ISG110/04

Meeting name	Imbalance Settlement Group (ISG)
Date of meeting	23 March 2010
Paper title	Change Proposal Progression
Purpose of paper	For Decision
Synopsis	This paper provides: • CP1324 for your consideration and agreement on its progression; • an update on CP1315, following an SVG decision; and • a summary of all Open Change Proposals (CPs) and Draft Change Proposals (DCPs).

1 Introduction

1.1 This paper provides the details of CP1324 for you to consider and agree on its progression. CP1324 has been assessed by us and has undergone Impact Assessment (IA) by Parties and Party Agents (via CPC00674).

1.2 In addition, we provide an update on CP1315 'Maintenance of Outstation Types as part of Compliance and protocol approval' following the March SVG meeting.

2 CP1324 Clarifications and Recommendations

2.1 Background

2.1.1 The ISG considered CP1324 'Access Requirements for Offshore Metering Installations at 132kV or Above' at its meeting on 23 February 2010 as part of that month's Change Proposal Progression paper (ISG109/01). You deferred your decision on CP1324 until we could consult with the CP1324 expert group to resolve a number of queries raised by an ISG member.

2.1.2 The ISG member questioned the definition of 'Communication Line' that CP1324 proposed to introduce to Code of Practice (CoP) 1 and 2, and suggested some amendments (**Issue 1**). Following the meeting they also suggested it should be clarified that the provisions proposed by CP1324 apply only to Meters located Offshore (**Issue 2**).

2.1.3 You agreed in the meeting that Issue 1 was the only outstanding matter to be resolved before you could make a decision on this CP. However, we believe you should also address Issue 2 when you consider CP1324. We sought the views of the expert group on both issues. Their views and our considerations are detailed below in full.

2.1.4 The SVG considered this CP at their meeting on 2 March 2010 (SVG109/01), and approved CP1324 subject to it being approved by the ISG.

2.2 Expert Group Views

- **Issue 1:** The expert group believed that the definition originally proposed in CP1324 should be retained, i.e. the redlining should not be amended. The group's views are detailed below.
- **Issue 2:** The expert group endorsed the suggested amendment to make it clear that the CP1324 provisions apply only to Meters located Offshore.

2.3 ELEXON's Recommendations

- **Issue 1:** We recommend that the proposed definition should be amended in line with the ISG member's suggestion, except for one change. Our considerations are detailed below.
- **Issue 2:** We recommend the redlining should be amended to make it clear that the CP1324 provisions apply only to Meters located Offshore.

2.4 Issue 1: Definition of Communication Line

2.4.1 CP1324 proposed to add a definition of Communication Line to CoP 1 and 2, as follows:

Communication Line means a line or link which is dedicated to an Outstation System and is identified by a unique number, e.g. CTN line number 123, PSTN line number 321 or IP address 555.

2.4.2 The expert group had agreed that the term 'Communication Line' should be clarified such that a Communication Line is one which is uniquely identifiable by its number or address. The aim of this was to reduce the potential for providing communication systems that may be subject to a common mode failure.

2.4.3 However, an ISG member questioned the proposed definition, and wanted to clarify whether it could be interpreted, or was intended, to allow a single physical line or link to be 'dedicated' to an Outstation System ***by virtue of having a unique address***. The member noted that the group had confirmed that they did not believe it would be appropriate to require different modes of communication, such as entirely separate communication cables to Offshore sites or employment of a different communication technology like a satellite link.

2.4.4 However, the ISG member did not believe it would be acceptable to consider one physical link (such as one fibre optic line within a communication cable with one set of equipment (e.g. modem etc at each end)) as two Communication Lines just because that link can 'serve' two different addresses. The ISG member believed it was not clear from the proposed text whether it was the expert group's intent to allow this, and suggested that breaking the definition into two parts and referring to a physical line or link would be absolutely clear. The ISG member suggested a change to the proposed definition which is set out below:

Communication Line means a physical line or link ~~which is~~ whose components are dedicated to ~~an~~ a single Outstation System. ~~and is~~ A Communication Line shall be identified by a unique number, e.g. CTN line number 123, PSTN line number 321 or IP address 555.

2.4.5 We suggested to the expert group that, if it was in line with their intent for the CP1324 solution, the amendments suggested by the ISG member should be made to the definition of Communication Line.

2.4.6 The group believes that the originally proposed definition should be approved. Their key reasons for this recommendation were:

- To deliver complete 'dual redundancy' for offshore sites it would be necessary to require installation of two separate dedicated lines (i.e. physically separate communication cables), which would be impractical, excessively expensive and unduly onerous.
- The fibre link is embedded inside the power cable between the offshore platform and substation, which is buried deeply into the seabed to prevent it from being damaged, e.g. by a dredger.

- The only plausible mode of failure would be physical severance of the cable.
- There would be no significant benefit in requiring two different fibres within a cable to be dedicated to metering communications because severance would render all fibres unusable, and it would be expected that damage severe enough to prevent use of one fibre would similarly render the rest unusable.
- If the cable is severed, power as well as communication would cease to operate; no power, no generation means zero data and therefore no risk to Settlement.

- The proposed revised definition is not absolutely clear:
  - Communications systems will commonly use multiplexing techniques[1], and hence it will be very difficult/impossible to ensure that a physical line with dedicated components is used throughout the communication line.
  - Cellular and satellite links might not be considered physical links.
- The sentence 'A single point of failure shall not prevent access to both main and check metering data' in section 5.5 'Outstation' prevents common components being used within the communications equipment that may lead to common mode failure (e.g. multiplexing equipment, modem).

2.5 ELEXON's considerations and recommendations

2.5.1 We have further considered the wording of the Communication Line definition in light of the ISG member's concern and the views of the expert group. Our interpretation is that the originally proposed definition already delivers the requirements that the ISG member believed were appropriate. For instance, we would not consider it acceptable for one optical fibre within a cable to be considered as two Communication Lines (or as part of two Communication Lines) regardless of whether it can serve two different, unique addresses or not. As noted by one of the members of the expert group, this is due to the sentence 'A single point of failure shall not prevent access to both main and check metering data' in section 5.5 'Outstation'.

2.5.2 However, we do believe that the meaning of the definition should be clarified so it better reflects the interaction with the new clause in section 5.5. We believe this would allay any concerns about potential ambiguity of interpretation and would help those designing communications systems for Metering Systems. In addition, the new clause in section 5.5 applies to Offshore Metering Systems, while the Communication Line definition is general and would apply equally to onshore Metering Systems. We therefore believe that for this reason too it would be prudent to reflect in the definition itself that components of a Communication Line must be dedicated to that Communication Line.

2.5.3 We believe these aims can be achieved by the wording suggested by the ISG member, but we agree with the suggestion from the expert group that specifying of a 'physical' line or link could be unclear, and we do not believe it is necessary.

2.5.4 We therefore recommend that you approve the following amended definition of Communication Line (which differs from the ISG member's suggestion only in its omission of the word 'physical'):

[1] An electronic multiplexer makes it possible for several signals to share one device or resource, for example one A/D converter or one communication line, instead of having one device per input signal.

Communication Line means a line or link ~~which is~~ whose components are dedicated to ~~an~~ a single Outstation System. ~~and is~~ A Communication Line shall be identified by a unique number, e.g. CTN line number 123, PSTN line number 321 or IP address 555.

2.5.5 This is not a material change to the CP, as it would just clarify and reinforce the existing solution. We have therefore not issued CP1324 for another industry impact assessment due to this suggested change.

2.6 Issue 2: Applicability of Offshore requirements

2.6.1 CP1324 proposes to add a paragraph to section 5.5 'Outstation' in CoPs 1 and 2 which applies to 'Metering Systems located at Offshore Power Park Modules'. The ISG member noted that recent Modifications have proposed metering at a different location than the module itself, and suggested that the intention should actually be to capture any Metering System located Offshore. If the metering for an Offshore Power Park Module is actually located onshore (because it is sub-132kV or has some form of dispensation) the provisions proposed by CP1324 would not need to apply.

2.6.2 We suggested to the expert group that, if it was in line with their intent for the CP1324 solution, the proposed addition to section 5.5 of CoPs 1 and 2 should be amended to make it clear that the requirements apply only to Offshore Power Park Modules' Metering Systems that are located Offshore. If an Offshore Power Park Module's Metering System is located onshore (e.g. due to a dispensation or a connection below 132kV) the normal rules apply, not the CP1324 provisions. We suggested the following amendment to achieve this:

For Metering Systems located Offshore at Offshore Power Park Modules duplicate Outstation Systems with separate Communication Lines shall be provided. Main and check data shall be accessible by either of the separate Communication Lines. A single point of failure shall not prevent access to both main and check metering data.

2.6.3 The same clarifying amendment would also be made to references to 'Metering Systems located at Offshore Power Park Modules' in the CP1324 redlined proposed changes to BSCP06, BSCP05, the CDCA User Requirements Specification and the CDCA Service Description.

2.6.4 We asked the group to confirm whether this proposed amendment to the Offshore Outstation provisions was acceptable and in line with their intent.

2.6.5 The expert group believes that the ISG should approve the amendment intended to make it unambiguous that the new provisions apply only to systems actually located Offshore. No group members objected to this; the expert group endorse this amendment as reflective of their agreed solution.

2.7 Recommendations

2.7.1 We recommend, based on the responses of the expert group and our further considerations, that you:

- **APPROVE** CP1324 for implementation in the June 2010 Release; and
- **AGREE** the further recommended amendments to the redlined text as detailed in this document.

3 CP1315 Update

3.1 Background

3.1.1 CP1315 seeks to allow Outstation information to be kept more up to date by removing the Valid Set for the Outstation Type data item (J0471), listed in the DTC, and replacing it with a reference to the Compliance and Protocol Approval process (documented in BSCP601) which is maintained by ELEXON.

3.1.2 We presented CP1315 to the ISG at your meeting in November 2009 (ISG106/01). You agreed that this is an SVA matter and should be decided by the SVG Committee, however you asked us to provide the following comments to the SVG:

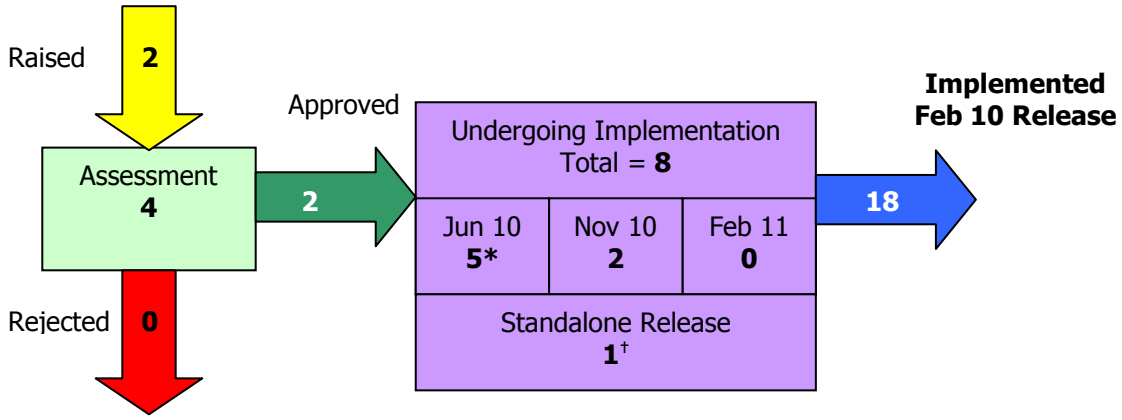
- You raised concerns about removing the DTC validation completely;
- You asked whether the DTC could be updated more frequently; and
- You commented that by introducing this change, new processes would have to be introduced.

3.2 SVG Decision

3.2.1 We presented CP1315 to the SVG at their meeting on the 2 March 2010 (SVG109/01). After considering responses from participants, the MRA and the ISG, the SVG approved CP1315 for inclusion in the November 2010 release.

4 Summary of Change Proposals for Progression

4.1 There are currently **11** open CPs, the ISG and SVG co-own **6** CPs, and the SVG own the remaining **5** CPs. **2** new CPs have been raised since the last ISG meeting.



Please note:

- The numbers in the boxes indicate current number of CPs in a given phase.
- The numbers in arrows show the variance in the past month.

** Changes to BSCP504 as a result of the CP1311 solution will be implemented in the June 10 Release. All other changes resulting from CP1311 were implemented in the February 10 Release.*

† CP1322 was approved by the BSC Panel on 11 March 2010, with a 5 Working Day implementation date. CP1322 will be implemented on 18 March 2010.

4.2 There are currently no open DCPs.

5 Recommendations

5.1 We invite you to:

a) **NOTE** that the SVG approved CP1315 for a November 2010 Release;

b) **APPROVE** CP1324 for inclusion in the June 2010 BSC Systems Release; and

c) **AGREE** the further recommended amendments to the redlined text as detailed in this document.

Stuart Holmes

ELEXON Change Consultant

T: 020 7380 4135

Appendix:
Appendix 1 – Release Information

Appendix 4 – Release Information

Key to Release Plan

Change Proposals and Modification Proposals in **BLACK** text represents SVA changes, **RED** text represents CVA changes and **BLUE** text represents changes which impact both the SVA and CVA arrangements.

The Authority decision dates are provided in the following format:	
P	Modification Proposal number
(< date)	Date by which a determination must be made by the Authority in order for the Modification Proposal to be implemented within the indicated release
Pro✓/Pro×	Indicates that the Panel's recommendation to the Authority was to Approve/Reject the proposed Modification
Alt✓/Alt×	Indicates that the Panel's recommendation to the Authority was to Approve/Reject the Alternative Modification

	February 2010 Scope (Imp. Date 25 Feb 10)	June 2010 Scope (Imp. Date 24 Jun 10)	Nov 2010 Scope (Imp. Date 4 Nov 10)	Standalone Releases
Change Proposals		1324, 1326	1325,	
Pending				
Approved	1295, 1296, 1297, 1298, 1299, 1301, 1302, 1303, 1304, 1306, 1307, 1308, 1310, 1311*, 1312, 1313, 1314, 1321	1309, 1311*, 1316, 1317, 1318, 1323	1267, 1315	1322
Modifications				
Pending		P249 Pro✓		
Approved	P246 Pro✓		P243 Alt✓, P244 Alt✓	P245 Alt✓
Updates	We successfully implemented the Release on 25 February 2010; with the approved exception of the CP1311 changes to BSCP504 (24 June 2010), P246 and P248 (31 March 2010). The updated EAC/AA software and SQL scripts are available via the ELEXON exchange and all updated documentation is live on the ELEXON website. Logica are currently developing the changes for P246 with testing scheduled to complete by 17 March. We have updated the LDSOs on the file design and have provided dates for when the test and live files will be made available to them. We estimate that the Release will complete at approximately 5% over budget due to the additional testing effort required for the EAC/AA software.	The scope of the June 2010 Release currently includes six approved CPs (1309, 1311, 1316, 1317, 1318 and 1323) which only impact Category 1 Code Subsidiary Documents. No changes to Central Systems are scheduled for this release. There are no Modifications currently approved for inclusion in this release.	P243 'Publication of Generator Forward Availability by Fuel Type' and P244 'Provision of BritNed Data to BMRS' were both approved on 21 January 2010 for inclusion in the November 2010 Release. The project is currently in the planning phase.	The Authority approved Alternative Modification P245 with an Implementation Date of 31 March 2010. The BSC Panel approved CP1322 with a 5 Working Day Implementation Date. CP1322 will be implemented on 18 March 2010.

Draft CP Scope of the June 2010 Release

CP	Title	Impacts	BSC Agent (Demand Led)	ELEXON Operational		Total
				Man Days	Cost	
CP1309	Include reference to D0303 in BSCP514 and circumstances in which its use is mandatory.	BSCP514, SVA Data Catalogue Volume 1	£0	3	£660	£660
CP1316	Removal from BSCP536 of obligation to attach a copy of Form 536/01 to BSCCo Bill	BSCP536	£0	1	£220	£220
CP1317	Removal of Requirement for NHH MOAs to notify NHH DCs of metering work before the event	BSCP514	£0	1.25	£225	£225
CP1318	Minor changes to BSCP601	BSCP601	£0	1.75	£295	£295
CP1323	Review of the Qualification Self Assessment Document	BSCP537 Appendix 1	£0	5.25	£1,260	£1,260
		Total[2]	**£0**	**12.25**	**£2,660**	**£2,660**

Draft CP Scope of the November 2010 Release

CP	Title	Impacts	BSC Agent (Demand Led)	ELEXON Operational		Total
				Man Days	Cost	
CP1267	Registration of UMSO's and MA's in SMRS	BSCP501, BSCP520	£0	3	660	£660
CP1315	Maintenance of Outstation Types as part of Compliance and protocol approval	BSCP601	£0	1	£220	£220
		Total[3]	**£0**	**4**	**£880**	**£880**

[2] A Tolerance of 20% applies for both Demand Led costs and ELEXON Operational Costs
[3] A Tolerance of 20% applies for both Demand Led costs and ELEXON Operational Costs