ETSO Status Request

Implementation Guide

Version : 1

Release : 0

MEMBERS OF ETSO TASK FORCE 14

MEMBER	Company
Erik Hartwell, Convenor	Eltra, Denmark
José Bembibre Regue	REE, Spain
Maurizio Monti	RTE, France
Nisheeth Singh	ETRANS, Switzerland
Herwig Van den Bosch	Elia, Belgium
Joachim Vanzetta	RWE Net, Germany
Matti Vasara	Fingrid, Finland
Mike Conroy, Consultant	SchlumbergerSema

Web site address: www.edi.etso-net.org

REVISION HISTORY

Version	Release	Date	Paragraphs	Comments
1	0	2003-04-29		Initial release

CONTENTS

REFERENCE DOCUMENTS.

1. The ETSO Role Model
2. A Common Identification System for The Electricity Industry, The ETSO Identification Coding Scheme - EIC

1. OBJECTIVE

The objective of this implementation guide is to make it possible for software vendors to develop a standard mechanism for requesting status information within the ETSO information interchange environment.

2. INFORMATION REQUEST PROCESS OVERVIEW

With the opening of the electricity market in Europe standard information interchange interfaces are being defined. Several business processes have already been identified for standardisation. Among these one can cite the scheduling process, the imbalance settlement process and ancillary services.

The processes in question cover the transmission of the initial information as well as the acknowledgement, anomaly reports and concluding replies. However, in many instances there is lapse of time between an initial transmission and its conclusion. During this time the initiator of the process is unaware of the status of his situation. For example in the case where matching information must be received in order to conclude the transaction and a time limit is imposed on its successful conclusion. The initiator may be able to expedite the transmission of the matching information if he was aware that it had not yet been received.

In other cases it may be that a participating party would like to have a global overview of his situation at a given point in time.

Generally such status information may be offered as a service via a web access. However in some circumstances this would require that the market participant to pole the web site of each of his counter parties thus making it difficult and time consuming for him to establish his overall position.

In these circumstances it is felt useful to provide a harmonised requesting mechanism that will enable a market participant to make an electronic request for information by a means other than the web. The recipient may then acknowledge the request with the transmission of the requested information providing he has the capacity to do so.

The nature of the information that is sent in reply to a request is dependent on the context in which the request is made. It is through bilateral agreement that such a service is provided. The agreement will also define the structure of the answering information flow.

2.1 Operational scenario

2.1.1 The general context

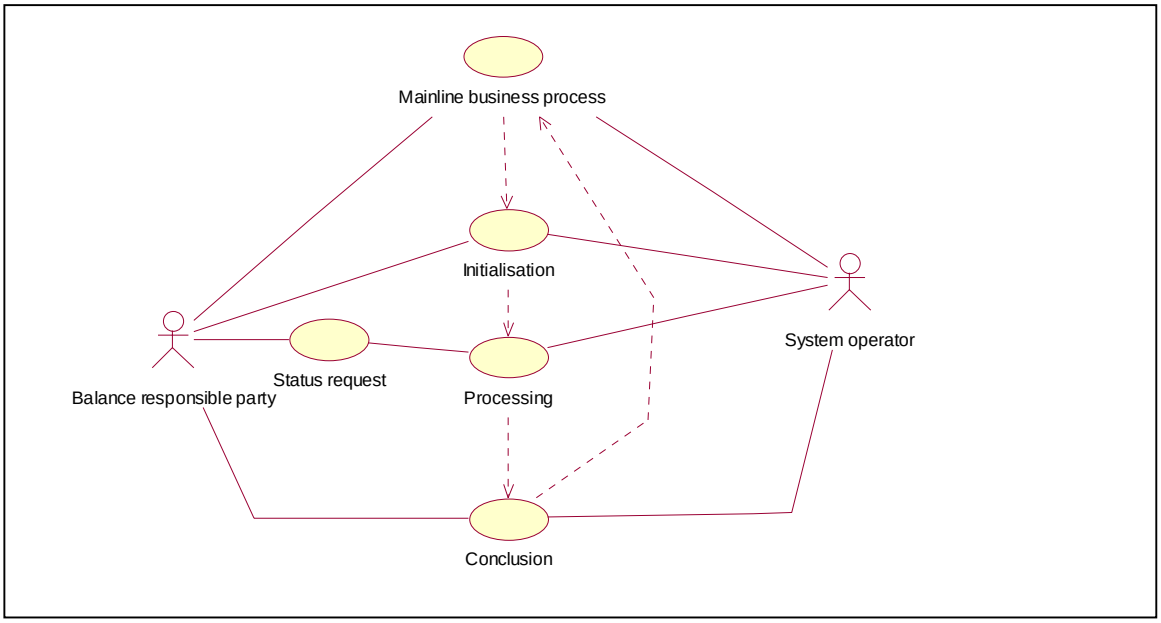


Figure 1: The status request process perspective

In the general context the two principal actors participate in some mainline business process such as scheduling. The business process is composed of a number of transactions that are initialised, processed and concluded. In the context of the use case in figure 1 it is assumed that the system operator carries out the principal processing. However the roles may be inversed.

Between the initialisation where the initial submission and acknowledgement is carried out and the conclusion where the business process is terminated, there is a processing activity. Generally it is during this period that the initiator has little or no insight into his situation in respect to the ongoing transaction.

It is during this phase where a status request use case may be applied. This process will enable the initiator to receive the status of his transaction prior to its termination. This will eventually enable him to react and expedite missing information prior to the transactions conclusion.

The status request process is of interest only in a context where it has not already been provided for in the mainline business process.

3. STATUS REQUEST INFORMATION REQUIREMENTS

3.1 Process flow

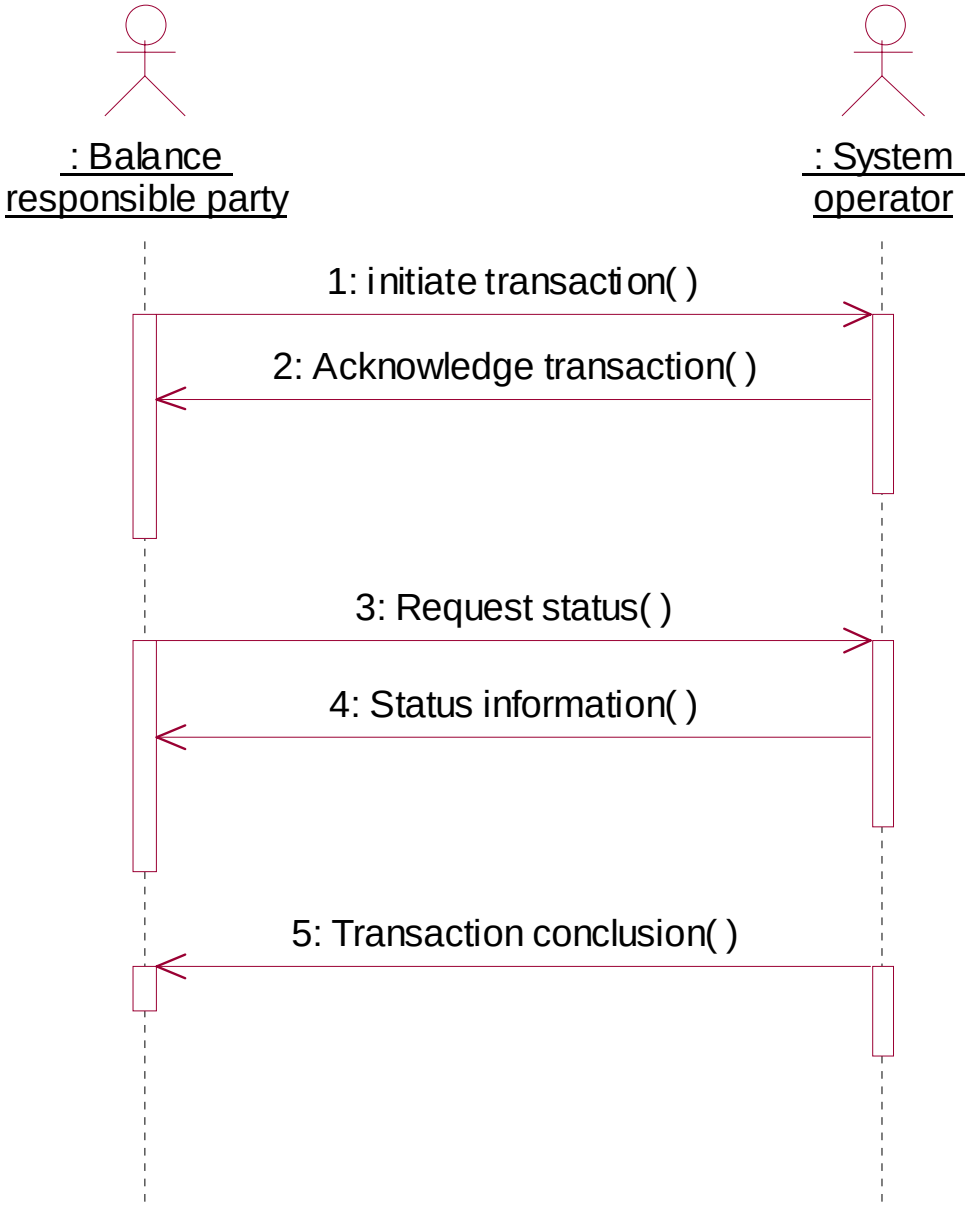
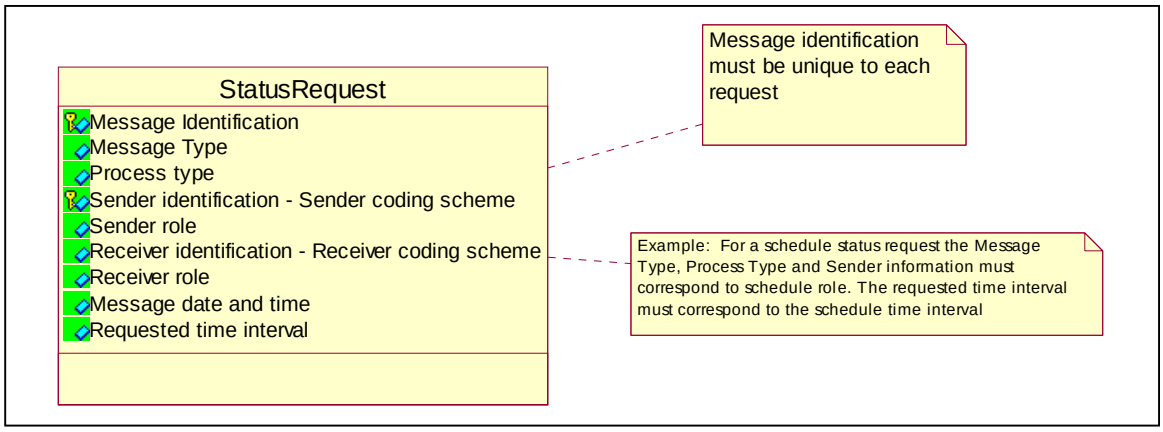


Figure 2: Typical sequence diagram of the information flow for requesting status information

The sequence diagram in Figure 2 outlines the typical context where status information is requested during the processing of a transaction. The status information that is returned is dependent on the nature of the business process. For example, in the context of the day ahead scheduling process it could take the form of an intermediate confirmation report.

4. STATUS REQUEST IMPLEMENTATION

4.1 Information model



4.2 Rules governing the Status request Implementation

4.3 Introduction

A status request is made concerning a given transaction identified by the message type (e.g. balance responsible schedule), covering where necessary a given period identified by the requested time interval and a specific process as identified in the process type.

The receiver will automatically reject the request if any information is found to be in error. No acknowledgement process is defined other than that eventually agreed upon between the parties. Consequently, if the sender does not get a reply within a specified time interval the request should be resubmit after having closely examined it for eventual errors.

4.4 Status request class specifications

4.4.1 Message Identification

ACTION	DESCRIPTION
Definition of element	Unique identification of the status request.
Description	Each status request is allocated a unique identification by the sender. If for any reason a request is retransmit because of non reception of a status request reply the retransmission shall be assigned a new identification number.
Size	The identification of a status request may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None

4.4.2 Message Type

ACTION	DESCRIPTION
Definition of element	The coded type of the status request being sent.
Description	The status request message type identifies the type of the transaction to which the request is being made. **Refer to ETSO Core Components (ECC) specification for valid codes.**
Size	The status request message type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

4.4.3 Process Type

ACTION	DESCRIPTION
Definition of element	The nature of the process that the message is directed at.
Description	The process type identifies the process to which the information flow is directed. **Refer to ETSO Core Components (ECC) specification for valid codes..**
Size	The process type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

4.4.4 Sender Identification – Coding Scheme

ACTION	DESCRIPTION
Definition of element	Identification of the party who is sending the status request.
Description	The sender of the status request is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. **Refer to ETSO Core Components (ECC) specification for valid codes.**
Size	The maximum length of a sender's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

4.4.5 Sender Role

ACTION	DESCRIPTION
Definition of element	Identification of the role that is played by the sender.
Description	The sender role, which identifies the role of the sender within the context of the transaction for which the request is being made. **Refer to ETSO Core Components (ECC) specification for valid codes.**
Size	The maximum length of a sender role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

4.4.6 Receiver Identification – Coding Scheme

ACTION	DESCRIPTION
Definition of element	Identification of the party who is receiving the status request.
Description	The receiver of the status request is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. **Refer to ETSO Core Components (ECC) specification for valid codes.**
Size	The maximum length of a receiver's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

4.4.7 Receiver Role

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the receiver.
Description	The receiver role, which identifies the role of the receiver concerning the transaction for which the request is being made. **Refer to ETSO Core Components (ECC) specification for valid codes.**
Size	The maximum length of a receiver role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

4.4.8 Message Date And Time

ACTION	DESCRIPTION
Definition of element	Date and time of transmission of the status request. The time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ.
Description	The date and time that the status request was prepared for transmission by the application of the sender.
Size	The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is mandatory.
Dependence requirements	None.

4.4.9 Requested Time Interval

ACTION	DESCRIPTION
Definition of element	The beginning and ending date and time of the period that the status request is covering. The status request start and stop time interval must be expressed with a UTC time as follows: YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.
Description	This information provides the start and end date and time for which the status information is to be supplied. Typically in the case of schedule information requests the sender will make a request covering the same period as the of the submitting transaction. The receiver will discard any request, without replying for a time interval that is outside the scope of the transaction covered by the request.
Size	The start and end date and time must be expressed as YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.
Applicability	This information is dependent.
Dependence requirements	This information is only required if the status request is requesting information for a period.

5. XML DTD DEFINITIONS

5.1 Status request DTD

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="request-xsl.xsl"?>
<!-- ETSO Task Force 14 - DTD Version : 1 RELEASE : 0 -->
<!ELEMENT StatusRequest (MessageIdentification, MessageType,
ProcessType, SenderIdentification, SenderRole, ReceiverIdentification, ReceiverRole,
MessageDateTime, RequestedTimeInterval)>
     <!ATTLIST StatusRequest DtdVersion CDATA #REQUIRED
                             DtdRelease CDATA #REQUIRED>

     <!ELEMENT MessageIdentification EMPTY>
     <!ATTLIST MessageIdentification v CDATA #REQUIRED>

     <!ELEMENT MessageType EMPTY>
     <!ATTLIST MessageType v CDATA #REQUIRED>

     <!ELEMENT ProcessType EMPTY>
     <!ATTLIST ProcessType v CDATA #REQUIRED>

     <!ELEMENT SenderIdentification EMPTY>
     <!ATTLIST SenderIdentification v CDATA #REQUIRED
                                    codingScheme CDATA #REQUIRED>

     <!ELEMENT SenderRole EMPTY>
     <!ATTLIST SenderRole v (A01 | A02 | A03 | A04 | A05 | A06 | A07 | A08) #REQUIRED>

     <!ELEMENT ReceiverIdentification EMPTY>
     <!ATTLIST ReceiverIdentification v CDATA #REQUIRED
                                      codingScheme CDATA #REQUIRED>
```

```
     <!ELEMENT ReceiverRole EMPTY>
     <!ATTLIST ReceiverRole v (A01 | A02 | A03 | A04 | A05 | A06 | A07 | A08) #REQUIRED>

     <!ELEMENT MessageDateTime EMPTY>
     <!ATTLIST MessageDateTime v CDATA #REQUIRED>

     <!ELEMENT RequestedTimeInterval EMPTY>
     <!ATTLIST RequestedTimeInterval v CDATA #REQUIRED>
```

5.2 Status Request data instance

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ScheduleMessage SYSTEM "../dtd/request-xml.dtd">
<StatusRequest DtdVersion="1" DtdRelease="0">
     <MessageIdentification v="Req1234"/>
     <MessageType v="A01"/>
     <ProcessType v="A01"/>
     <SenderIdentification v="5790000432752" codingScheme="A10"/>
     <SenderRole v="A01"/>
     <ReceiverIdentification v="10X000000000RTEM" codingScheme="A01"/>
     <ReceiverRole v="A04"/>
     <MessageDateTime v="2002-12-12T09:00:00Z"/>
     <ScheduleTimeInterval v="2002-12-12T22:00Z/2001-06-03T22:00Z"/>
</StatusRequest>
```