

CP Progression Paper

Upgrade of NHHDA and EAC/AA systems from Oracle 12c to version 19.21

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About This Document

You can find the definitions of the terms and acronyms used in this document in the [BSC Glossary](#)¹.

This document provides information on a new Change Proposal (CP) and outlines our proposed progression timetable for this change, including when it will be issued for CP Consultation in the next suitable Change Proposal Circular (CPC) batch.

We are presenting this paper to the Supplier Volume Group (SVG) on 6 February 2024 to capture any comments or questions from Committee Members on this CP before we issue it for consultation.

There are two parts to this document:

- This is the main document. It provides a summary of the solution, impacts, anticipated costs, and proposed implementation approach, as well as our proposed progression approach for this CP.
- Attachment A contains the CP proposal form.



Committee

Supplier Volume Group (SVG)



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¹ <https://www.elxon.co.uk/glossary/?show=all>



Not sure where to start?

We suggest reading the following sections:

- Have 5 minutes?
Read section 1
- Have 15 minutes?
Read sections 1, 4, 5 and 6
- Have 30 minutes?
Read all sections
- Have longer? Read
all sections and the
annexes and
attachments

Why change?

The current versions of NHHDA (Non Half Hourly Data Aggregation) and EAC/AA (Estimation of Annual Consumption/Annualised Advance) system applications that Elexon provides to Party Agents run on Oracle 12c, for which Oracle Corporation withdrew application support in 2022. It is good practice to operate on a supported version of software.

Solution

Upgrade NHHDA and EAC/AA systems to the latest available version of Oracle 19.21. Where possible, leverage cost savings by aligning with Elexon's planned update to BSC central systems.

Impacts and costs

The estimated central implementation costs for this CP will be approximately £230K.

Implementation

This CP is proposed for implementation between July - November 2024 as part of a Special BSC Release.

2. Why Change?

What is the issue?

The current versions of NHHDA and EAC/AA applications that Elexon provides to Party Agents run on Oracle 12c, for which Oracle Corporation withdrew application support in 2022. It is good practice to operate on a supported version of software as continuing with unsupported software increases the security risk to the system.

If a problem were encountered in any of the Party Agent applications as a result of an Oracle defect, and Oracle support had expired, it could only be resolved via an upgrade to a fully supported Oracle release, which could not be completed quickly.

If a workaround were possible, it is likely that it would require daily manual intervention, which could be time consuming and prone to human error, and so would only be an interim solution pending an Oracle upgrade.

Background

Elexon, via its service provider, provides Party Agents with Non Half Hourly Data Aggregation (NHHDA), Estimation of Annual Consumption/Annualised Advance (EAC/AA) and Erroneously Large EACAA Reporting Tool (ELERT) applications. These are known as the Party Agent applications.

Upgrading the Party Agent applications to Oracle 19 will also require Party Agents to upgrade their environments to ensure that third party components are compatible.

The previous upgrade for NHHDA and EAC/AA applications occurred in 2018 following [CP1482 - Upgrade of NHHDA and EAC/AA systems from Oracle 11g to version 12c - Elexon BSC](#), upgrading from Oracle 11g to Oracle 12c (CP1482). In September 2020, a Change Request (CR) was raised to assess a further Oracle upgrade, a decision was made at the time to remain on version 12 due to industry impact and the expected delivery of Market-wide Half Hourly Settlement (MHHS).

Following discussions with the Party Agent Group (PAG) concerning the need to upgrade Oracle from 12c to 19c, a new change request (CR14109) was raised. Following discussions with CGI, it was found that upgrades to other systems were required before this CR could be implemented; these were implemented via other CRs.

CGI issued an Impact Assessment in May 2022 for the Oracle 12c to 19c upgrade, which was reviewed by Elexon. Further clarification was sought from CGI over summer 2022, and discussions were held internally to understand associated costs with this change, and it was not progressed. The change was not progressed due to the cost and expected decommissioning with MHHS.

An NHHDA escalated the need to upgrade the Oracle software. Elexon is raising the required Change Proposal and has refreshed the Change Request/IA with CGI.

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3. Solution

Proposed solution

This CP proposes to upgrade EAC/AA and NHHDA to the latest available version of Oracle 19.21. Where possible, it leverages cost savings by aligning with Elexon's planned update to other BSC central systems.

The upgraded version of the NHHDA and EAC/AA systems will maintain compatibility with the latest fully supported Oracle Forms release for both server and client components.

Following this upgrade, this system will be decommissioned prior to Market Wide Half Hourly Settlement (MHHS).

Proposer's rationale

As the current version of Oracle is no longer supported, if problems were then encountered with the database products, they could not be resolved without recourse to an upgrade, which in turn could not be completed within a reasonable timeframe. Any proposed workaround may not resolve the issue and the only solution would be a full Oracle upgrade.

While there is a low probability of this risk occurring, it could have a significant impact on Settlement. Following discussions with the Party Agent Group (PAG), we feel it is important to begin the upgrade now to give Party Agents sufficient time to implement.

Upgrading the NHHDA and EAC/AA systems to run on Oracle 19.21 would ensure compatibility with the latest fully supported Oracle release. As a consequence, the upgrade would have a number of material benefits for both the developer and users of this software:

- 1) Maintain full vendor support service for both developer and users of the applications;
- 2) Minimise risk of being unable to take advantage of any defect fixes and other enhancements made available by the vendor;
- 3) Minimise reliance on reduced vendor support service for both developer and users; and
- 4) Minimise cost of vendor support for both developer and users.

Proposed redlining

No Category 1 Configurable Items are impacted.

4. Impacts and Costs

BSC Party & Party Agent impacts and costs

BSC Party & Party Agent Impacts	
BSC Party/Party Agent	Impact
NHHDA	Install, test and implement upgraded NHHDA software and update guidance/technical documentation
NHHDC	Install, test and implement upgraded EAC/AA and ELERT software and update guidance/technical documentation

Central impacts and costs

Elxon, via its service provider, will install, test and implement upgraded NHHDA and EACAA software, along with any required third-party software components, and deliver the upgraded software to Party Agents on the proposed BSC Systems Release Date.

Central impacts

Central Impacts	
Document Impacts	System Impacts
<ul style="list-style-type: none">NHHDA System Management GuideNHHDA Installation GuideNHHDA Technical SpecificationNHHDA Operations GuideEAC/AA System Management GuideEAC/AA Installation GuideEAC/AA Technical SpecificationEAC/AA Operations GuideELERT Installation GuideELERT Technical SpecificationELERT Operations Guide	<ul style="list-style-type: none">NHHDAEAC/AAErroneously Large EACAA Reporting Tool (ELERT)

Impact on BSC Settlement Risks

Impact on BSC Settlement Risks
None

Impact on Market-wide Half Hourly Settlement (MHHS)

Impact on MHHS
None

Central costs

The central implementation costs for this CP will be approximately £230K.

5. Implementation Approach

Recommended Implementation Date

This CP is proposed for implementation between July and November 2024 as part of a Special BSC Release.

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6. Proposed Progression

Progression timetable

The table below outlines the proposed progression plan for this CP:

Progression Timetable	
Event	Date
CP Progression Paper presented to SVG for information	06 February 2024
CP Consultation	07 February 2024 – 28 February 2024 (15 working days)
CP Assessment Report presented to Panel for decision	14 March 2024
Proposed Implementation Date	July- November 2024

CP Consultation questions

We intend to ask the standard CP Consultation questions for this CP. We do not believe any additional questions need to be asked for this CP.

Standard CP Consultation Questions
Do you agree with the proposed solution?
Will this CP impact your organisation?
Will your organisation incur any costs in implementing this CP?
Do you agree with the proposed implementation approach for this CP?

7. Recommendations

We invite you to:

- **NOTE** the proposed progression timetable for the CP; and
- **PROVIDE** any comments or additional questions for inclusion in the CP Consultation.