

277/06 - PRELIMINARY TERRE (P344) IMPLEMENTATION IN ADVANCE OF OFGEM DECISION

MEETING NAME BSC Panel Meeting

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Purpose of paper Decision

Classification Public

Summary To meet the P344 TERRE legal deadline of 18 December 2019 and align with current European Central TERRE and National Grid delivery schedules, ELEXON's view (based on its service provider's assessment) is that work on the changes needs to commence in April 2018. This is before Ofgem's expected decision on P344, which is due by 31 July 2018. The cost of such work from April to the end of July is estimated at £1.1m. Whilst there is a risk that Ofgem declines to approve the P344 solution in July and by commencing work this cost, or at least some of it, proves nugatory, the BSC Panel is invited to support the commencement of design and development activities in April 2018 and associated cost.

1. Introduction

- 1.1 TERRE (Trans European Replacement Reserves Exchange) is a balancing product implementation project currently involving National Grid and a number of other European Transmission System Operators (TSOs). It will fulfil incoming European legal requirements on TSOs, outlined in the European Electricity Balancing Guideline (EB GL). The EB GL requires TSOs that use Replacement Reserve (RR) energy balancing products (balancing energy products with a >15 minute lead time) to implement and make operational a new European platform for the exchange of energy.
- 1.2 The EB GL entered into force (became law) on 18 December 2017. National Grid will have to ensure compliance by the legal backstop date, expected to be 18 December 2019.
- 1.3 The go-live window for the TERRE product as defined by the European Central TERRE Project team is expected to commence in October 2019, with the GB market joining in advance of the legal backstop date of December 2019.
- 1.4 According to the Modification proposal, compliance with the EB GL is necessary to ensure that GB doesn't risk infraction proceedings and the potential for non-compliance fines to be levied against GB market participants.
- 1.5 The TERRE product will enable all TERRE participating Balancing Service Providers (BSPs) to submit bids (upwards or downwards) to their national TSO (i.e. National Grid for BSPs in GB) on an hourly basis to fulfil 15 minute delivery periods. The TSO will forward these Bids to a central platform (LIBRA) which will process them to determine the most efficient method of meeting the RR requirements specified by European TSOs. Acceptances and associated delivery instructions will be passed back to the BSP via the national TSO.
- 1.6 [P344 'Project TERRE implementation into GB market arrangements'](#) seeks to implement the Settlement (TSO-BSP) solution of the TERRE balancing product within the GB electricity market arrangements (TSO-TSO settlement is outside the BSC arrangements). It will facilitate payments between National Grid and GB BSPs for acceptances/instructions issued to GB BSPs. Payments to BSPs will be subject to validation of delivered

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volumes against metered data (with any non-delivery subject to imbalance charges and potentially additional Non-Delivery Charges).

- 1.7 The P344 solution will allow customers and independent aggregators to participate in the TERRE balancing product (using embedded generation or demand side response (DSR) to deliver RR, independently of their electricity supplier). The BSC changes for P344 will also remove BSC barriers to customers and independent aggregators participating directly in the existing Balancing Mechanism (BM), although there may be other restrictions outside the BSC (e.g. in the Grid Code).
- 1.8 The implementation of the TERRE product, by providing new opportunities for GB market participants and a new product for National Grid utilisation as part of its balancing regime, significantly impacts the BSC arrangements.

2. Implementation Timetable

- 2.1 The following dates were provided by the Central TERRE Project team at the TERRE stakeholder workshop, held in Brussels on 19 March 2018:
 - 5 August 2019 - Central TERRE parallel run across Europe starts
 - 27 September 2019 - Central TERRE parallel run ends
 - 1 October 2019 - Central TERRE go live window starts for TSOs
 - 18 December 2019 - TERRE legal deadline for go live
- 2.2 The TERRE parallel run is expected to be a full TSO wide end-to-end test, providing full test coverage, except for the physical dispatch of RR services or physical monetary transfers. Ofgem wishes for the GB market to participate in the Central TERRE parallel run in advance of go-live and National Grid intends to do so.
- 2.3 Qualification criteria for joining the Central TERRE parallel run have not yet been published. However, it is expected that ELEXON and National Grid must have demonstrated successful system integration testing before participating. Similarly, the full requirements for the parallel running phase have not been defined and we are waiting for further detail from the Central TERRE Project.
- 2.4 To allow new market participants an appropriate timeframe to complete BSC Accession and associated Registration tasks in advance of TERRE product go-live, we are proposing an Implementation Date of the February 2019 BSC Release.
- 2.5 Market entry processes typically complete within 3-9 months depending on the responsiveness of the participant. Documentation changes and systems relating to market entry and BM Unit registration will need to be successfully tested and deployed in order that the GB market can realise the widespread benefits from the TERRE product at the earliest opportunity.
- 2.6 National Grid believes it is unlikely that TERRE Balancing Service Providers will be mandated to participate in the Central TERRE parallel run but will be strongly encouraged to do so. ELEXON is keen to enable new market participants to join if desired.
- 2.7 In light of the above, ELEXON believes that design and development work needs to commence in April 2018 to meet the European Central TERRE timetable and proposed implementation date. This is supported by the impact assessment performed by CGI, ELEXON's service provider responsible for development and operation of BSC Central Systems.
- 2.8 However, the final Ofgem decision on the Modification is not expected before the end of July 2018 following submission of the P344 Final Report to the BSC Panel on 14 June 2018.

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3. Ofgem Provisional Thinking

- 3.1 Recognising the tight deadline to implement the TERRE solution for Settlement, a clear and unambiguous view was sought from Ofgem that the principles at the heart of the proposed solution were aligned with, or at least do not conflict with, Ofgem's vision of how the market will operate post-TERRE implementation.
- 3.2 This was requested by the BSC Panel, through its Chair, seeking Ofgem's provisional thinking on the P344 solution in line with BSC Section F 'Change Management' paragraph 2.6.10(a) on 15 February 2018. A response was requested by 5pm Tuesday 3 April 2018 in order that the relevant documentation could be prepared in advance of the April 2018 Panel meeting
- 3.3 On Tuesday 3 April 2018, Ofgem informed ELEXON that it would be unable to meet the deadline to provide its provisional thinking response and indicated this would be provided by Friday 6 April. Assuming it is received we will update the BSC Panel meeting on 12 April 2018.

4. Delivery Approach

- 4.1 The Panel will recall that in 2017/18 we developed a new Architecture Strategy that addresses the challenges of delivering the number and scale of BSC Change to our current BSC Central Systems and associated processes. While our change delivery performance is considered to be good and improving, our assessment concluded that in order to maintain this into the future, we will have to consider investment in our systems.
- 4.2 ELEXON has mobilised a programme (Foundation Programme), which aims to deliver a stable, more dynamic and flexible platform to more efficiently deliver future market change. It introduces new ways of working and ultimately puts ELEXON in a strong position to continue to successfully meet our customers' needs and deliver change within a dynamic, evolving market environment.
- 4.3 It is a multi-year programme aligned with required industry modifications such as P344 to minimise costs to parties. The first Release will re-architect the Central Registration Agent (CRA), Settlement Administration Agent (SAA) and Supplier Volume Allocation Agent (SVAA) with proposed delivery for the February 2019 BSC Release.

5. Finance

- 5.1 The table below sets out the estimated total implementation costs for the required changes to BSC Central Systems and the ELEXON costs for managing those changes, together with the amount at risk ahead of Ofgem's P344 decision in July. No contingency has been applied to these figures as these are estimates.

	External Costs (£)	Internal Costs (£)
Total TERRE Cost Estimate	3M	148k
April - July 2018 TERRE Cost Estimate (included in above total)	1,1M	32k

- 5.2 Provision for the external costs was already included in the Demand Led budget in the ELEXON Business Plan 2018/19.

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- 5.3 ELEXON intends to appoint Delivery and Independent Assurance Partners to support outward management and to widen ELEXON capability, resource and expertise. These costs are included in the external costs alongside software licensing and dedicated contract staff costs.
- 5.4 In addition to detailed design and development work for BSC Central Systems, activities associated with April - July 2018 costs include service provider mobilisation and setup of test and development environments with associated licenses.
- 5.5 ELEXON continues to challenge services providers on costs to identify areas where they can be avoided or reduced.
- 5.6 As normal, internal costs are covered in the Operational budget and business-as-usual processes for Design & Delivery, Professional Services and Electricity Market Reform to implement this change are not included.

6. Risk & Mitigation

- 6.1 In deciding whether to approve the commencement of work ahead of Ofgem's P344 decision, the Panel should be aware of the following:
- 6.2 Provisions for any delay to the Ofgem decision will be included in agreements with our service providers where considered appropriate. Where feasible, the initial four months development activities will be focussed on areas where ELEXON believes the solution is unlikely to change in the event that Ofgem sends back or rejects the solution.
- 6.3 If design and development work were not to commence in April 2018, there would be a number of associated risks and dis-benefits to industry, as it is unlikely that delivery timescales could be shortened at a later stage even through an increase in resource allocation (and in turn cost):
- A reduction in quality (in order to meet challenging timescales) could lead to failure to deliver a fully functioning solution, impacting the benefit to the GB market
 - The potential for non-compliance with European law, should the GB platform not be operational by the legal backstop date in December 2019
 - GB market participants being unable to participate in the TERRE product from the earliest opportunity and hence losing market knowledge in terms of competition and its associated benefits
 - GB balancing efficiencies in the region of 13m Euros per year would not be achieved for the duration that the product is not available to the market
 - GB market participants being unable to realise financial benefits as a result of wider market access delivered through P344, such as access to the Balancing Mechanism
- 6.4 There is precedent for deciding to commence activities ahead of an Ofgem Modification approval: ELEXON correctly identified the need to commence procurement activities ahead of the Ofgem decision for P350 (Introduction of a seasonal Zonal Transmission Losses scheme) to ensure successful delivery by 1 April 2018 and the Panel agreed.
- 6.5 The Panel might wish to consider the likelihood of Ofgem not approving the P344 solution. A preliminary view from Ofgem would clearly be beneficial but it is recognised that compliance with the EB GL is required and in the time available there is limited scope for devising an amended solution.

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7. Next Steps

- 7.1 Should the BSC Panel approve commencement of design and development work for P344 in April 2018, we will instruct our service provider responsible for developing the BSC Central Systems to commence the required work once commercial and contractual terms have been agreed.
- 7.2 Subject to National Grid providing justification to its TERRE development costs as requested by the P344 Workgroup, we will present the P344 Assessment Report to the BSC Panel at its meeting in May 2018.

8. Recommendations

- 8.1 Having considered the benefits, risks and internal effort required, the programme team's recommendation is to progress with the TERRE Implementation in advance of the Ofgem decision.
- 8.2 We invite you to:
 - a) **APPROVE** commencement of design and development work for P344 in April 2018 and the associated spend ahead of an Ofgem decision to approve P344.

For more information, please contact:

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