

# CP Progression – CP1383

**Meeting Name** Supplier Volume Allocation Group

**Meeting Date** 4 December 2012

**Purpose of paper** For Information

**Summary** This report provides details of the background, solution, impacts and industry views for CP1383 'Upgrade of NHHDA and EAC/AA systems to Oracle 11g'. ELEXON invites the SVG to note the report which, due to the size of the implementation cost, will be presented to the BSC Panel for decision. We invite the SVG to recommend that the Panel approves CP1383.

## 1. Why change?

### 1.1 Background

1.1.1 ELEXON, via its BSC Agent Service Provider, provides Party Agents with Non Half Hourly Data Aggregation (NHHDA) and Estimation of Annual Consumption/Annualised Advance (EAC/AA) software on which to run the NHHDA and EAC/AA applications. The current versions of the NHHDA and EAC/AA applications run on Oracle systems.

1.1.2 The previous Oracle upgrade was carried out in November 2006 when CP1117 'Upgrade of NHHDA and EAC/AA systems to Oracle 10g' was implemented. At that time, ELEXON confirmed that 10g was the latest version of the Oracle software which would be supported for at least 5 years.

### 1.2 What is the issue?

1.2.1 Support for Oracle 10g versions of NHHDA and EAC/AA applications ended in July 2012. This means these systems are now running on unsupported platforms.

1.2.2 If problems were encountered with any 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 an Oracle upgrade.

1.2.3 Whilst there is a low risk of this probability occurring, it could have a significant impact on Settlement. Therefore, after consultation with the Software Technical Advisory Group (STAG), ELEXON agreed that it is important to progress the upgrade now.

## 2. Solution

- 2.1 Updating the NHHDA and EAC/AA systems requires a Change Proposal (CP). Therefore, ELEXON raised CP1383 on 26 October 2012.
- 2.2 CP1383 proposes to upgrade NHHDA and EAC/AA systems to the latest available version of Oracle, which is version 11g.

## 3. Industry views

- 3.1 CP1383 was issued for participant Impact Assessment via CPC00719. We received nine responses of which eight agreed and one was neutral.
- 3.2 The breakdown of responses is shown in the following table. You can find the full collated participant responses to CP1383 in Attachment A or on the BSC Website [here](#).

| Respondent role   | Supports CP? |          |          |
|---|--------------|----------|----------|
|   | Yes          | No       | Neutral  |
| Distributors  | -            | -        | -        |
| Party Agent (e.g. Data Collector, Data Aggregator, Meter Operator)                  | 4            | -        | -        |
| Suppliers   | -            | -        | -        |
| Mixed (i.e. two or more of Supplier, generator, trader, Party Agent or Distributor) | 4            | -        | 1        |
| <b>Total</b>  | <b>8</b>     | <b>0</b> | <b>1</b> |

- 3.2 No respondents were against the changes proposed by CP1383. The respondents who agreed with the CP believed that the change is a necessity in order to ensure that a supported operating system is available, and to mitigate the risks associated with running on an obsolete infrastructure.
- 3.3 Some respondents had questions surrounding the change and these are summarised in the following table along with ELEXON's response. Once we had provided the clarifications we received no further comments.

| Respondent's query   | ELEXON's response   |
|--|---|
| Do ELEXON anticipate that any of the dataflows that are either sent or received by NHHDA's will be changed as a result of this change or is this merely of impact to them and their systems? | The change will impact NHHDA's systems only, and relates only to the versions of software they are running.<br><br>This change will not have any impact on the flow structures that NHHDA's either receive or send. |



| Respondent's query  | ELEXON's response   |
|---|---|
| <p>Please advise if ELEXON are aware of how this may affect the performance of systems, and if the change may mean our current hardware needs to be upgraded? Additionally, does this upgrade mean that a specific Operating System version will be required?</p>   | <p>Hardware impacts – Yes. The link below gives the pre-installation requirements for Oracle 11g (the targeted Operating System (OS) for upgrade) when running on the Solaris Operating System. The information will allow NHHDA's to understand what hardware is required to be able to run the upgraded software.</p> <p><a href="http://docs.oracle.com/cd/B28359_01/install.111/b32068/pre_install.htm#i1011296">http://docs.oracle.com/cd/B28359_01/install.111/b32068/pre_install.htm#i1011296</a></p> <p>Operating System impacts – Yes. There are no major impacts on the OS; however there are a few patches that need to be installed. A quick extract below will be detailed in the installation guide for the software:</p> <p>The following patches are to be updated for Oracle DB -11g compatibility:</p> <ul style="list-style-type: none"><li>• 120753-06: SunOS 5.10: Microtasking libraries (libmtsk) patch</li><li>• 139574-03: SunOS 5.10: file crle ldd stings elfdump patch</li><li>• 141444-09, 141414-02</li><li>• 119963-14: SunOS 5.10: Shared library patch for C++</li><li>• 124861-15: SunOS 5.10 Compiler Common patch for Sun C C++</li></ul> <p>The following patch is to be updated for Oracle OFM -11g compatibility:</p> <ul style="list-style-type: none"><li>• patch 144540-01</li></ul> <p>Performance impacts – 'Acceptable performance impacts'. Though the impact is driven by Oracle products, they may result in changes to the NHHDA and EAC/AA software. From Party Agents' point of view, the Service Provider will deliver the software performance tested on a similar size of their data. So if the Service Provider's testing identifies any performance impacts on the software, the solution will also be available along with the delivery.</p> |
| <p>Within the ScottishPower/Iberdrola Technical blueprint, the preferred Operating System is specified as AIX. Is there any potential for an AIX compatible version of the NHHDA EAC/AA application being developed?</p> <p>In addition, other regulatory applications (an example being St Clements' SONET application) have recently been upgraded to Oracle 11g/ AIX 6.1. Has any consideration been given to aligning software releases/technology stacks with other regulatory applications?</p> | <p>ELEXON takes advice from the STAG regarding the technical requirements for NHHDA's. To date, there has been no discussion for support for AIX. Given this request however, ELEXON could take this back to the STAG and assess the feasibility of supporting AIX under a future release.</p>  |



| Respondent's query  | ELEXON's response   |
|---|---|
| <p>Siemens MCS' view is that the NHHDA and EACAA systems should be run on Oracle 11.2.0.3 Enterprise Edition 64bit on Solaris. The front end should be upgraded from Oracle 10g App Service Forms and Reports to Oracle 11g Weblogic Server (Oracle Fusion Middleware), running Forms and Reports standard edition. Please could you confirm if this is in line with the intention of this Change Proposal?</p> | <p>ELEXON confirmed that what Siemens had stated was entirely in line with this CP.</p> |

### 3.4 Comments on the proposed redlining

3.4.1 There is no redlined text attached to this CP as no Category 1 Configurable Items are impacted.

## 4. Intended benefits

4.1 Upgrading the NHHDA and EAC/AA systems to operate under Oracle 11g will ensure compatibility with the latest fully-supported Oracle release. As a consequence, the upgrade will have the following material benefits for both the developer and users of this software:

- (1) Maintains availability of full vendor support service (i.e. including Error Correction Support) for both the developer and users of the application;
- (2) Minimises any risk of being unable to take advantage of defect fixes and other enhancements made available by the vendor;
- (3) Minimises reliance on reduced vendor support service for both developer and users; and
- (4) Minimises the cost of vendor support for both developer and users.

4.2 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.

## 5. Impacts and costs

5.1 The following table summarises the ELEXON effort required to implement CP1383 and the impact on market participants. Some respondents have provided confidential cost information.

| Market participant                        | Cost/impact  | Implementation time needed  |
|---|--|---|
| <b>ELEXON (implementation)</b>            | 20 man days, equating to £4,800.                                 | June 2013 Release is suitable (as long as decision is made and notified by early December). |
| <b>BSC Agent Service Provider</b>         | £221,000 to test and deliver the new software.                   | June 2013 Release is suitable (as long as decision is made and notified by early December). |
| <b>Data Collectors / Data Aggregators</b> | Between 180 - 270 days.  | June 2013 Release is suitable (as long as decision is made and notified by early December). |
| <b>Supplier</b>                           | 90 days.<br>The respondent did not provide any cost information. | June 2013 Release is suitable.  |

5.2 The estimated total central implementation cost for CP1383 is £225,800. The Panel has delegated authority to the SVG to approve CPs where the total central implementation cost is less than £150,000. As the cost of CP1383 is higher, the SVG's Terms of Reference require the SVG to make a recommendation to the Panel on the CP. We will present the SVG's recommendation to the Panel at its next meeting on 13 December 2012.

## 6. Implementation approach

6.1 The majority of respondents agreed that six months' implementation time is adequate to be able to upgrade to the new version fully. However, one respondent has requested an eight-month window.

6.2 We appreciate that it may take some Party Agents longer than others to install the software. However, it is not necessary for all Party Agents to be running on the new software simultaneously. The impact is that any Agent not running on the new software would continue to be at risk of having a failure on an unsupported system until they did install the latest Oracle version. The 2013 June Release is the earliest that ELEXON can deliver the new software. Those who are able to upgrade to the software immediately would remove any potential risk straight away in comparison to other parties who may require more time. Therefore we still recommend an Implementation Date of June 2013.

6.3 CP1383 would therefore be implemented on 27 June 2013 as part of the June 2013 BSC Systems Release.

## 7. Recommendations

7.1 ELEXON invites the SVG to:

- a) **NOTE** that we will present CP1383 to the Panel for decision on 13 December 2012;
- b) **RECOMMEND** to the Panel that CP1383 is approved; and
- c) **RECOMMEND** to the Panel an Implementation Date of 27 June 2013, as part of the June 2013 Release.

### Appendices:

None

### Attachments:

Attachment A – Collated Responses to CPC00719 for CP1383

### For more information, please contact:

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