

Technical Report

TR-38-3:2009

**Identical to
ISO/TS 20022-
3:2004**

**Financial services — UNiversal Financial
Industry message scheme —
Technical Report – Part 3:
ISO 20022 Modelling guidelines**



Accredited Standards Committee X9, Inc.
Financial Standards Industry

Registered with American National Standards
Institute

Date Registered: January 16, 2009

Contents

Foreword

Introduction

1	Business analysis	7
1.1	Introduction	7
1.1.1	Purpose	7
1.1.2	Key topics	7
1.1.3	Deliverables	7
1.2	Process overview	8
1.3	Activities	9
1.3.1	Define business context.....	9
1.3.2	Define Business Model.....	9
1.4	Guidelines.....	11
2	Requirements analysis	12
2.1	Introduction	12
2.1.1	Purpose	12
2.1.2	Key topics	12
2.1.3	Main activities.....	12
2.1.4	Deliverables	13
2.2	Process overview	14
2.3	Activities	15
2.3.1	Define final scope & boundary	15
2.3.2	Define communication requirements	15
2.3.3	Complete requirements and constraints.....	16
2.4	Guidelines.....	16
3	Logical analysis	17
3.1	Introduction.....	17
3.1.1	Purpose	17
3.1.2	Key topics	17
3.1.3	Main activities.....	18
3.1.4	Deliverables	18
3.2	Process overview	19

3.3	Activities	20
3.3.1	Define “architecture”	20
3.3.2	Define Business Transactions	20
3.4	Guidelines	21
3.4.1	General	21
3.4.2	Message granularity	22
4	Message design	24
4.1	Introduction	24
4.1.1	Purpose	24
4.1.2	Key topics	24
4.1.3	Main activities	24
4.1.4	Deliverables	24
4.2	Process overview	25
4.3	Activity: define Message Components	26
4.3.1	Common guidelines	27
4.3.2	Advanced guidelines	31
4.4	Activity : compose Messages	35
4.4.1	Common guidelines	35
5	Technical design	37
6	Naming conventions	38
Annex A: Example	39	
A.1	Business analysis: funds industry Business Processes	39
A.2	Requirements analysis: fund communication requirements	43
A.3	Logical analysis: Business Transactions	46
A.4	Message design: compose Messages	48

Foreword

Publication of this *Technical Report* that has been registered with ANSI has been approved by the Accredited Standards Committee X9, Incorporated, 1212 West Street, Suite 200, Annapolis, MD 21401. This document is registered as a Technical Report according to the "Procedures for the Registration of Technical Reports with ANSI." This document is not an American National Standard and the material contained herein is not normative in nature. Comments on the content of this document should be sent to: Attn: Executive Director, Accredited Standards Committee X9, Inc., 1212 West Street, Suite 200, Annapolis, MD 21401.

Published by

Accredited Standards Committee X9, Incorporated
Financial Industry Standards
1212 West Street, Suite 200
Annapolis, MD 21401 USA
X9 Online <http://www.x9.org>

Copyright © 2009 ASC X9, Inc.

All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher. Published in the United States of America.

Introduction

The methodology described in this document focus on the development of standardized Business Transactions and Message Sets. The objective of a standardized Business Transaction is to define a commonly agreed solution for communication problems existing among different organizations within the context of a given Business Process.

For a given communication problem in a given business context, several solutions can be developed. The purpose of this document is to explain the different steps a modeller should follow to ensure that ISO 20022 Business Components / Elements, Message Components / Elements, Business Transactions and Messages are defined in a consistent way.

The ISO 20022 methodology is composed of a set of activities. These activities are grouped into the following phases:

- business analysis
- requirements analysis
- logical analysis
- logical design (message design)
- technical design

For each of these activities, this document describes:

- the artefacts needed to start this activity (required input)
- the artefacts that should be the result of this activity (expected output)
- an example – where useful
- any modelling and other guidelines that should be followed or taken into account

It is not the intent of this document to describe what will be the allowed artefacts and/or documents to be submitted to the Registration Authority. This information is described in the ISO 20022 submission templates and their related guidelines.

Examples are provided only to illustrate the modelling methodology and should not be regarded as definitive for the Business Areas described.

For the purpose of ISO/TS 20022-3, the terms and definitions given in ISO 20022-1 apply.

1 Business analysis

A small example of Business Analysis can be found in Annex A (Business analysis: funds industry Business Processes).

1.1 Introduction

1.1.1 Purpose

The purpose of business analysis is to achieve a better understanding of the Business Area and Business Processes for which ISO 20022 compliant Business Transactions and Message Sets will be developed:

- Describing the Business Processes, including the Business Roles and their need for Business Information, helps in the identification of the communication problems that exist among the organizations that take part in these processes. Those communications problems are the main drivers for the next phase (requirements analysis).
- Identifying Business Information manipulated in a Business Area is also important because the Messages - that will be designed in later phases - will contain data elements that are related to this Business Information. An explicit link between Business Elements/Components and Message Elements/Components will be helpful for interoperability, for later maintenance and for change management: if something changes in a Business Area, it will be possible to identify the impact on previously defined Messages.

1.1.2 Key topics

- To identify the business context of the communication problem to be solved.
- To understand the daily business in the Business Area and Business Processes with no special focus on the Business Transactions and Message Sets to be developed.
- To capture the Business Information manipulated within the Business Processes.
- To ensure that all users, such as business experts and standards developers have a common understanding of the Business Area and the Business Processes.

1.1.3 Deliverables

- Textual description of the Business Area (objectives, scope and boundaries)
- Models describing the Business Processes and the Business Information and Business Roles involved in these Business Processes. All model elements are enriched with textual descriptions, including a glossary of business terms.