding to the BMRS. Whilst supportive of the approach ELEXON is taking to ensure market participants have full access to the disaggregated data, albeit on a separate webpage, the respondent wishes for the enduring solution to be delivered earlier than November 2020.

The interim solution to be delivered under CP1516 will ensure data is available for market participants to inform trading decisions and market dynamics through API in the same frequency as currently published on the BMRS. We appreciate that market participants wish to access the data via existing BMRS content e.g. graphs, tables and XML / CSV downloads, along with API, Data Push services and TIBCO services. However, we acknowledge that further changes to the BMRS to deliver the enduring solution, in addition to adding future Interconnectors, will result in further costs passed through to market participants.

We are assessing whether there are more cost efficient means of amending the BMRS to enable the addition of future Interconnectors and subsequent publication of their data. Subject to this assessment, we may be able to deliver the enduring CP1516 solution at a date earlier than the addition of the next Interconnector. We will provide an update to the BSC Panel at its meeting in October 2019.


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# 7 Recommendations

We invite you to:

- **APPROVE** the proposed changes to the NETA Interface Definition and Design: Part 1 - Interfaces with BSC Parties and their Agents for CP1516; and
- **APPROVE** CP1516 for implementation on 30 November 2019 as part of an ad-hoc BSC Release; and
- **APPROVE** the ElecLink and IFA2 Interconnectors as Fuel Type Categories under paragraph 6.1.18 (l) of section Q of the BSC effective from 30 November 2019.


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# Appendix 1: Glossary & References

## Acronyms

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

| Acronyms | |
|---|---|
| Acronym | Definition |
| API | Application Programming Interfaces |
| BM | Balancing Mechanism |
| BMRA | Balancing Mechanism Reporting Agent |
| BMRS | Balancing Mechanism Reporting Service |
| BSC | Balancing and Settlement Code |
| CP | Change Proposal |
| CPC | Change Proposal Circular |
| ESO | Electricity System Operator |
| GB | Great Britain |
| HVDC | High-Voltage Direct Current |
| IDD | Interface Definition and Design |
| IFA | Interconnexion France – Angleterre |
| IFA2 | Interconnexion France – Angleterre 2 |
| ISG | Imbalance Settlement Group |
| MW | Megawatt |
| NETA | New Electricity Trading Arrangements |
| NETSO | National Electricity Transmission System Operator |
| NG | National Grid |
| NGESO | National Grid Electricity System Operator |


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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 |
| 2 | Interconnector Definition | https://www.elexon.co.uk/about/interconnectors/ |
| 2 | ELEXON Portal | https://www.elexonportal.co.uk/ |
| 2 | Balancing Mechanism Reporting Service | https://www.bmreports.com/bmrs/ |
| 2 | BSC Section V 'Reporting' | https://www.elexon.co.uk/the-bsc/bsc-section-v-reporting/ |
| 2 | BSC Section Q 'Balancing Services Activities | https://www.elexon.co.uk/the-bsc/bsc-section-q-balancing-services-activities/ |
| 2 | NETA Interface Definition and Design (IDD) Part 1 Documentation | https://www.elexon.co.uk/csd/neta-programme-interface-definition-and-design-part-1-interfaces-with-bsc-parties-and-their-agents/ |
| 2 | NETA Interface Definition and Design (IDD) Part 1 Spreadsheet | https://www.elexon.co.uk/csd/interface-definition-and-design-part-1-interfaces-with-bsc-parties-and-their-agents/ |
| 3 | P244: 'Provision of BritNed flow data to the BMRS' | https://www.elexon.co.uk/mod-proposal/p244-provision-of-britned-flow-data-to-the-bmrs/ |
| 3 | Panel Meeting 194 | https://www.elexon.co.uk/meeting/bsc-panel-194/ |
| 3 | Panel Meeting 280 | https://www.elexon.co.uk/meeting/bsc-panel-meeting-280/ |
| 4 | CP1367: 'Reporting Data relating to the East-West Interconnector on the BMRS' | https://www.elexon.co.uk/change-proposal/cp1367-reporting-data-relating-to-the-east-west-interconnector-on-the-bmrs/ |
| 5 | P344 'Project TERRE implementation into GB market arrangements' | https://www.elexon.co.uk/mod-proposal/p344/ |
| 5 | P384 'The publication of European Electricity Balancing Guideline (EB GL) balancing data by BMRS | https://www.elexon.co.uk/mod-proposal/p384/ |
| 6,9 | CP1506: New Interconnector Fuel Type' | https://www.elexon.co.uk/change-proposal/cp1506-new-interconnector-fuel-type/ |
| 9 | ISG Meeting 214 | https://www.elexon.co.uk/meeting/isg214/ |


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