

PUBLIC

BSC Systems Roadmap

Companion document to Roadmap
Diagram v4.0

Design Authority
V2.0
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BSC SYSTEMS ROADMAP

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BSC SYSTEMS ROADMAP

1. INTRODUCTION

1.1 BSC Systems Roadmap

The [BSC Systems Roadmap](#) provides a view of market and regulatory changes that impact the Balancing and Settlement Code (BSC) Systems over the next five years. It presents ELEXON's best view of the likely timing and impact of major industry/regulatory developments, alongside approved or prospective BSC Changes¹. It also shows changes arising from ELEXON's management of the BSC service, such as planned improvements and major technology upgrades.

We use the roadmap in our business planning to ensure we deliver an efficient/effective service, in particular the BSC Change service. It helps us to plan ahead for delivery of change and the content of BSC Releases, and also to recognise when a particular area of settlement is affected by multiple changes. We review and update the roadmap quarterly, and brief the BSC Panel and Panel committees on key changes or actions. The roadmap is organised into three main business areas: Europe, Smarter Markets (shortened as 'Smart' in the roadmap), and Competition and Markets Authority (CMA), Governance and BSC Change.

All market and industry changes which are known to us are represented in the top band (labelled according to the business areas) of the roadmap. The middle band expands on the impact of the business changes on the different functions of the BSC systems and processes. The bottom band shows other changes which ELEXON needs to address in its management of the BSC Systems and its service providers.

All market and industry changes (identified in the top band) and specific impacts on the BSC systems (identified in the middle band) are referenced by a letter (e.g. 'A') or a number (e.g. '1'). These references are used to map the relationship between various market and industry changes and their impacts on the BSC Systems.

1.2 Purpose of this Document

This document is an accompanying guide to the current version of the BSC Systems Roadmap (v4.0, published October 2016). It elaborates further on the changes driven by the European Union, Ofgem's Smarter Markets programme, the CMA review, and other change initiatives that may significantly affect BSC systems and processes. It mainly covers the items that are referenced by a letter or number in the top and middle bands of the roadmap. It does not cover the milestones (e.g. those referenced by a diamond-shaped symbol) in the roadmap. Neither does it cover the changes to ELEXON's systems platforms and service contacts, which are plotted in the bottom band of the roadmap.

1.3 Structure of this Document

For ease of reference, the first section of this document highlights the changes made to the previous version of the IS Roadmap. The remainder of the document presents current understanding of the factors driving changes to the central BSC systems and processes. These change drivers are organised into the three main business areas: Europe, Smarter Markets, and CMA, Governance and BSC Change. In each of these sections, we set out a list of market and industry changes associated with those business areas, the outcomes that these require, and the expected date required. We also assess their impacts on the functions of the BSC systems and processes, comprising of: Registration and Market Entry, Contract Volume, Central Data Collection, Metering, Supplier Volume Allocation, Settlement of Imbalances and of Balancing Mechanism (BM) Trades, Invoicing and Billing, and Reporting and Data.

¹ For more information on BSC changes see the ELEXON website, [BSC Change](#)

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1.4 Next Version: Potential changes

This version does not include any changes arising from the October 2016 draft of the Guideline on Electricity Balancing (GL EB), which, at the time of writing, has just been received. We expect the next version of the Roadmap diagram (and this accompanying document) to reflect the latest electricity balancing guideline document and developments in the European energy market legislation.

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2. UPDATES TO PREVIOUS VERSION

This section lists the changes made in the BSC Systems Roadmap v4.0 compared to v3.0. There is a glossary at the end of this document.

2.1 Europe

- Milestone for UK leaving the EU moved to Q2 2019, with up to 3 months' leeway either side.
- Target date for harmonising imbalance settlement arrangements is now mid-2020. [Was mid-2019]
- Earlier target date for some changes to imbalance price calculations now removed, as the UK is expected to seek a derogation for the GB market to implement these changes with other harmonisation provisions, in 2020. [Was in Q1 2018]
- Assignment/delegation of ELEXON as settlement administrator is now expected Q2 2018. [Was Q2 2017]
- Harmonising on a shorter ISP duration is now shown as a longer term requirement (2023 onwards) as we now believe that member states will be allowed more time for transition. [Was shown in 2019]
- Description of TERRE impacts updated to include registering TERRE providers who are not BM participants. [New impact]
- For other balancing reserve markets, dropped the separate target date for regional markets. Now show a single target date for Europe-wide implementation, in Q2 2021. [Was Q3 2022]
- Updated milestones for impact of the Emergency and Restoration Network Code, target date now estimated as Q2 2019. [Was Q1 2018]
- Dropped the potential impacts of the Capacity Allocation and Congestion Management (CACM) Guideline on BM gate closure and imbalance pricing.

2.2 Smart

- DCC go-live delayed to Q4 2016, as confirmed in news reports in August.
- Milestones for Ofgem's planned consultation on mandatory HH settlement and call for evidence on demand-side participation both moved to Q4 2016, but timing of impacts unchanged. [Was Q2 2016]
- Item T Addressing evolving settlement risks now renamed as PAF Review, and shown in next section.

2.3 CMA, Governance and BSC Change

- Panel review of market entry and qualification (item V) now merged with PAF review (item T).
- BSC pipeline of Modifications and Releases updated to include P339. Note that Mods and CPs are only included on the diagram if they relate to a major market change or have a significant systems impact.
- Dropped potential CP1460-style change to include SBR actions in imbalance prices, as SBR will no longer be used. [Was in Q4 2017]

2.4 Supporting services

- Added indicative timelines for new BSC Agent service to calculate zonal transmission loss factors.
- Updated timescales for other service support contracts.

2.5 General

- Timeframe adjusted to start mid-2016.
- Clearer distinction between BSC impacts (coloured boxes) and decision milestones (plain text).
- The Network Code on Electricity Balancing (NC EB) is now the Guideline on Electricity Balancing (GL EB).

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3. DRIVERS FOR CHANGE

3.1 Europe

3.1.1 Current Assessment

ELEXON is keeping a close eye on the direction of the European energy market. For planning purposes it is assumed that, regardless of the UK leaving the EU, Great Britain will still wish to trade in the European energy market, and will therefore be subject to EU regulations governing that market. This assumption will be kept under review.

To date the impacts of European harmonisation on ELEXON have been relatively small, but the first significant change is under way with the TERRE project. ELEXON is working with National Grid and the Modification P344 workgroup to plan how TERRE will integrate with balancing and settlement in Britain.

Harmonisation of imbalance settlement arrangements is now expected to be required by mid-2020. ELEXON currently believes that GB will not be required to harmonise on a shorter Imbalance Settlement Period (ISP) at this time, but that this requirement should be kept in mind as the longer term direction.

Similarly, provisions for reviewing the boundaries of bidding zones could affect GB in the long term, although this is believed to be less likely.

3.1.2 Future Direction

The European Commission's energy market policy is driving towards the eventual aim of having a single European electricity market with a single European Transmission System Operator body and a single European Regulator.

For as long as Britain wishes to participate in the European electricity market, we are assuming for the Roadmap that it will need to abide by the regulations, even when it leaves the EU.

And we envisage that in this future state, many aspects of the harmonised arrangements are supported by common European regulations, services and systems. For example, there are Europe-wide markets for balancing services, supported by common trading platforms.

Some aspects of balancing and settlement services are still operated locally or regionally, and the scope of these is agreed. In particular, the BSCCo's role in GB arrangements, and its interfaces with European services, are clearly defined.

3.1.3 Changes and Impacts

Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
D	TERRE advance implementation goes live	Q3 2018	<p>Project Trans-European Replacement Reserves Exchange (TERRE) is an advance implementation project that forms part of the implementation of the European Guideline on Electricity Balancing.</p> <p>TERRE aims to harmonise the Transmission System Operator (TSO) dispatch of Replacement Reserve (RR) across seven TSO areas. It will do this by introducing common TERRE Products,</p>	<p>Registration and Market Entry: Subject to the TERRE BSC modification (P344), settlement of TERRE accepted products for non-BMU providers may need to be done.</p> <p>Settlement of Imbalances and of BM Trades: TERRE Products will be used by the TSO, as part of GB balancing, and settled by ELEXON. TERRE volumes and prices feed into BSC calculations of imbalance prices and volumes.</p> <p>Invoicing and Billing: TERRE Products will be priced and settled in Pounds or in Euros (to be</p>

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Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
			which would be akin to products such as Balancing and Settlement Code Bid-Offers or Short Term Operating Reserve submissions.	considered as part of mod P344). Reporting and Data: Receipt of data relating to trading in TERRE Products, and reporting on BMRS.
E	Early imbalance price change for NC EB rules	Q2 2020	<p>There are rules that will require changes to the BSC calculations of Imbalance Price which may be required by early 2018 (depending on the final text of the Guideline on Electricity Balancing):</p> <ul style="list-style-type: none"> • System Buy Price has to be greater than a threshold; • System Sell Price has to be less than a threshold; and • The thresholds have to be calculated for each settlement period. 	<p>Settlement of Imbalances and of BM Trades: Changes to imbalance price calculations and tagging of data from National Grid.</p> <p>GB is expected to seek a derogation so that these changes can be implemented at the same time as item K.</p>
H	Changes to bidding zones in GB	2023 or later	<p>A bidding zone is the largest geographical area within which market participants are able to exchange energy without capacity allocation. The CACM requirement (on ACER) to review bidding zones may lead to a split of GB into two or more zones.</p> <p>However we believe it is unlikely this will occur within the next few years.</p>	<p>Registration and Market Entry: When registering a new BMU, there may be a need to identify the bidding zone it belongs to.</p> <p>Central Data Collection: Metered data may need to be aggregated within each zone.</p> <p>Supplier Volume Allocation: Multiple bidding zones – volumes need to fall within a zone.</p> <p>Settlement of Imbalances and of BM Trades: There could be a need to calculate imbalance prices for each bidding zone separately.</p> <p>Invoicing and Billing: BSC trading charges could be invoiced by bidding zone.</p> <p>Reporting and Data: There may be structural changes to data to reflect new concepts (e.g. at bidding zone granularity).</p>
I	Harmonised suspension and restoration	Q2 2019	<p>The BSC contains rules for the suspension and restoration of Balancing Mechanism and imbalance settlement processes in GB. These apply where there is a total shutdown of the GB transmission system or where there is a partial shutdown above a certain pre-defined threshold. As well as notifying BSC Parties of the shutdown and</p>	<p>Settlement of Imbalances and of BM Trades: The NC ER will affect Section G of the BSC, which governs Market Suspension and Restoration. The rules in Section G would need to align to the provisions in the NC ER. Depending on how closely TSO proposals for GB match the current BSC arrangements, there may be some changes to settlement calculations.</p>

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Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
			<p>restoration, these provisions include calculating and applying a single imbalance price during the shutdown.</p> <p>Under the Network Code on Emergency and Restoration (NC ER), TSOs are responsible for proposing the arrangements. We expect that the GB rules will closely follow the current BSC.</p>	<p>Reporting and Data: There may be changes to how suspension and restoration events are reported to Parties.</p>
K	Harmonised balancing and imbalance pricing	Q2 2020	Imbalance Settlement (price, volume calculations, etc.) must be harmonised across Europe.	<p>Contract Volume: Contract volume data is currently used in BSC calculations to derive the energy imbalance volumes of BSC Parties. However, this could be replaced by others forms of data (e.g. Final Physical Notifications).</p> <p>Settlement of Imbalances and of BM Trades: BSC Parties may be exposed to the same set of imbalance prices as their European counterparts.</p> <p>Reporting and Data: There could be changes to the way indicative imbalance prices are reported on BMRS.</p>
L	Harmonised settlement period < 30 minutes	2023 or later	We do not expect harmonisation of ISP duration across Europe to be required by 2020. However, we do believe that the longer term goal is likely to be harmonising on a 15-minute ISP.	<p>Contract Volume: Energy may no longer be traded on a half hourly basis, but according to the length of the harmonised ISP.</p> <p>Central Data Collection: The aggregated data that would be sent to BSC Central Systems would reflect new ISP length.</p> <p>Metering: Current HH metering needs to align to required ISP (or revert to profiling or another estimation technique). All meters, both CVA and SVA, are configured to record meter readings based on the new ISP length.</p> <p>ELEXON may offer support for transition to new ISP metering.</p> <p>ELEXON may need to produce sample metering and profile calculation based on new ISP length.</p> <p>Supplier Volume Allocation: Current HH metering needs to align to required ISP (or revert to profiling or another estimation technique). Profile coefficients need to be determined at intervals to match the new ISP.</p> <p>Settlement of Imbalances and of BM Trades: Bids and offers would be submitted and energy</p>

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Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
				<p>imbalances will be settled at intervals reflecting the length of the new ISP.</p> <p>Reporting and Data: Settlement data would be based on and reported at the new ISP granularity.</p>
N	Dropped: Regional mFRR and aFRR markets go live	Was Q3 2020	We no longer expect separate regional implementations of these markets.	
P	European RR, mFRR & aFRR markets go live	Q2 2021	Deadline for TSOs to phase in their participation in cross-European markets for manual and automatic frequency restoration reserve common products.	<p>Settlement of Imbalances and of BM Trades: Further adjustments to settlement for European markets.</p> <p>Reporting and Data: Further adjustments to reporting for European markets.</p>
Q	Dropped: Reduced gate closure (CACM)	Was Q1 2018	We no longer expect CACM provisions for the Intraday market to directly affect BM Gate Closure.	
R	Dropped: Knock-on effect of DA/ID price caps (CACM)	Was Q3 2018	We no longer expect that CACM's provisions for day-ahead (DA) and intra-day (ID) trading will have an impact on imbalance pricing.	

3.2 Smarter Markets

3.2.1 Current Assessment

The rollout of Smart Meters into 2020 will lay the foundations for the incremental migration to Smarter Markets. Existing goals, such as Change of Supplier and extending HH settlement, will fit within this timetable. The nature of settlement risks will evolve, and the BSC Panel is considering how performance assurance arrangements need to change accordingly. Longer term initiatives such as Electricity Settlement Reform and Demand Side Flexibility will develop alongside this work, and draw on the evolving discussions around Smart Grids, which in turn might be expected to come to fruition around from the mid 2020s onwards.

3.2.2 Future Direction

Virtually all consumers and businesses have smart meters, and settlement data is based on actual consumption. There are new options for balancing energy demand, and demand-side response is more flexible. ELEXON's role in a more efficient, innovative Smarter Market is clearly understood.

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3.2.3 Changes and Impacts

Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
A	Planned DCC go-live	Q4 2016	The Data Communications Company (DCC) is tasked with connecting smart meters to the business systems of energy suppliers, network operators and other authorised service users of the network.	No direct impact itself, however it impacts timetable for uptake of smart meters, and therefore how rapidly we need to evolve the half hourly settlement service.
M	Faster switching and centralised registration	Q2 2019	Registration services are currently provided separately by gas and electricity networks, and the switching rules are significantly different in both markets. This change would harmonise registration services, simplify the switching arrangements and provide a common platform for reliable and fast switching for all customers.	Registration and Market Entry: centralised registration will affect the industry processes outside of settlement, however we will continue to receive the data from the Data Aggregators as we do now, and therefore it is not expected to impact on settlement systems or processes.
O	Centralisation of DC & DA	Q1 2021	DC and DA functions are at the heart of the settlement process as they prepare the necessary data for settlement. At present, suppliers appoint Supplier Agents of their choice to carry out these functions. However, these functions could be carried out by a new central agent.	Registration and Market Entry: Changes to Supplier registration process for new central DP and DA function. Supplier Volume Allocation: Single instance of NHHDA and EAC/AA processing. EAC/AA function may have to be consolidated into either DC or DA to deliver central aggregation.
S	BSC support for mandatory HH settlement	Q2 2018	By the first half of 2018, Ofgem would take a final decision on whether to move towards mandatory HH settlement for all consumers. ELEXON's support would be needed for Ofgem's work on HH settlement.	Supplier Volume Allocation: Moving to mandatory HH settlement involves significant systems changes for suppliers, supplier agents and central systems. It is also likely to require changes to a number of industry rules.
X	Smart meter rollout complete	Q4 2020	By the end of 2020, around 53 million smart meters (for both gas and electricity) will be fitted in over 30 million premises (households and businesses) across Wales, Scotland and England.	Supplier Volume Allocation: The eventual rollout of smart metering will enable a greater use of HH metered data in the determination of supplier volumes, and a reduction in the profiling of NHH volumes. Over time this will require ELEXON and Parties to review the approach to profiling, profile classes, profile sampling and so on. Once the majority of consumers have Smart Meters, the role of profiling will be very limited, and a major overhaul of the BSC provisions for Supplier Volume Allocation will be warranted.

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3.3 CMA, Governance and BSC Change

3.3.1 Current Assessment

ELEXON are monitoring the progress of the CMA review and working with industry to understand their views. The BSC Panel & Panel Committee Strategic Work Programme is in progress and includes activities to improve BSCCo Governance. Market changes are delivered through Modifications to the BSC, and the pipeline of BSC change also includes proposals for improvement raised by BSC Parties.

3.3.2 Future Direction

Code Administrators are likely to be subject to more regulatory oversight (e.g. require a licence), and may also have more powers (e.g. able to raise modifications). Code Administration is subject to competitive tendering. ELEXON is the best in class code administrator and offers a package of flexible and valuable strategic services to the Industry.

3.3.3 Changes and Impacts

Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
C	Apply zonal transmission loss factors (TLFs)	Q1 2018	CMA has recommended introducing charging for energy losses in the transmission networks on a zonal basis. The TLF used in settlement calculations is currently set to zero. However, this would vary in the future to allow for the allocation of losses depending on the geographical location (TLF Zone) of the BM Unit. A modification (P350) has now been raised.	<p>Registration and Market Entry: Each year, zonal transmission loss factors will need to be loaded into the settlement systems for use in calculations. Based on previous modification proposals, the volume of data would be four loss factors (one per season) for each of the 14 GSP Groups.</p> <p>Central Data Collection: A new BSC Agent will be needed to calculate the zonal transmission loss factors using a load flow model. CDCA will need to provide the new Agent with information about historical transmission flows, as an input to the model.</p> <p>Settlement of Imbalances and of BM Trades: Currently the value of the TLF parameter used in settlement calculations is set to zero, so it has no effect in practice. However, a TLF would be calculated for each BSC Season and TLF Zone, and then applied in settlement calculations.</p>
T	PAF Review	Q2 2018	The BSC Panel would like a review of the Performance Assurance Framework to address the impacts of Smart Metering, which will change where settlement risks lie.	Reporting and Data: how performance assurance is measured and reported on is likely to change.
V	Dropped: Review of Market Entry:	Q1 2018	The BSC Panel has decided to include any changes to Market Entry and Qualification in	

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Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
	findings implemented		the PAF Review (item T).	
W	Facilitate DSR participation in balancing market	Q3 2018	<p>Changes to the BSC may be required to facilitate the participation of DSR providers and aggregators. Demand side response is a service where a provider is financially incentivised to lower or shift their electricity use at peak times. This will help manage load and voltage profiles on the electricity network. Providers of this service could be businesses or domestic consumers.</p> <p>DSR aggregators, on the other hand, combine small amounts of DSR from individual demand sites (businesses or domestic consumers) and offer them to the TSO.</p>	<p>Registration and Market Entry: There may be a requirement to record new types of BMUs for DSR providers and aggregators. This may require the creation of new BMU IDs with its own unique prefix (e.g. E_, as currently used by embedded generators) to recognise DSR providers.</p> <p>Settlement of Imbalances and of BM Trades: DSR providers of BMUs' data would be used in settlement calculations. DSR providers and suppliers may also share imbalance volumes between them.</p>
5	February 17 Release	Q1 2017	<p>P326: proposes to introduce a method to account for reductions in Supplier demand on non-Working Days within the Credit Cover calculations. This would allow the calculation to better reflect actual demand and increase the accuracy of the level of Credit Cover that Parties are required to lodge.</p>	<p>Registration and Market Entry: P326 will impact the CRA-I014 sub flow 5 'Registration Report' data flow that reports BM Unit registration data. For this variant of the flow, fields will need to be added or amended to account for the new parameters that P326 would introduce. Any participant that receives and loads these flows may need to amend their systems to account for these changes.</p> <p>Contract Volume: New parameters may be introduced to adjust suppliers' demand on non-working days. This would affect the calculation of a Supplier BM Unit's BMCAIC used within the Credit Cover Calculations.</p> <p>Supplier Volume Allocation: new Change Proposals may need to be raised to enable elective HH settlement.</p>
6	April and June 17 Releases	Q2 2017	<p>P272: will make HH Settlement mandatory for all Metering Systems within PCs 5-8 (where capable metering has been installed).</p> <p>P297: seeks to ensure that the Dynamic</p>	<p>Registration and Market Entry: P339: Allow for the new CCCs in Market Domain Data.</p> <p>Central Data Collection: P321: ELEXON may capture Trading Unit and GSP volumes</p>

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Ref.	Market & industry changes	Expected Date	Description	Impacts of change on systems & associated processes
			<p>Data Set published on the BMRS fully corresponds to the revised Dynamic Data Set as submitted to the Transmission Company by BSC Parties.</p> <p>P320: proposes that the required changes to PARMS and Supplier Charges that were introduced by P272 should be removed. Instead, a Committee report should be introduced to monitor the implementation of P272.</p> <p>P321: proposes to publish information on the direction of delivery (delivering or offtaking) of Trading Units, particularly for each Grid Supply Point (GSP) Group, in each ISP.</p> <p>P329: proposes to align the BSC and Balancing Mechanism Reporting Service (BMRS) with the Regulation on Wholesale Energy Markets Integrity and Transparency (REMIT) common schemas for inside information web feeds, required by the Agency for the Cooperation of Energy Regulators (ACER).</p> <p>P339: proposes to create new Consumption Component Classes (CCCs) for Aggregated HH Export. This will allow aggregated HH export data to enter Settlement for smaller customers.</p>	<p>for reporting purposes.</p> <p>Supplier Volume Allocation: P272: actual HH consumption data will be used to settle consumers who used to be in PC 5-8.</p> <p>P321: ELEXON may capture Trading Unit and GSP volumes for reporting.</p> <p>P339: Allow for the new CCCs and process them correctly.</p> <p>Settlement of Imbalances and of BM Trades: P321: trading Unit and GSP volumes data may be passed on to BMRS.</p> <p>Reporting and Data: P329: ACER has set out its expectation for standardised web feeds within its REMIT Manual of Procedures on data reporting v3.0 along with the Extensible Markup Language (XML) Schema Definitions (XSDs) for the collection of REMIT inside information data from REMIT platforms. The BMRS is expected to expose a web feed which complies with the Manual of Procedures for collection of data by ACER.</p> <p>P297: BMRS and SAA systems will need to be modified to receive and publish the new and revised Dynamic Data from the TSO.</p> <p>P321: BMRS would be required to publish Trading Unit Delivery Modes and Export and Import Volumes on BMRS.</p>
7	November 17 Release	Q4 2017	<p>P336: proposes to add 'biomass' as a specific fuel type category reported on the Balancing Mechanism Reporting Service (BMRS). It also seeks to allow the Panel to approve further fuel types without needing to raise a Modification.</p>	<p>Reporting and Data: P336: 'Biomass' will be added to the list of generation fuel types reported on BMRS.</p>

GLOSSARY

The following list explains abbreviations and specialised terms used on the roadmap diagram. Note that the list does not include any terms or abbreviations which are already defined in the BSC Glossary.

aFRR	Automatic FRR, that is, a frequency restoration reserve service that is activated automatically.
CACM	The legally binding European guideline on capacity allocation and congestion management, one of a number of codes and legally-binding guidelines which will govern the harmonised electricity market in Europe. It came into force in August 2015.
CBA	Cost-benefit analysis.
CCC	Consumption Component Class, a way of categorising different types of electricity consumption to ensure they are treated correctly in the Supplier Volume Allocation process.
CMA	Competition and Markets Authority.
DA/ID	Day-ahead or intra-day markets, in relation to energy trading.
DSR	Demand-side response.
ENTSO-E	The European network for transmission system operators for electricity, the legally mandated body of electricity TSOs at the European level.
FRR	Frequency restoration reserve, a type of balancing service which is designed to help a TSO maintain the system frequency within tolerances.
GL EB	The European guideline on electricity balancing, one of a number of codes which will govern the harmonised electricity market in Europe. Formerly known as the NC EB.
ISP	Imbalance settlement period, the term used in European network codes for the time period in which balancing services are traded. Across Europe it varies from 15 minutes to 1 hour.
mFRR	Manual FRR, that is, a frequency restoration reserve service that is activated manually.
NC EB	The European network code on electricity balancing, one of a number of codes which will govern the harmonised electricity market in Europe. Now known as the GL EB.
NC ER	The European network code on emergency and restoration procedures, one of a number of codes which will govern the harmonised electricity market in Europe.
PAF	The Performance Assurance Framework, a set of assurance techniques used to address settlement risks.
REMIT	An EU regulation on energy market integrity and transparency. REMIT imposes obligations on energy companies to report inside information (e.g. about plant outages) in the interests of market transparency. In Britain the information is routed via the BMRS system.
RR	Replacement reserve, a type of balancing service that energy companies can offer a TSO.
SBR	Supplemental balancing reserve, a type of balancing service that National Grid may call on.
TERRE	Trans-European replacement reserve exchange, an early project in the harmonisation of balancing arrangements across Europe. It is a joint project among several European TSOs to establish a common market (and supporting IT platform) for trading in RR services.
TSO	Transmission system operator.