

STCP 04-2 Issue 004 Real Time Datalink Management

STC Procedure Document Authorisation

Company	Name of Party Representative	Signature	Date
National Grid Electricity Transmission plc			
SP Transmission Ltd			
Scottish Hydro-Electric Transmission Ltd			
Offshore Transmission Owners			

STC Procedure Change Control History

Issue 001	21/12/2004	BETTA Go-Live Version
Issue 002	20/04/2005	Issue 002 incorporating STCPAP003
Issue 003	25/10/2005	Issue 003 incorporating PA034 & PA037
Issue 004	12/11/2009	Issue 004 incorporating changes for Offshore Transmission
<u>Issue 005</u>	<u>31/01/2014</u>	<u>Issue 005 incorporating changes to include IEC60870-5-101 changes</u>

1. Introduction

1.1 Scope

1.1.1 The provision of a resilient Datalink is essential for the continuous transmission of real time data from the TO to NGET to enable NGET to have an overview of the TO's Transmission System. This document details the responsibilities and obligations on NGET and the TO with regard to the management and support of the Datalink.

1.1.2 This document applies to NGET and each TO.

1.1.3 for the purposes of this STCP, TOs are:

- SPT;
- SHETL; and
- All Offshore Transmission Licence holders as appointed by OFGEM

In the event that specific conditions or exceptions are made in the document relating to an Onshore TO or Offshore TO these will be prefixed appropriately

1.2 Objectives

1.2.1 This process specifies the responsibilities and obligations on NGET and the TOs in relation to the Datalink, including:

- infrastructure ownership boundaries;
- management in real time; and
- change management.

2 Key Definitions

2.1 For the purposes of STCP04-2:

2.1.1 Onshore Datalink means the infrastructure that enables the transfer of real time SCADA data from the relevant Onshore TO to NGET, as defined in Appendix B for Onshore Transmission Systems and Appendix D for Offshore Transmission Systems.

3 Procedure

3.1 Datalink Provisions

3.1.1 The diagrams in Appendix C and Appendix E illustrates the ownership and support boundaries of the infrastructure associated with the real-time Datalink for Onshore and Offshore Transmission Systems respectively .

3.1.2 Any changes to the configuration of the infrastructure illustrated in Appendices C and E shall be agreed between NGET and the relevant TO prior to implementation.

3.1.3 Each TO shall provide a resilient Datalink to interface with the NGET Datalink, in line with Good Industry Practice.

3.1.4 The specification of the TO Datalink infrastructure, its level of resiliency, supporting services and facilities shall be included in that TO's Services Capability Specification.

3.1.5 NGET shall provide a resilient Datalink to interface with each TO's Datalink, in line with Good Industry Practice.

3.2 Alarm & Fault Management of the Datalink

- 3.2.1 When a TO receives a Datalink alarm or is made aware of a fault that affects Datalink equipment at a TO site, the relevant TO shall notify NGET of such alarm or fault.
- 3.2.2 Where the alarm or fault is on the TO Datalink, the TO shall report any Service Reduction or Service Reduction Risk in accordance with STCP 2-1 Alarm and Event Management.
- 3.2.3 Where NGET is in receipt of an alarm, or is made aware of a fault that affects the TO Datalink NGET shall notify the relevant TO of the alarm or fault in accordance with STCP 2-1 (Alarm and Event Management).
- 3.2.4 Where the TO owns the equipment associated with the alarm of fault, it shall arrange, through communication with NGET, for resolution in line with the standing Service Restoration Proposal.
- 3.2.5 Where NGET is in receipt of an alarm, or is made aware of a fault that affects the NGET Datalink, they shall notify the relevant TO as soon as reasonably practicable and arrange for resolution in line with agreed support arrangements.

3.3 Change Management

- 3.3.1 Change management shall be carried out in line with STCP 4-1 (Real Time Data Change Management).

3.4 Outage Co-ordination

- 3.4.1 NGET shall notify the TO of any proposed outage on the NGET Datalink.
- 3.4.2 The TO shall notify NGET of any proposed outages on the TO Datalink. The TO shall advise NGET on the works duration, content, its impact on the operation of the Datalink, and any other measures to mitigate the effect of the outage.
- 3.4.3 NGET or the relevant TO shall provide the other party with sufficient notice of a planned outage on any element of the Datalink, or data communication systems, where it may affect the resiliency of its operation.

3.5 Site Access and Support Arrangements

- 3.5.1 Site access and support arrangements between NGET and the relevant TO shall allow NGET access to the NGET Datalink at TO sites for service restoration.
- 3.5.2 The TO shall ensure that there are support arrangements with associated levels of service to enable restoration or maintenance of the TO Datalink as part of the standing TO Service Restoration Proposal. NGET shall ensure that there are equivalent support arrangements with associated levels of service to enable restoration or maintenance of the NGET Datalink.
- 3.5.3 Where User consent for access is required, NGET shall procure all necessary User consents.

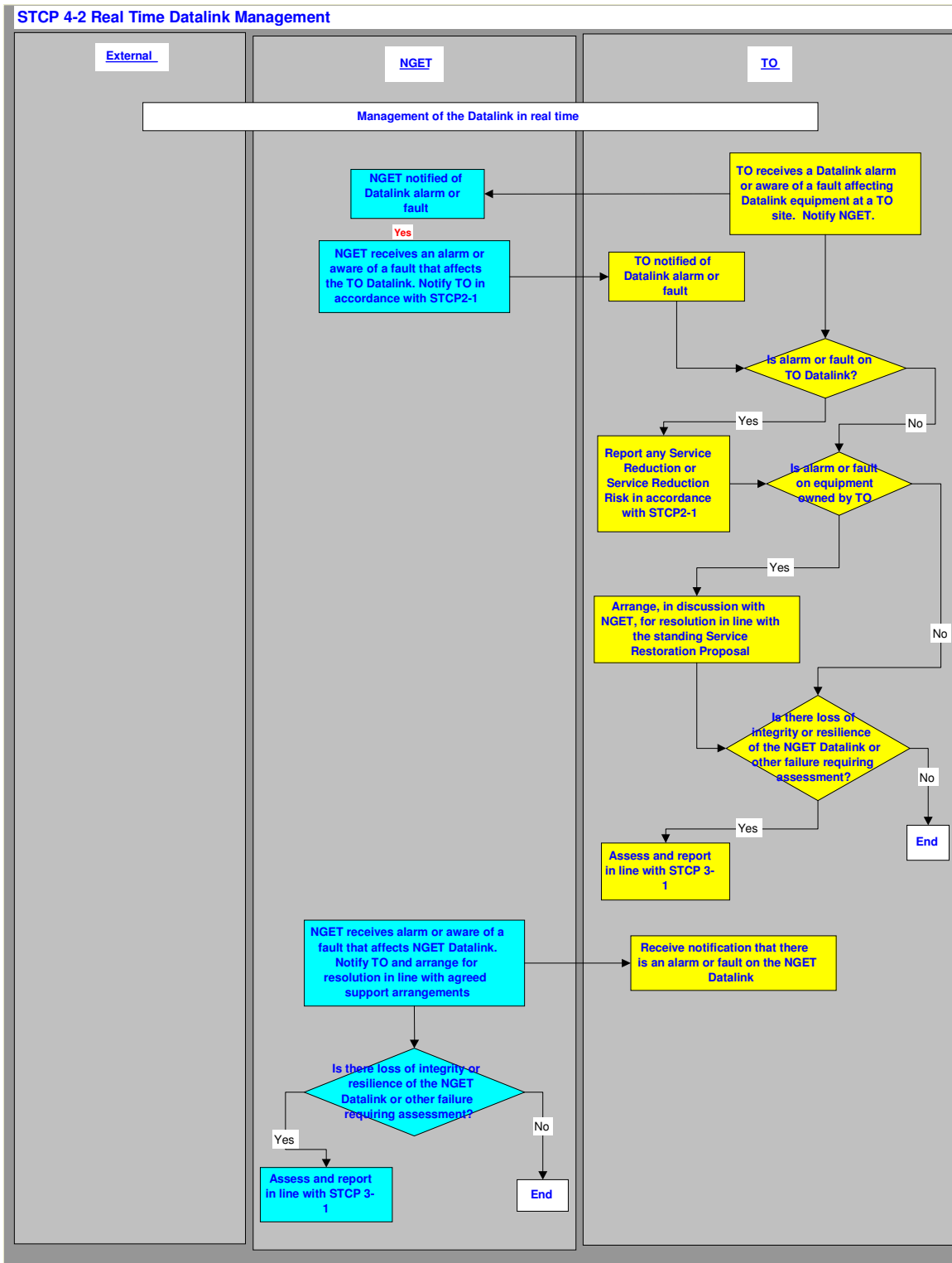
3.6 Datalink Reporting

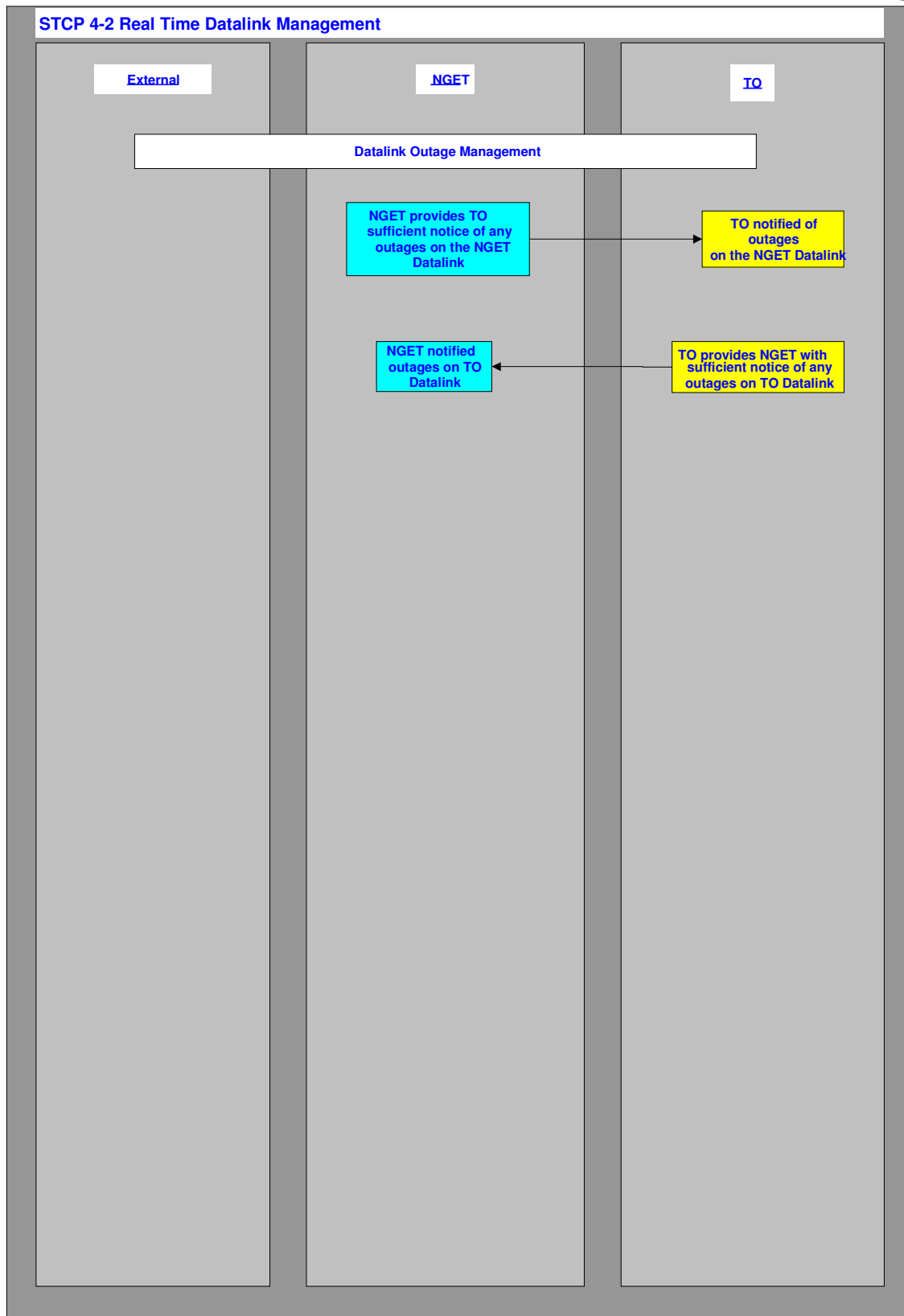
- 3.6.1 Failures of the Datalink may be assessed and reported in line with STCP 3-1 (Post Event Analysis and Reporting) and may include the following:
- Faults on the TO Datalink that causes loss of integrity or resiliency of the Datalink
 - Faults on the NGET Datalink that causes loss of integrity or resiliency of the Datalink

Appendix A: Flow Chart

Note that the Process Diagrams shown in this Appendix A are for information only. In the event of any contradiction between the process represented in this Appendix and the process described elsewhere in this STCP, then the text elsewhere in this STCP shall prevail.

STCP 4-2 Real Time Datalink Management





Appendix B Onshore Datalink

This Appendix has been removed from this version of the STCP on the grounds of Confidentiality, in accordance with the decision taken by the STC Committee in February 2005.

For further information please email STC.Team@uk.ngrid.com

Appendix C

This Appendix has been removed from this version of the STCP on the grounds of Confidentiality, in accordance with the decision taken by the STC Committee in February 2005.

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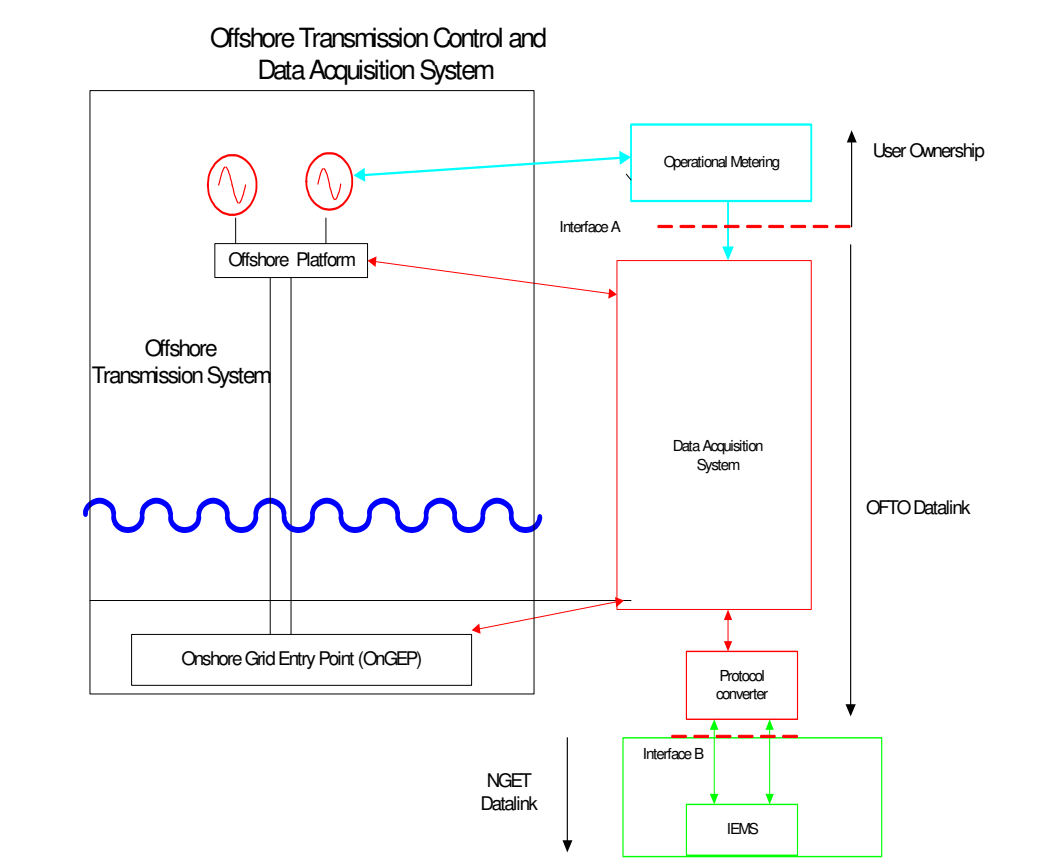
Appendix D

Offshore Datalink

The OFTO will provide a data acquisition system to collect and deliver real time indications, alarms and analogues from the offshore transmission system and Users of the Offshore Transmission System.

The interface between the OFTO datalink and the NETSO i.e. the telecontrol communication interface will be located at an onshore location as agreed between NGET and the OFTO. The functional specification for telecontrol communication interface between the SCADA system and the NETSO energy management system is described in STCP 4-6.

Appendix E: Offshore Datalink Ownership and Support Boundaries



Note the in the diagram above a protocol converter may not be required in all cases.

Appendix F: Abbreviations & Definitions

Abbreviations

SPT SP Transmission Ltd
SHETL Scottish Hydro-Electric Transmission Ltd
TO Transmission Owner
OFTO Offshore Transmission Owner

Definitions

STC definitions used:

Apparatus
Good Industry Practice
NGET
Plant Services Capability Specification
Services Restoration Proposal
Services Reduction
Services Reduction Risk
Transmission System
User