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ISO/IEC 2nd CD 15944-5:200x(E)

Title: Information technology - Business Agreement Semantic Descriptive Techniques
Part 5: Identification and mapping of various categories of jurisdictional domains
as sources of external constraints

Project: 1.32.31.01.05.00

Introductory note: The attached document is hereby submitted for a three-month letter ballot to the National Bodies of ISO/IEC JTC 1/SC 32. The ballot starts 2005-04-12. This cover was corrected. No other Changes.

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Project Editor's Notes

1. *This document is being issued as a 2nd CD ballot document even though some clauses require more work. This has been indicated by the Project Editors. It is anticipated that these clauses will be completed during the 2nd CD ballot comment period and will also benefit from 2nd CD ballot comments. It is anticipated that as a result of,*

- (1) resolution of 2nd CD ballot comments; and,*
- (2) additional comments received from SC32 P,O & L members as well as individual experts,*

that all these and other input will be integrated into the development of the FCD ballot document.

2. *Completion of technical specification for this Part 5 in the form of rules, definitions, coded domains, templates, figures (and their UML-based equivalents), etc. of sub-clauses of Clauses 6, 7, 8, 9, 10 is being undertaken in consultation with competent legal authorities and internationally recognized legal experts in relevant areas of international law.*

3. *Time limits on the submission for this 2nd CD ballot document did not provide sufficient time to be able to integrate and support all the clauses, rules, definitions, templates, etc. of the ISO/IEC FCD15944-2 FCD ballot document, i.e. ISO/IEC JTC/SC32 document 32N1218.*

4. *This CD ballot document incorporates the results of the review, discussions and decisions taken by SC32/WG1 based on the comments received in the CD ballot of 15944-11. These are found in document JTC1/SC36/WG1 N272R "Editing instructions for CD 15944-5 (2004-11-11). All ballot comments have been addressed in this 2nd CD. Also as a result of these "Editing Instructions for CD-15944-5", three new clauses or sub-clauses have been added in the 2nd CD ballot document.*

➤ 1.3 Scope- Aspects not Currently Addressed

(This is in response to Canadian comment #09 and similar to the approach taken by ISO/IEC 111179-3:2003)

➤ 6.2.8 Legally Recognized Languages (LRLs)

(This is in response to Norway ballot comments on Annex C)

➤ under existing 6.6.2 Person Component

6.6.2.1 General (existing text with minor editing changes)

6.6.2.2 Persona as Legally Recognized Names (new text)

(This is in response to UK ballot comment #05)

➤ *under 6.6.4 Data Component*

6.6.4.1 General (existing text with minor editing changes)

6.6.4.2 Records Retention (new text)

(This is in response to Canadian ballot comment #02)

5. *In addition, most of the text in the current CD version of Clause 0.2 "Business Transaction Model (BTM): Two Classes of Constraints" has been moved to an Annex as per editing instructions and the text of this former Clause 0.2. is now Clause 4. Editing instructions for 15944-2 (see SC32/WG1 N0269REV), 115944-3 (see SC32/WG1 N0270REV) and for 15944-4 (see SC32/WG1 N0261REV) are the same here in that all these parts will have a common normative Annex on Classes of Constraints. (See UK ballot comment #04)*
6. *Further, given the importance of definitions, a new Clause 0.3 "Importance and role of terms and definitions" has been added. This new Clause 0.3 is taken from that found in the ISO/IEC FCD 15944-2 ballot document. It is intended that all Parts2+ of 15944 contain this Clause. (See further UK comment #01 and its resolution in SC32/WG1 document N)*
7. *The two foundation standards for this 2nd CD version are ISO/IEC 14662:2004 (2nd ed.) Open-edi Reference Model and ISO/IEC 15944-1:2002. Readers are advised to familiarize themselves with these two standards. Both standards are available as "Freely Available Documents" at the ISO/IEC JTC1 web site, i.e. as < www.jtic1.org >.*
8. *Note: In the period during the 2ndCD ballot process, the Project Editors will complete the development of added UML models where relevant and appropriate.*
9. *This 2nd CD document for ISO/IEC 15944-5 is a continuation and reorganization of JTC1/SC32 standards development project previously referenced as "ISO/IEC 18038 Identification and Mapping of Various Categories of Jurisdictions".*
10. *This 2nd CD document for ISOIEC 15944-5 is also a continuation of that part of the JTC1/SC32/WG1 and JTC1/SC32/WG2 previous joint work project referenced as ISO/IEC 18022 "IT-enablement of Widely Used Coded Domains", i.e. of those concepts and definitions of "coded domains" which are needed from a commitment exchange perspective and in support of (electronic) business transactions.*

The multipart ISO/IEC 15944 standard focuses on aspects pertaining to unambiguity requirements of business transactions in commitment exchange, predefined scenarios and scenario components particularly semantic components required due to application of external constraints of jurisdictional domains. As such they serve as the primary source of coded domains.

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124 **Information technology - Business agreement semantic descriptive techniques - Part 5:**
125 **Identification and mapping of various categories of jurisdictional domains as sources of**
126 **external constraints**

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[Project Editors to insert additional standard ISO/IEC template boilerplate text and pages here prior to FCD ballot document issuance]

Warning

This document is not an ISO International Standard. It is distributed for review and comment. It is subject to change without notice and may not be referred to as an International Standard.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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FOREWORD

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

In the field of information technologies, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 15944 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 15944-5 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information Technology*, Subcommittee SC32, *and Data Management and Interchange*.

ISO/IEC 15944 currently consists of the following parts, under the general title *Information technology - Business agreement semantic descriptive techniques*:

- Part 1: Operational aspects of Open-edi for implementation
- Part 2: Registration of scenarios and their components as business objects
- Part 3: Open-edi description techniques (OeDT)
- Part 4: Business transaction scenarios - Accounting and economic ontology
- Part 5: Identification and mapping of categories of jurisdictional domains as sources external constraints.

This standard contains several annexes with Annexes A, B, C, D, E, and F being normative and the following Annexes being for information purposes only, i.e., G, H, I, J, K, L, M and N (and X if necessary).

0 INTRODUCTION

0.1 PURPOSE AND OVERVIEW

0.1.1 ISO/IEC 14662 "Open-edi Reference Model"

The ISO/IEC 14662 Open-edi Reference Model¹ provides the conceptual architecture necessary for carrying out electronic business transactions. That architecture describes the need to have two separate and related views of the business transaction. The first is the Business Operational View (BOV). The second is the Functional Service View (FSV). Figure 1 from ISO/IEC 14662 illustrates the Open-edi environment. {For definitions of the terms in Figure 1, see Clause 3}

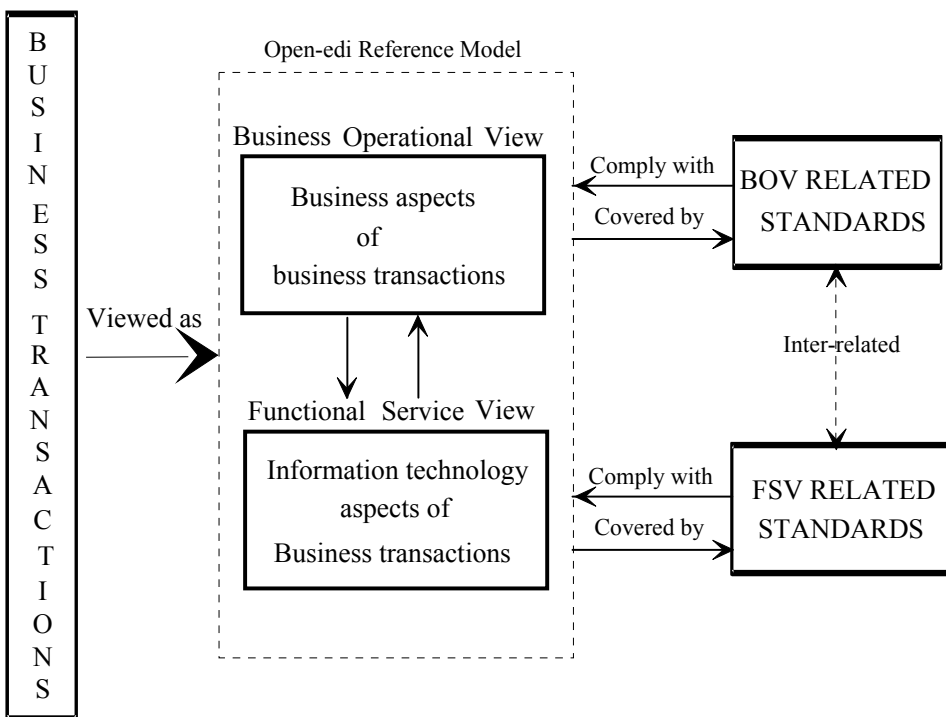


Figure 1 - Open-edi environment

¹ISO/IEC 14662:2003 (2nd ed). "Information technology - Open-edi Reference Mode/Technologies de l'information - Modèle de référence EDI-ouvert". The English and French versions of this ISO/IEC standard are publicly available. {See <http://www.jtc1.org> and go to "Freely Available Documents"}

ISO/IEC 14662, Clause 5 contains the following text:

"The intention is that the sending, by an Open-edi Party, of information from a scenario, conforming to Open-edi standards, shall allow the acceptance and processing of that information in the context of that scenario by one or more Open-edi Parties by reference to the scenario and without the need for agreement. However, the legal requirements and/or liabilities resulting from the engagement of an organization in any Open-edi transaction may be conditioned by the competent legal environment(s) of the formation of a legal interchange agreement between the participating organizations. Open-edi Parties need to observe rule-based behaviour and possess the ability to make commitments in Open-edi, (e.g., business, operational, technical, legal and/or audit perspectives)".

In addition, Annex A of the ISO/IEC 14662 "Open-edi Reference Model" contains a Figure A.1 *"Relationships of Open-edi standardization areas with other standards and import of the legal environment"*. This Part 5 standard is a BOV standard which focuses on the legal environment from an Open-edi perspective and as required follow-up standards development in support of the "Open-edi Reference Model".

The purpose of this Part 5 of ISO/IEC 15944 is thus directed at being able to identify and reference laws and regulations impacting scenarios and scenario components as external constraints. The primary source of such external constraints is jurisdictional domains.

In Part 1, constant reference is made and many rules are stated pertaining to the specification of external constraints when modelling business transactions through scenarios, scenario attributes and scenario components. These are consolidated in this Part 5 in Annex B (Normative) title *"Consolidated Set of Rules of ISO/IEC 15944-1 Governing Business Transactions, their Scoping and Specification as Open-edi Scenarios and their Components of Particular Relevance to Specifying "External Constraints"."*

Finally it is noted that the approach taken in ISO/IEC 15944-1:2002 in Clause 7 "Guidelines for scoping Open-edi Scenarios" is, as stated in Clause 7.1:

"The approach taken is that of identifying the most primitive common components of a business transaction and then moving from the general to the more detailed, the simplest aspects to the more complex, from no external constraints on a business transaction to those which incorporate external constraints, from no special requirements on functional services to specific requirements, and so on".

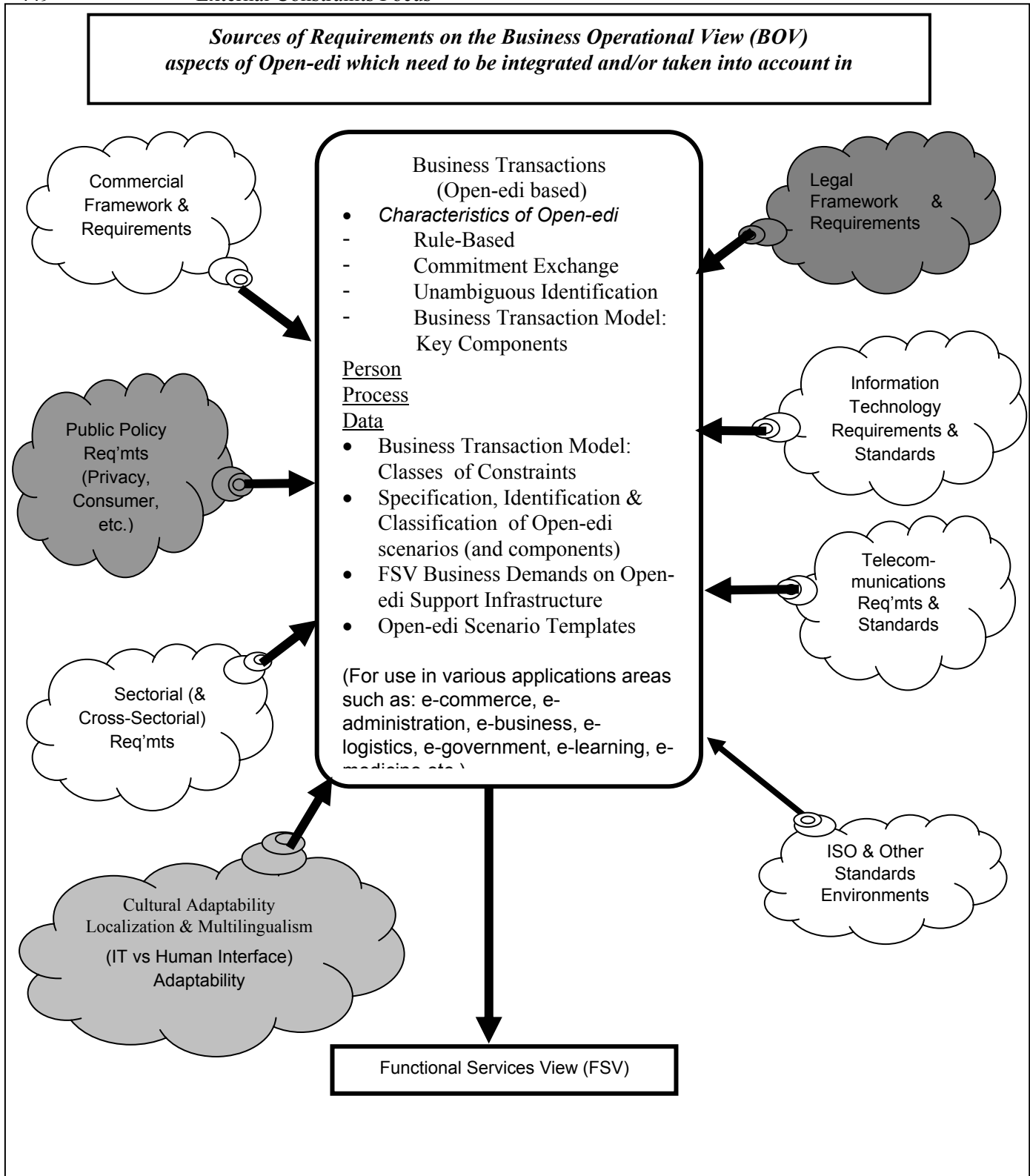
This Part 5 standard focuses on addressing the more simple, i.e., definable, aspects of external constraints for which the source is a jurisdictional domain. A useful characteristic of external constraints is that at the sectoral level, national and international levels, etc., focal points and recognized authorities often already exist. The rules and common business practices in many sectoral areas are already known. Use of this standard (and related standards) will facilitate the transformation of these external constraints (business rules) into specified, registered, and re-useable scenarios and scenario components

0.1.2 ISO/IEC 15944-1 "Business Agreement Semantic Descriptive Techniques"

ISO/IEC 15944-1:2002 is the first part of a multipart BOV standard which focuses on the many requirements of the business operational view aspects of Open-edi in support of electronic business transactions. These need to be integrated and taken into account in the development of business semantic descriptive techniques for modelling e-business transactions and components thereof as re-useable business objects. These include:

- commercial frameworks and associated requirements;
- legal frameworks and associated requirements;
- public policy requirements particularly those of a generic nature such as consumer protection, privacy, accommodation of handicapped/disabled;
- requirements arising from the need to support cultural adaptability. This includes meeting localization and multilingual requirements, (e.g., as may be required by a particular jurisdictional domain or desired to provide a good, service and/or right in a particular market. Here one needs the ability to distinguish, the specification of scenarios, scenario components, and their semantics, in the context of making commitments, between:
 - (1) the use of unique, unambiguous and linguistically neutral identifiers (often as composite identifiers) at the information technology (IT) interface level among IT systems of participation parties on the one hand; and, on the other,
 - (2) their multiple human interface equivalent expressions in a representation form appropriate to the Persons involved in the making of the resulting commitments.

Figure 2 provides an integrated view of these business operational requirements. Figure 2 is based on Figure 3 from ISO/IEC 15944-1:2002. Since the focus of this Part 5 is that of external constraints for which jurisdictional domains are the primary source, these have been highlighted here (in shaded form).



0.2 USE OF "PERSON", "ORGANIZATION" AND "PARTY" IN THE CONTEXT OF BUSINESS TRANSACTION AND COMMITMENT EXCHANGE²

In electronic business transactions, whether undertaken on a for profit or not-for-profit basis, the key element of any type of business transaction is commitment exchange among Persons made among their Decision Making Applications (DMAs) of the Information Technology Systems (IT Systems)³ acting on behalf of "Persons". "Persons" are the only entities able to make commitments. Quoting from Clause 0.4 in ISO/IEC 15944-1:2002:

"When the ISO/IEC 14662 Open-edi Reference Model standard was being developed, the "Internet" and "WWW" were an embryonic stage and their impact on private and public sector organizations was not fully understood. The Business Operational View (BOV) was therefore initially defined as:

- *"a perspective of business transactions limited to those aspects regarding the making of business decisions and commitments among organizations which are needed for the description of a business transaction".*

The existing and widely-used ISO/IEC 6523 standard definition of "organization" was used in ISO/IEC 14662. The fact that today Open-edi through the Internet and WWW also involves "individuals" has now been taken into account in this standard. Further, ISO/IEC 14662:1997 did not define "commitment", nor the discrete properties and behaviours an entity must have to be capable of making a "commitment" as well as bridging legal and IT perspectives in the dematerialized world of the Internet.

During the development of ISO/IEC 15944-1 the term "commitment" was defined. At the same time it was recognized that in order to be able to make a commitment, the term "Open-edi Party" was not specific enough to satisfy scenario specifications when the legal aspects of commitment were considered. In many instances commitments were noted as being actually among IT systems acting under the direction of those legally capable of making commitment, rather than the individuals in their own capacities. It was also recognized that in some jurisdictions commitment could be made by "artificial" persons such as corporate bodies. Finally, it was recognized that there are occasions where agents act, either under the instruction of a principal or as a result of requirement(s) laid down by a jurisdiction, or where an individual is prevented by a relevant jurisdiction from being able to make commitment.

To address these extended requirements an additional term: "Person", was defined. The construct of Person has been defined in such a way that it is capable of having the potential legal and regulatory constraints applied to it".

²The text in this section is based on existing text in Section "0.3" in ISO/IEC 15944-1:2002 and ISO/IEC 14662:2004 (2nd edition).

³See further Clause 5.2 "Functional Services View", ISO/IEC 14662:2004 "Open-edi Reference Model" (2nd Edition).

There are three broad categories, i.e., subtypes, of Persons as players in Open-edl, namely; the Person as "individual", the Person as "organization", and the Person as "public administration". There are also three basic (or primitive) roles of Persons in business transactions namely "buyer", "seller", and "regulator".

In modelling business transactions, jurisdictional domains prescribe their external constraints in the role of "regulator" and execute them as "public administration". {See further below Clause 5.4.5}

Very often the requirements of jurisdictional domains are specified through the use of sets of "Codes representing X..." These sets of codes are created and maintained by Source Authorities via a rule base with a resulting coded domain(s) in the form of a data element(s) whose permitted values represent predefined semantics and in a structured form, i.e., as a type of semantic component. As such, jurisdictional domains serve as Source Authorities for jurisdictional domains. {See further below Clause 9}.

These three sub-types of Persons are also the possible Source Authorities for coded domains. On the whole, Source Authorities for coded domains are either "organizations" or "public administrations".

The reader of this standard should understand that:

- the use of Person with a capital "P" represents Person as a defined term, i.e., as the entity within an Open-edl party that carries the legal responsibility for making commitment(s);
- "individual", "organization", and "public administration" are defined terms representing the three common subtypes of "Person"; and,
- the words "person(s)" and/or "party(ies)" are used in their generic contexts independent of roles of "Person" as defined in the ISO/IEC 14662 and ISO/IEC 15944-1 standards. A "party" to a business transaction has the properties and behaviours of a "Person".

0.3 IMPORTANCE AND ROLE OF TERMS AND DEFINITIONS

Project Editor's Note

At the SC32/WG1 October, 2004 meeting in Tallinn, Estonia it was decided, as reflected in the editing instructions for Parts 2, 3, 4 & 5 to add an Introductory Clause on the importance and role of definitions, which should be included in Parts 2, 3 4. and 5. At the time of the tabling of this Part 5 document, the text for this common clause was not yet finalized and agreed to among the Project Editors for Parts 2, 3, 4 & 5. The text that follows is that found in the FCD ballot document for 15944-2.

The ISO/IEC Directives Part 2 provide for "Terms and definitions" as a "Technical normative element," necessary for the understanding of certain terms used in the document. A primary reason for having "Terms and definitions" in a standard is because one cannot assume that there exists a common understanding, worldwide, for a specific concept. And even if one

assumes that such an understanding exists, then having such a common definition in Clause 3 serves to formally and explicitly affirm (re-affirm) such a common understanding, i.e. ensure that all parties concerned share this common understanding as stated through the text of the definitions in Clause 3.

A primary objective of this multipart standard on business semantic descriptive techniques is to ensure that there is a common understanding of the Business Operational View (BOV) from commercial, legal, ITC, public policy and cross-sectoral perspectives. It is therefore important to ascertain and confirm that which may be considered a “common understanding” in one of these domains is also so unambiguously understood and accepted in the others.

This sub clause is included in each Part of this multipart standard to emphasize that harmonized terms and definitions are essential to the continuity of the overall standard. Terms/definition should be established as early as possible in the standards development process. Comments on any definition should address the question of changes needed to avoid possible misinterpretation. Definitions may need to be amended/improved as part of the harmonization of terms/definitions among the various Parts.

In order to minimize ambiguity in the terms and definitions introduced in Clause 3 of each Part of this multipart standard, Canada has committed to develop French language equivalents for the same. Some terms/definitions may need to be amended/improved as part of developing the French language translation.

Normative Annex A Consolidated list of terms and definitions with cultural adaptability: ISO English and ISO French language equivalency is derived from Clause 3 of each Part of ISO/IEC 15944. Canada has committed to maintain this comprehensive list in a database as the reference file for Annex A. This Annex A reference file will insure the consistency of terms/definitions among the various Parts in the on-going harmonization effort. Annex A is repeated in each Part as a convenient reference.

0.4 IMPORTANCE OF THE TWO CLASSES OF CONSTRAINTS OF THE BUSINESS TRANSACTION MODEL (BTM)

The Business Transaction Model has two classes of constraints; namely:

- (1) those which are "self-imposed" and agreed to as commitments among the parties themselves, i.e., "internal constraints"; and,
- (2) those which are imposed on the parties to a business transaction based on the nature of the good, service and/or rights exchanged, the nature of the commitment made among the parties (including ability to make commitments, the location, etc.), i.e., "external constraints".

The focus of this Part 5 of ISO/IEC 15944 is on external constraints. Jurisdictional domains are the primary source of external constraints.⁴

⁴For business requirements of the Functional Service View and business demands on the Open-edi support infrastructure with respect to internal constraints, see further ISO/IEC 15944-1:2002 Clause 6.5.2 "Self-Imposed Constraints". ISO/IEC 15944-4:200n which focuses on accounting and economic aspects of business transactions does so from an "internal constraints" perspective.

ISO/IEC 15944-1:2002 Clause 6.1.6 provides normative text for these two classes of constraints. It is included in this Part 5 as Annex E. Annex G provides examples of various ontologies that result when modelling business scenarios with (1) internal constraints only; and (2) with external constraints.

0.5 USE OF "JURISDICTIONAL DOMAIN", AND "JURISDICTION" (AND "COUNTRY") IN THE CONTEXT OF BUSINESS TRANSACTIONS AND COMMITMENT EXCHANGE

Multiple definitions are currently in use for "jurisdiction". Some have legal status and others do not. Further, it is also a common practice to equate "jurisdiction" with "country". Yet at the same time, it is also a common practice to refer provinces, länder, cantons, territories, municipalities, etc., as "jurisdictions" or a court of law as having jurisdiction or international body having jurisdiction, etc. In summary, "jurisdiction" is commonly utilized with many different meanings in various contexts. Finally, there are differing "legal" definitions of "jurisdiction". Readers of this standard should understand that:

- the use of "jurisdictional domain" represents its use as a defined term; and,
- the use of "jurisdiction(s)" and/or "country(ies)" represents their use in their generic contexts.

0.6 USE OF "IDENTIFIER" AS "IDENTIFIER (IN BUSINESS TRANSACTIONS)"⁵

Clause 6.1.4 of ISO/IEC 15944-1 focuses on the requirement for the unambiguous identification of entities in business transactions. "Unambiguous" is a key issue in business transactions because states of ambiguity and uncertainty are not desired from commercial, legal, consumer and information technology perspectives. Issues of unambiguousness apply to all aspects of a business transaction and even more so to those which are EDI-based.

A key objective of the ISO/IEC 15944 multipart standard is to serve as a methodology and tool for the specification and unambiguous identification of Open-edi scenarios, scenario attributes and scenario components as re-useable elements, i.e., as re-useable business objects, in support of common business transactions. These and related objectives of interoperability and re-usability of Open-edi scenarios and scenario components for business transactions require their unambiguous identification.

ISO/IEC 15944-1:2002 defined "unambiguous" as:

unambiguous: *the level of certainty and explicitness required in the completeness of the*

⁵This is a summary of ISO/IEC 15944-1:2002, Clause 6.1.4 "Business transactions: unambiguous identification of entities". See also Annex C in Part 1 titled "Unambiguous Identification of Entities in a Business Transaction" which provides the informative and explanatory text for the rules and definitions in Clause 6.1.4.

636 *semantics of the recorded information interchanged appropriate to the goal of a business*
637 *transaction. [ISO/IEC 15944-1:2002 (3.66)]*

638
639 and "identifier (in business transaction)" as:

640
641 ***identifier (in business transaction):*** *an unambiguous, unique and a linguistically*
642 *neutral value, resulting from the application of a rule-based identification process.*
643 *Identifiers must be unique within the identification scheme of the issuing authority.*
644 *[ISO/IEC 15944-1:2002 (3.27)]*

645
646 Thus readers of this standard should understand that the "identifier" in this standard is used as a
647 defined term as "identifier (in a business transaction)".⁶

648 649 650 0.7 ORGANIZATION AND DESCRIPTION OF DOCUMENT

651
652 The document provides the key concepts required for addressing the legal environment in
653 developing the BOV of business transactions and scenarios which involve and are required to
654 support external constraints.

655
656 [to be completed as required for FCD version]

657
658 This document also provides checklists, i.e., templates, to guide the user through the mechanics of
659 determining the source of the external constraint(s) where these are jurisdictional domains and
660 determining the adequacy of the scenario specification as well as those of the scenario
661 components.

662
663 [to be completed as required for FCD version]

⁶Identifiers in business transactions can be simple or composite identifiers. This is dependent on (1) the rules governing "identifiers" as a rule-based process; (2) the "registration schema" utilized (as well as any permitted combinations of the same).

1 SCOPE

1.1 STATEMENT OF SCOPE

The modelling of a business transaction through scenarios and scenario components is done through specifying the applicable constraints through explicitly stated rules (See further Annex E)..

The primary purpose of this BOV standard ISO/IEC 15944-5 is to address specific aspects of business semantic descriptive techniques in order to be able to support legal requirements in modelling business transactions, i.e., in the form of jurisdictional domains as sources of external constraints. External constraints apply to most business transactions. Jurisdictional domains are the primary source of external constraints on a business transaction.

As such, this BOV-related standard addresses fundamental, i.e., more primitive, requirements of the legal environment on business transactions and also integrates the requirements of the information technology and telecommunications environments.

This standard contains a methodology and tool for specifying common classes of external constraints through the construct of "jurisdictional domains".

Jake to add note on modelling external constraints as scenarios, bo's etc.

In addition to the existing strategic directions of "portability" and "interoperability", the added strategic direction of ISO/IEC JTC1 of "cultural adaptability" is also supported in this standard.

1.2 EXCLUSIONS

1.2.1 Mutual Recognition of Jurisdictional Domain by Other Jurisdictional Domains

Resolving the issue of recognition of a jurisdictional domain, of whatever nature, by other jurisdictional domains is outside the scope of this standard.

1.2.2 Formation of Jurisdictional Domain

A jurisdictional domain can and does create other jurisdictional domains within it⁷.

Processes pertaining to the formation of a jurisdictional domain are outside the scope of this standard.

1.2.3 "Overlap" of and/or Conflict Among Jurisdictional Domains as Sources of External

⁷For example, on 1 April, 1999, the Canadian government through an Act of Parliament created the Territory of Nunavut out of the existing Northwest Territories.

Constraints

A business transaction by its very nature involves an exchange of commitments among autonomous parties. Commitment is the making or accepting of a right, an obligation, liability or responsibility by a Person while a business transaction pertains to the transfer of a good, service and/or right among the Persons involved.

It is not an uncommon occurrence that, depending on the goal and nature of the business transaction, multiple external constraints apply originating from various jurisdictional domains. It is also a not uncommon occurrence that there is overlap among such sets of external constraints and/or conflict among them.

Resolving issues of this nature is outside the scope of this standard. However, the modelling of business transaction as scenarios and scenario components as re-useable business objects may well serve as a useful methodology for identifying specific overlaps and conflicts (thereby serving as a tool for their harmonization).

The application of business semantic descriptive techniques to laws, regulations, etc., of jurisdictional domains and their modelling of such sets of external constraints as scenarios and scenario components is an essential step to their application in a systematic manner to (electronic) business transactions (and especially e-government, e-commerce, e-education, etc.).

As such, the Open-edi business agreement descriptive techniques methodologies can serve as a tool in harmonization and simplification of external constraints arising from jurisdictional domains.

1.2.4 Artificial Languages, Programming Languages, Mark-Up Languages, etc.

This Part 5 includes clauses which focus on external constraints on business transactions which pertain to the use of a "natural language" and/or a "special language" for the human interface equivalents of the business semantics of the set of commitments comprising a business transaction modelled through scenarios and scenario components. A primary source of such external constraints is jurisdictional domains.

With respect to the use of language(s) to provide human interface equivalent values, the following are excluded from the scope of this Part 5; namely:

- "artificial languages"
- "programming languages"⁸
- "hypertext languages"
- "indexing languages"⁹

⁸As stated in Clause 6.1.1 of ISO/IEC 15944-1:2002, the focus of this multipart standard is the "WHATs", i.e., BOV aspects, and not the FSV aspects, including programming language(s) used for implementations.

⁹There may be requirements of a jurisdictional domain for the use of an "indexing language", as a specified vocabulary, a controlled terminology, etc. However, on the whole "indexing languages" are outside the scope of this

➤ "mark-up languages"¹⁰

1.3 SCOPE - ASPECTS NOT CURRENTLY ADDRESSED

Project Editors' Notes

This is a stakeholder part agreed to be included as a result of the resolution of ballot comments on the 1st CD ballot document for 15944-5. It will be populated based on comments received on this 2nd CD and subsequent FCD ballot documents for 15944-5 and the results of subsequent ballot resolution meetings and "Editing instructions"

This part of ISO/IEC 15944-5 does not currently support the following requirements

- a) differences in equality of status of official languages within a jurisdictional domains¹¹;
- b) the identification and mapping of legally recognized languages for a specific purpose or within a particular jurisdictional domain;
- c) the identification and registration of schemas involving the control and management of legally recognized personas and associated unique identifiers for the unambiguous identification of the role qualification of a Person in a specified context
- d) the more detailed requirements of common public policy requirements of jurisdictional domains including consumer protection, privacy protection, individual accessibility and human rights;
- e) the more detailed requirements of records retention and other related information management requirements pertaining to commitment exchange among autonomous parties and subject to external constraints;
- f) other?

It is anticipated that some or all of these requirements will be addressed in future editions of this part of ISO/IEC 15944 or in companion standards or technical reports.

1.4 IT SYSTEMS ENVIRONMENT NEUTRALITY

This standard does not assume nor endorse any specific system environment, database

Part 5.

¹⁰This Part 5 is independent of, but maps to, any mark-up languages which may be used as a syntax for its implementation, (e.g., SGML, HTML, XML, RELAX-NG, tML, ebXML, etc.).

¹¹ Part 5 focuses on the essential basic, i.e. primitive, aspect of jurisdictional domains as sources of external constraints. As such this edition of ISO/IEC 15944-5 not address differences in status that may exists among official languages within a jurisdictional domain. It is not uncommon that where a jurisdictional domain has three or more official languages that not all these have equal status. For example, for use of some official language(s) in a jurisdictional domain , there could be criteria such as "where and when numbers warrant", "there is a significant demand for communication with and services from a public administration in that language", etc.

management system, database design paradigm, system development methodology, data definition language, command language, system interface, user interface, syntax, computing platform, or any technology required for implementation , i.e., it is information technology neutral. At the same time, this standard maximizes an IT-enabled approach to its implementation and maximizes semantic interoperability.

2 NORMATIVE REFERENCES

Project Editor's Notes

1. *The list of normative references presented below is a candidate list. It will be amended as required. Standards which end up not being used in the text at the FCD stage will be deleted.*
2. *This draft 2nd CD includes normative references of the nature of international legal conventions which "govern" jurisdictions as "Referenced Specifications", (e.g., those of the UN such as the Vienna Convention and others).*
3. *ISO Directives allow for normative referencing of non-ISO/IEC "documents" as "Referenced Specifications" (RS). {See further, ISO/IEC JTC1 N 4046 "The Normative Referencing of Specifications other than International Standards in JTC1 International Standards - Guidelines for JTC1 SCs" (1996-03-13). These have been amended as per JTC1/SC32 Santa Fe (2003) Plenary Resolution 30. {See 32N0978}}*
4. *The Normative References are divided into two parts; namely:*
 - 2.1 *ISO/IEC*
 - 2.2 *Referenced Specifications (or other appropriate title as per ITTF requirements).*

2.1 ISO/IEC¹²

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Collective Standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ISO 639-2:1998 (E/F) Codes for the representations of names of languages - Part 2: Alpha-3 code/Codes pour la représentation des noms de langue - Partie 2: Code alpha-3

ISO 704:2000 (E/F) Terminology work - Principles and methods/Travail terminologique -

¹²For standards referenced for which both English and French versions are available both the English and French language titles are provided. This is independent of whether the English and French language versions of the standard are published as a single document or as separate documents. For those standards which are available in English only, only the English language title is provided.

827 Principes et méthodes
828
829 ISO 1087-1:2000 (E/F) Terminology work - Vocabulary - Part 1: Theory and application/Travaux
830 terminologiques - Vocabulaire - Partie 1: Théorie et application
831
832 ISO 1087-2:2000 (E/F) Terminology work - Vocabulary - Part 2: Computer applications/Travaux
833 terminologiques - Vocabulaire - Partie 2: Applications logicielles.
834
835 ISO/IEC 2382:1976-2000 (E/F) Information Technology - Vocabulary, Parts 1-34/Technologies
836 de l'information - Vocabulaire, Parties 1-34 (as applicable)
837
838 ISO 2788:1986 (E/F) Documentation - Guidelines for the establishment and development of
839 monolingual thesauri/Documentation - Principes directeurs pour l'établissement et le
840 développement de thesaurus monolingues
841
842 ISO 3166-1:1997 (E/F) Codes for the representation of names of countries and their subdivisions
843 - Part 1: Country codes/Codes pour la représentations des noms de pays et de leur subdivisions -
844 Partie 1: Codes pays
845
846 ISO 3166-2:1998 (E/F) Codes for the representation of countries and their subdivisions - Part 2:
847 Country subdivision code/Codes pour la représentation des noms de pays et de leurs subdivisions
848 - Partie 2: Code pour les subdivisions de pays
849
850 ISO 3166-3:1999 (E/F) Codes for the representation of countries and their subdivisions - Part 3:
851 Code for formerly used names of countries/Codes pour la représentation des noms de pays et de
852 leurs subdivisions - Partie 3: Code pour les noms de pays antérieurement utilisés
853
854 ISO 4217:2001 (E/F) Codes for the representation of currencies and funds/Codes pour la
855 représentation des monnaies et types de fonds
856
857 ISO 5127:2001 (E) Information and documentation - Vocabulary
858
859 ISO 5127-1:1983 (E/F) Documentation and information - Vocabulary - Part 1: Basic
860 concepts/Documentation et information - Vocabulaire - Partie 1: Notions fondamentales
861
862 ISO 5127-2:1983 (E/F) Documentation and information - Vocabulary - Part 2: Traditional
863 documents/Documentation et information - Vocabulaire - Partie 2: Iconic documents
864
865 ISO 5127-6:1983 (E/F) Documentation and information - Vocabulary - Part 6: Documentary
866 languages/Documentation et information - Vocabulaire - Partie 6: Langues documentaires
867
868 ISO 5127-11:1987 (E/F) Documentation and information - Vocabulary - Part 11: Audio-visual
869 documents/Documentation et information - Vocabulaire - Partie 11: Documents audiovisuels
870
871 ISO/IEC FCD 5218:2004(E/F) "Information technology – Codes for the Representation of the
872 Human Sexes"/ «Technologies de l'information –Codes pour la représentation des sexes
873 humains»

874
875 ISO 5964:1985 (E/F) Documentation - Guidelines for the establishment and development of
876 multilingual thesauri/Documentation - Principes directeurs pour l'établissement et le
877 développement de thesaurus multilingues
878
879 ISO/IEC 6523-1:1998 (E/F) Information Technology - Structure for the identification of
880 organizations and organization parts Part 1 : Identification of organization identification
881 schemes/Technologies de l'information - Structures pour l'identification des organisations et des
882 parties d'organisations - Partie 1: Identification des systèmes d'identification d'organisation
883
884 ISO/IEC 6523-2:1998 (E/F) Information Technology - Structure for the identification of
885 organizations and organization parts Part 2: Registration of organizations identification
886 schemes/Technologies de l'information - Structures pour l'identification des organisations et des
887 parties d'organisations - Partie 2: Enregistrement des systèmes d'identification d'organisation
888
889 ISO/IEC 7501-1:1977(E) Identification cards -- Machine readable travel documents -- Part 1:
890 Machine readable passport
891
892 ISO/IEC 7501-2: 1977(E) Identification cards -- Machine readable travel documents -- Part 2:
893 Machine readable visa
894
895 ISO/IEC 7501-3:2003(E) Identification cards -- Machine readable travel documents -- Part 3:
896 Size 1 and Size 2 Machine readable official travel documents
897
898 ISO/IEC 7812-1:2000(E) Identification cards – Identification of issuers Part 1: Numbering system
899
900 ISO/IEC 7812-2: 2000(E) Identification cards – Identification of issuers -- Part 2: Application
901 and registration procedures
902
903 ISO 8583-1:2003(E) Financial transaction card originated messages - Interchange message
904 specifications-- Part 1: Messages, data elements and code values
905
906 ISO 8583-2:1998 (E) Financial transaction card originated messages -- Interchange message
907 specifications -- Part 2: Application and registration procedures for Institution Identification Codes
908 (IIC)
909
910 ISO 8583-3:2003 (E) Financial transaction card originated messages -- Interchange message
911 specifications -- Part 3: Maintenance procedures for messages, data elements and code values
912
913 ISO 8601:2000 (E) Data elements and interchange formats - Information interchange -
914 Representation of dates and times (available in English only).
915
916 ISO/IEC 9594.1-9:1995 (E) Information technology - Open Systems Interconnection - The
917 Directory. (This nine part standard was developed in collaboration with the ITU-T with the
918 identical text published as ITU-T Recommendation X.500)
919
920 ISO 9735-1:1998 (E) Electronic data interchange for administration, commerce and transport
921 (EDIFACT) -- Application level syntax rules (Syntax version number:4) -- Part 1: Syntax rules

922 common to all parts, together with syntax service directories for each of the parts
923
924 ISO/IEC 9798-1:1997 (E) Information technology - Security techniques - Entity authentication -
925 Part 1: General
926
927 ISO/IEC 9834-1:1993 Information technology - Open Systems Interconnection - Procedures for
928 the operation of OSI Registration Authorities - Part 1: General procedures
929
930 ISO/IEC 9834-2:1993 Information technology - Open Systems Interconnection - Procedures for
931 the operation of OSI Registration Authorities - Part 2: Registration procedures for OSI document
932 types
933
934 ISO/IEC 9834-6:1993 Information technology - Open Systems Interconnection - Procedures for
935 the operation of OSI Registration Authorities - Part 6: Application processes and application
936 entities
937
938 ISO/IEC 9834-7:1998 Information technology - Open Systems Interconnection - Procedures for
939 the operation of OSI Registration Authorities - Part 7: Assignment of international names for use
940 in specific contexts
941
942 ISO/IEC 10164-15:2001 (E) Information technology -- Open Systems Interconnection -- Systems
943 Management: Scheduling function. [also ITU-T Recommendation X.746]
944
945 ISO 10241:1997 (E/F) International terminology standards - Preparation and Layout/Normes
946 terminologiques internationales - Élaboration et présentation
947
948 ISO/IEC 11179-1:1999 (E) Information technology -- Specification and standardization of data
949 elements - Part 1: Framework for the specification and standardization of data elements
950
951 ISO/IEC 11179-3:1994 (E) Information technology -- Specification and standardization of data
952 elements -- Part 3: Basic attributes of data elements
953
954 ISO/IEC 11179-3:2003 (E) Information technology - Metadata Registries (MDR) - Part 3:
955 Registry Metamodel and basic attributes
956
957 ISO/IEC 11581-5:2000 (E) Information technology -- User system interfaces and symbols -- Icon
958 symbols and functions -- Part 5: Tool icons
959
960 ISO/IEC 13251:2001 (E/F) Collection of graphical symbols for office equipment/Collection de
961 symboles graphiques pour équipement de bureau
962
963 ISO/IEC TR 14369:1999 (E) Information technology -- Programming languages, their
964 environments and system software interfaces -- Guidelines for the preparation of Language-
965 Independent Service Specifications (LISS)
966
967 ISO/IEC 14662:1997 (E/F) Information technology - Open-edition Reference Model/Technologies de
968 l'information - Modèle de référence EDI-ouvert

ISO/IEC TR 15285:1998 (E) Information technology -- An operational model for characters and glyphs

ISO/IEC 15944-1:2002 (E) Information Technology - Business Agreement Semantic Descriptive Techniques - Part 1: Operational Aspects of Open-edi for Implementation

ISO/IEC 2nd CD 15944-2 (E) Information Technology - Business Agreement Semantic Descriptive Techniques - Part 2: Registration of Scenarios and their Components as Business Objects

ISO 19108:2000 (E) Geographic information - Temporal schema

ISO 19115:2003 (E) Geographic information – Metadata

ISO 19135:2005 (E) Geographic information – Procedures for registration of itmes of geographic information

ISO/IEC 19501-1:2002 (E) Information technology - Unified Modelling Language (UML) - Part 1: Specification

2.2 REFERENCED SPECIFICATIONS

Project Editors' Note(s):

1. *The Clause 2.2 will not be exhaustive. It will contain only those referenced specifications which are actually used in this standard.*
2. *For each referenced specification noted here, a "referencing explanatory report (RER) which will be included in Annex X (Informative).*
3. *[to be completed as part of 2nd CD ballot resolution and prior to FCD stage]*

[currently in alphabetical order by English title]

Count	Title
1	Basil Convention on the Control of Transborder Movement of Hazardous Wastes
2	Charter of the United Nations (as signed 1945 and Amended 1965, 1968, and 1973.
3	"Competent Authority" means one of WIPO 170 Member States
4	Constitution of the World Health Organization (WHO) International Health Regulations (1969)
5	Convention for the Unification of Certain Rules for International Carriage by Air (Montreal, 1999)

Count	Title
6	General Agreement on Tariffs and Trade (GATT) (1947, 1994)
7	Harmonized Commodity Description and Coding System (Harmonized System or HS System, 1983, and subsequent amendments)
8	International Commercial Terms (INCOTERMS)
9	International Covenant on Economic, Societal and Cultural... (1966)
10	International Convention for the Safety of Life at Sea (SOLAS)
11	International Maritime Dangerous Goods (IMDG) Code
12	International Patent Classification (IPC)
13	LOS Convention
14	TRIPP Agreement (Intellectual Property Regime) - stronger than the Berne Convention
15	UPC/EAN
16	Vienna Convention on Diplomatic and Consular Relations
17	Vienna Convention on the Law of Treaties (1969 1155 U.N.T.S. 331, in force 1980.
18	World Trade Organization (WTO)

3 DEFINITIONS

Project Editors' Temporary Notes on Terms/Definitions

1. *All the definition which are found in the 1st CD Ballot document, i.e. SC32 N1080, for which no ballot comments were received, i.e. accepted, have been carried forward into this 2nd CD. As such they are deemed to be accepted and stable.*
2. *Addition and changes to this 2nd CD ballot document with respect to Clause 3 Definitions are (1) either those which are as a result of the Project Editors following-up on the SC32/WG1 N027R2 "Editing instructions for 15944-5" and those resulting from the preparation of the 15944-2 FCD ballot document.*
3. *At the FCD ballot document preparation stage any definition listed in this Clause 3 which is not utilized in this Part 5 will be removed.*
4. *The current set of terms and definitions presented here integrates:*
 - (1) *those drawn from existing ISO/IEC, ISO and other standards with the source standard being referenced; and,*
 - (2) *those introduced as part of this standard. They are referenced as "[ISO/IEC 15944-5]"*

Following the 2nd CD ballot resolution phase and as part of the preparation of this

standard for FCD ballot, Annex A will be provided and the "missing" ISO French equivalent terms and definitions provided. This development of ISO French language equivalents will also serve as an "ISO 9000" quality control check into the FCD stage of the development of this standard.

4. The development of this 2nd CD ballot document is harmonized with the development of the other Parts of the ISO/IEC 15944, namely:

➤ the FCD ballot document for Part 2 Information Technology - Business Agreement Semantic Descriptive Techniques - Part 2: Registration of Scenarios and their Components as Business Objects. Here the Clause 3 sub-clause of this FCD ballot document has been identified.

➤ the most current version available (as of 31 December, 2004) of the Part 3 Information Technology - Business Agreement Semantic Descriptive Techniques - Part 3: Open-edi Descriptive Techniques

➤ the most current version available (as of 31 December, 2004) of the Part 4 Information technology - Business Agreement Semantic Descriptive Techniques - Part 4: Business Transactions and Scenarios – Accounting and Economic Ontology

4. Further, there are some definitions/terms in Clauses 5+ which have not yet been integrated into Clause 3. This will be done following the 2nd CD ballot resolution stage and preparation of the FCD document.

3.001

address

a set of **data elements** that specifies a **location** to which a recorded information item(s), a **business object(s)**, a material object(s) and/or a person(s) can be sent to or received from.

NOTE 1: A location can be specified as either a physical or electronic address.

NOTE 2: In the identification, referencing and retrieving of registered business objects, it is necessary to state whether the pertinent recorded information is available in both physical and virtual forms.

NOTE 3: In the context of Open-edi, a "recorded information item" is modelled and registered as an Open-edi Scenario, Information Bundle (IB) Semantic Components (SC), or any combination thereof, i.e. as sets of recorded information.

[ISO/IEC 15955-2:200n (3.1)]

3.002

1078 **agent**
1079 a **Person** acting for another **Person** in a clearly specified capacity in the context of a **business**
1080 **transaction**.

1081
1082 NOTE Excluded here are agents as "automatons" (or robots, bobots, etc.). In ISO/IEC 14662,
1083 "automatons" are recognized and provided for but as part of the Functional Service View (FSV)
1084 where they are defined as an "Information Processing Domain (IPD)".
1085 [ISO/IEC 15944-1:2002 (3.1)]
1086

1087 **3.003**

1088 **artificial language**
1089 **language** whose rules are explicitly established prior to its use.
1090 [ISO 5127 (1.1.2.03)]
1091

1092 **3.004**

1093 **attribute**
1094 a characteristic of an **object** or **entity**.
1095 [ISO/IEC 11179-3:2003 (3.1.3)]
1096

1097 **3.005**

1098 **authentication**
1099 the provision of assurance of the claimed identity of an entity.
1100 [ISO/IEC 10181-2:1996]
1101

1102 **3.006**

1103 **authenticity**
1104 the property that ensures that the identity of a subject or resource is the one claimed. Authenticity
1105 applies to entities such as users, processes, systems and information.
1106 [ISO/IEC TR 13335-1:1996 (3.3)]
1107

1108 **3.007**

1109 **business**
1110 a series of processes, each having a clearly understood purpose, involving more than one **Person**,
1111 realized through the exchange of information and directed towards some mutually agreed upon
1112 goal, extending over a period of time.
1113 [ISO/IEC 14662:2004 (3.1.2)]
1114

1115 **3.008**

1116 **business object**
1117 an unambiguously identified, specified, referenceable, registered and re-useable **Open-ed**
1118 **scenario** or **scenario component** of a **business transaction**.
1119

1120 NOTE 1 As an "object", a "business object" exists only in the context of a business transaction.
1121

1122 NOTE 2 A business object includes any defined set of recorded information exchanged among
1123 Persons as part of commitment exchange.
1124 [ISO/IEC 15944-2:200n (3.nnn)]

1125
1126 **3.009**

1127 **Business Operational View (BOV)**

1128 a perspective of **business transactions** limited to those aspects regarding the making of business
1129 decisions and **commitments** among **Persons**, which are needed for the description of a **business**
1130 **transaction**.

1131 [ISO/IEC 14662:2004 (3.1.3)]
1132

1133 **3.010**

1134 **business transaction**

1135 a predefined set of activities and/or processes of **Persons** which is initiated by a **Person** to
1136 accomplish an explicitly shared business goal and terminated upon recognition of one of the
1137 agreed conclusions by all the involved **Persons** although some of the recognition may be implicit.

1138 [ISO/IEC 14662:2004 (3.1.4)]
1139

1140 **3.011**

1141 **buyer**

1142 a **Person** who aims to get possession of a good, service and/or right through providing an
1143 acceptable equivalent value, usually in money, to the **Person** providing such a good, service
1144 and/or right.

1145 [ISO/IEC 15944-1:2002 (3.8)]
1146

1147 **3.012**

1148 **character**

1149 a member of a set of elements that is used for the representation, organization or control of **data**.

1150
1151 NOTE Characters may be categorized as follows:
1152

1153 TYPES AND EXAMPLES

1154 graphic character: (e.g., digit, letter, ideogram, special character)
1155

1156 control character: (e.g., transmission control, character, format effector, code extension character,
1157 device control character).

1158 [ISO/IEC 2382-4:1999 (04.01.01)]
1159

1160 **3.013**

1161 **character set**

1162 a finite set of different **characters** that is complete for a given purpose.
1163

1164 EXAMPLE The international reference version of the character set of ISO 646.

1165 [ISO/IEC 2382-4:1999 (04.01.02)]
1166

1167 **3.014**

1168 **characteristic**

1169 abstraction of a **property** of an **object** or of a set of **objects**.
1170

1171 NOTE: Characteristics are used for describing concepts.

[ISO 1087-1:2000 (3.2.4)]

3.015

classification system

[to be inserted prior to FCD stage based on ISO TC46 standards]

3.016

code

data representation in different forms according to a pre-established set of **rules**.

NOTE In this standard the "pre-established set of rules" are determined and enacted by a Source Authority and must be explicitly stated.

[ISO 639-2:1998 (3.1)]

3.017

code (in coded domain)

an identifier, i.e. an **ID code**, assigned to an **entity** as member of a **coded domain** according to the pre-established set of rules governing that coded domain.

NOTE 1 [to be added, if required]

NOTE 2 [to be added, if required]

[ISO/IEC 15944-5]

3.018

coded domain

a domain for which (1) the boundaries are defined and explicitly stated as a **rulebase** of a **coded domain Source Authority**; and, (2) each **entity** which qualifies as a member of that domain is identified through the assignment of a unique **ID code** in accordance with the applicable **Registration Schema** of that **Source Authority**.

NOTE 1 The rules governing the assignment of an ID code to members of a coded domain reside with its Source Authority and forms part of the Coded Domain Registration Schema of the Source Authority.

NOTE 2 Source Authorities which are jurisdictional domains are the primary source of coded domains.

NOTE 3 A coded domain is a data set for which the content of the data element values are predetermined and defined according to the rule base of its Source Authority and as such have predefined semantics.

NOTE 4 Associated with a code in a coded domain can be:

- one or more equivalent codes;
- one or more equivalent representations especially those in the form of human interface

equivalent (linguistic) expressions.

NOTE 5 In a coded domain the rules for assignment and structuring of the ID codes must be specified.

NOTE 6 Where an entity as member of a coded domain is allowed to have, i.e., assigned, more than one ID code, i.e., as equivalent ID codes (possibly including names), one of these must be specified as the pivot ID code.

NOTE 7 A coded domain in turn can consist of two or more coded domains, i.e., through the application of the inheritance principle of object classes.

NOTE 8 A coded domain may contain ID code which pertain to predefined conditions other than qualification of membership of entities in the coded domain. Further, the rules governing a coded domain may or may not provide for user extensions.

EXAMPLE Common examples include: (1) "0" (or "00", etc.) = Others, Not Known; (2) "9" or ("99", etc.) = Not Applicable.

NOTE 9 In object methodology, entities which are members of a coded domain are referred to as instances of a class.

NOTE 10 In UML modelling notation, an ID code is viewed as an instance of an object class. [ISO/IEC 115944-2:200n (3.12)]

3.019

coded Domain Source Authority

a **Person**, usually an **organization**, which sets the **rules** governing a **coded domain**

NOTE 1 For widely used coded domains the coded domain Source Authority is often a jurisdictional domain.

NOTE 2 Specific sectors, (e.g., banking, transport, geomatics, agriculture, etc.), may have particular coded domain Source Authority(ies) whose coded domains are used in many other sectors.

NOTE 3 A coded domain Source Authority usually also functions as a Registration Authority but can use an agent, i.e., another Person, to execute the registration function on its behalf.

[ISO/IEC 15944-2:200n (3.13)]

3.020

commitment

the making or accepting of a right, obligation, liability or responsibility by a **Person** that is capable of enforcement in the jurisdiction in which the **commitment** is made.

[ISO/IEC 15944-1:2002 (3.9)]

3.021

composite identifier

an **identifier (in a business transaction)** functioning as a single unique identifier consisting of one or more other identifiers, and/or one or more other **data elements**, whose interworking are **rule-based**.

NOTE 1 Most widely used composite identifiers consist of the combinations of:

- the ID of the overall identification/numbering schema, (e.g., ISO/IEC 6532, ISO/IEC 7812, ISO/IEC 7506, UPC/EAN, ITU-R E.164, etc.), which is often assumed;
- the ID of the issuing organization (often based on a block numeric numbering schema); and,
- the ID of the entities forming part of members of the coded domain of each issuing organization.

NOTE 2 Identifiers (in business transactions) are for the most part composite identifiers.

[ISO/IEC 15944-2:200n (3.15)]

3.022

composite type

a data type that has a data structure composed of the data structures of one or more data types and that has its own set of permissible operations.

EXAMPLE A data type "complex number" may be composed of two "real number" data types.

NOTE The operations of a composite type may manipulate its occurrences as a unit or may manipulate portions of these occurrences.

[ISO/IEC 2382-17:1999 (17.05.10)]

3.023

computational integrity

the expression of a **standard** in a form that ensures precise description of behaviour and semantics in a manner that allows for automated processing to occur, and the managed evolution of such standards in a way that enables dynamic introduction by the next generation of information systems.

NOTE Open-edl standards have been designed to be able to support computational integrity requirements especially from a registration and re-use of business objects perspectives.

[ISO/IEC 15944-2:200n (3.16)]

3.024

computer program

means **data** representing instructions or statements that, when executed in a **computer system**, causes the computer to perform a function.

3.025

computer service

a service which includes data processing and the storage or retrieval of **data**.

3.026

computer system

means a device that, or a group of interconnected or related devices one or more of which,

- (a) contains **computer programs** or other **data**, and
- (b) pursuant to **computer programs**,
 - (i) performs logic and control, and
 - (ii) may perform any other function.

3.027

constraint

a **rule**, explicitly stated, that prescribes, limits, governs or specifies any aspect of a **business transaction**.

NOTE 1 Constraints are specified as rules forming part of components of Open-edl scenarios, i.e., as scenario attributes, roles, and/or information bundles.

NOTE 2 For constraints to be registered for implementation in Open-edl, they must have unique and unambiguous identifiers.

NOTE 3 A constraint may be agreed to among parties (condition of contract) and is therefore considered an "internal constraint". Or a constraint may be imposed on parties, (e.g., laws, regulations, etc.), and is therefore considered an "external constraint".
[ISO/IEC 15944-1:2002 (3.11)]

3.028

controlled vocabulary (CV)

a **vocabulary** for which the entries, i.e., definition/term pairs, are controlled by a **Source Authority** based on a **rulebase** and process for addition/deletion of entries.

NOTE 1 In a controlled vocabulary, there is a one-to-one relationship of definition and term.

EXAMPLE The contents "Clause 3 Definitions" in ISO/IEC standards are examples of controlled vocabularies with the entities being identified and referenced through their ID code, i.e., via their clause numbers.

NOTE 2 In a multilingual controlled vocabulary, the definition/term pairs in the languages utilized are deemed to be equivalent, i.e. with respect to their semantics.

NOTE 3 The rule base governing a controlled vocabulary may include a predefined concept system

[ISO/IEC 15944-5:200n]

3.029

consumer

a **buyer** who is an **individual** to whom consumer protection requirements are applied as a set of **external constraints** on a **business transaction**.

NOTE 1 Consumer protection is a set of explicitly defined rights and obligations applicable as external constraints on a business transaction.

NOTE 2 The assumption is that a consumer protection applies only where a buyer in a business transaction is an individual. If this is not the case in a particular jurisdiction, such external constraints should be specified as part of scenario components as applicable.

NOTE 3 It is recognized that external constraints on a buyer of the nature of consumer protection may be peculiar to a specified jurisdiction.

[ISO/IEC 15944-1:2002 (3.12)]

3.030

data

a reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing.

NOTE Data can be processed by humans or by automatic means.

[ISO/IEC 2382-1:1998 (01.01.02)]

3.031

data (in a business transaction)

representations of **recorded information** that are being prepared or have been prepared in a form suitable for use in a **computer system**.

[ISO/IEC 15944-1:2002 (3.14)]

3.032

data element

a unit of data for which the **definition**, **identification**, representation and permissible values are specified by means of a set of **attributes**.

[adapted from ISO/IEC 11179-3:2003 (3.3.36)]

3.033

data element (in organization of data)

a unit of **data** that is considered in context to be indivisible.

EXAMPLE The data element "age of a person" with values consisting of all combinations of 3 decimal digits.

NOTE Differs from the entry 17.06.02 in ISO/IEC 2382-17.

[ISO/IEC 2382-04:1998 (04.07.01)]

3.034

dataset

identifiable collection of **data**.

NOTE A dataset may be a smaller grouping of data which, though limited by some constraint such as spatial extent or feature type, is located physically within a larger dataset. Theoretically, a dataset may be as small as a single feature or feature attribute contained within a larger dataset. A hardcopy map or chart may be considered a dataset.

[ISO 19115:2003 (4.2)]

3.035

dataset series

collection of **datasets** sharing the same product specification.

[ISO 19115:2003 (4.3)]

3.036

Decision Making Application (DMA)

the model of that part of an **Open-edi system** that makes decisions corresponding to the **role(s)** that the **Open-edi Party** plays as well as the originating, receiving and managing data values contained in the instantiated **information bundles** which is not required to be visible to the other **Open-edi Parties**.

[ISO/IEC 14662:2004 (4.2.1)]

3.037

de facto language

a **natural language** used in a **jurisdictional domain** which has the properties and behaviours of an **official language** in that **jurisdictional domain** without having formally been declared as such by that **jurisdictional domain**.

NOTE 1 A de facto language of a jurisdictional domain is often established through long term use and custom.

NOTE 2 Unless explicitly stated otherwise and for the purposes of modelling a business transaction through scenario(s), scenario attributes and/or scenario components, a de facto language of a jurisdictional domain is assumed to have the same properties and behaviours of an official language.

3.038

definition

representation of a concept by a descriptive statement which serves to differentiate it from related concepts.

[ISO/IEC 1087-1:2000 (3.3.1)]

3.039

dictionary

list of words or category of words from a **language** arranged alphabetically or systematically and explained in that **language** or translated into one or more other **languages**.

[ISO 5217 (2.2.1.16)]

1451
1452 **3.040**

1453 **distinguishing identifier**

1454 **data** that unambiguously distinguishes an **entity** in the authentication process.

1455 [ISO/IEC 10181-2:1996]

1456
1457 **3.041**

1458 **Electronic Data Interchange (EDI)**

1459 the automated exchange of any predefined and structured data for business purposes among
1460 information systems of two or more **Persons**.

1461
1462 NOTE This definition includes all categories of electronic business transactions.

1463 [ISO/IEC 14662:2004 (3.1.5)]

1464
1465 **3.042**

1466 **entity**

1467 any concrete or abstract thing that exists, did exist, or might exist, including associations among
1468 these things.

1469
1470 EXAMPLE A person, object, event, idea, process, etc.

1471
1472 NOTE An entity exists whether data about it are available or not.

1473 [ISO/IEC 2382-17:1999 (17.02.05)]

1474
1475 **3.043**

1476 **entity authentication**

1477 the corroboration that the **entity** is the one claimed.

1478 [ISO/IEC 9798-1:1997 (3.3.11); ISO/IEC 15944-1:2002 (3.21)]

1479
1480 **3.044**

1481 **exchange code set**

1482 a set of ID codes identified in a coded domain as being suitable for information exchange as
1483 shareable data.

1484
1485 NOTE Examples here are the 3 numeric, 2-alpha and 3-alpha codes in ISO 3166-1.

1486
1487 **3.045**

1488 **external constraint**

1489 a **constraint** which takes precedence over **internal constraints** in a **business transaction**, i.e., is
1490 external to those agreed upon by the parties to a business transaction.

1491
1492 NOTE 1 Normally external constraints are created by law, regulation, orders, treaties,
1493 conventions or similar instruments.

1494
1495 NOTE 2 Other sources of external constraints are those of a sectorial nature, those which pertain
1496 to a particular jurisdiction or a mutually agreed to common business conventions, (e.g.,
1497 INCOTERMS, exchanges, etc.).

NOTE 3 External constraints can apply to the nature of the good, service and/or right provided in a business transaction.

NOTE 4 External constraints can demand that a party to a business transaction meet specific requirements of a particular role.

EXAMPLE 1 Only a qualified medical doctor may issue a prescription for a controlled drug.

EXAMPLE 2 Only an accredited share dealer may place transactions on the New York Stock Exchange.

EXAMPLE 3 Hazardous wastes may only be conveyed by a licensed enterprise.

NOTE 5 Where the information bundles (IBs), including their Semantic Components (SCs) of a business transaction are also to form the whole of a business transaction, (e.g., for legal or audit purposes), all constraints must be recorded.

EXAMPLE There may be a legal or audit requirement to maintain the complete set of recorded information pertaining to a business transaction, i.e., as the information bundles exchanged, as a "record".

NOTE 6 A minimum external constraint applicable to a business transaction often requires one to differentiate whether the Person, i.e., that is a party to a business transaction, is an "individual", "organization", or "public administration". For example, privacy rights apply only to a Person as an "individual".

[ISO/IEC 15944-1:2002 (3.23)]

3.046

Formal Description Technique (FDT)

a specification method based on a description language using rigorous and unambiguous rules both with respect to developing expressions in the language (formal syntax) and interpreting the meaning of these expressions (formal semantics).

[ISO/IEC 14662:2004 (3.1.6)]

3.047

glyph

a recognizable abstract graphic symbol which is independent of any specific design

[ISO/IEC 9541-1:1991; ISO/IEC TR 15285:1998 (3.5)]

3.048

Human Interface Equivalent (HIE)

a representation of the **unambiguous** and IT-enabled semantics of an **IT interface equivalent** (in a **business transaction**), often the **ID code** of a **coded domain** (or a **composite identifier**), in a formalized manner suitable for communication to and understanding by humans.

NOTE 1 Human interface equivalents can be linguistic or non-linguistic in nature but their

semantics remains the same although their representations may vary.

NOTE 2 In most cases there will be multiple human interface equivalent representations as required to meet localization requirements, i.e. those of a linguistic nature, jurisdictional nature, and/or sectorial nature.

NOTE 3 Human interface equivalents include representations in various forms or formats, (e.g., in addition to written text those of an audio, symbol (and icon) nature, glyphs, image, etc.) [ISO/IEC 15944-5:200n (3.29)]

3.049

IB Identifier

a unique, linguistically neutral, unambiguous referenceable **identifier** for an **Information Bundle (IB)**

3.050

ID code

an identifier assigned by the **Source Authority** to a member of a **coded domain**. **ID codes** must be unique within their **Coded Domain Registration Schema**.

NOTE 1 Associated with an ID code in a coded domain can be:

- one or more equivalent codes;
- one or more equivalent representations especially those in the form of human equivalent (linguistic) expressions.

NOTE 2 Where an entity as a member of a coded domain is allowed to have more than one ID code, i.e., as equivalent codes (possibly including names), one of these must be specified as the pivot ID code.

EXAMPLE Common examples include: (1) the use of an ID code "0" (or "00", etc.), for "Other, Not Known"; (2) the use of an ID code "9" (or "99") for Not Applicable; (3) the pre-reservation of a series or set of ID codes for use for "user extensions".

NOTE 3 A coded domain may contain ID codes pertaining to entities which are not members as peer entities, i.e., have the same properties and behaviours, such as ID codes which pertain to predefined conditions other than member entities. If this is the case, the rules governing such exceptions must be predefined and explicitly stated.

NOTE 4 An ID Code often has the properties of a semantic identifier and can be utilized as such.

NOTE 5 In UML modelling notation, an ID code is viewed as an instance of an object class. [ISO/IEC 15944-2:200n (3.31)]

3.051

identification

a rule-based process, explicitly stated, involving the use of one or more attributes, i.e., data elements, whose value (or combination of values) are used to identify uniquely the occurrence or

1592 existence of a specified **entity**.
1593 [ISO/IEC 15944-1:2002 (3.26)]
1594
1595 **3.052**
1596 **identifier (in business transaction)**
1597 an **unambiguous**, unique and a linguistically neutral value, resulting from the application of a
1598 rule-based identification process. Identifiers must be unique within the identification scheme of
1599 the issuing authority.
1600 [ISO/IEC 15944-1:2002 (3.27)]
1601
1602 **3.053**
1603 **indexing language**
1604 **artificial language** established to characterize the content or form of a document.
1605 [ISO/IEC 2383-1 (4.2.2.1.04)]
1606
1607 **3.054**
1608 **individual**
1609 a **Person** who is a human being, i.e., a natural person, who acts as a distinct indivisible entity or is
1610 considered as such.
1611 [ISO/IEC 15944-1:2002 (3.28)]
1612
1613 **3.055**
1614 **Information Bundle (IB)**
1615 the formal description of the semantics of the **recorded information** to be exchanged by **Open-**
1616 **edi Parties** playing **roles** in an **Open-edi scenario**.
1617 [ISO/IEC 14662:2004 (4.1.2.2)]
1618
1619 **3.056**
1620 **Information Processing Domain (IPD)**
1621 an **Information Technology System** which includes at least either a **Decision Making**
1622 **Application** and/or one of the components of an Open-edi Support Infrastructure, and
1623 acts/executes on behalf of an **Open-edi Party** (either directly or under a delegated authority).
1624 [ISO/IEC 14662:2004 (4.2.2)]
1625
1626 **3.057**
1627 **Information Technology System (IT System)**
1628 a set of one or more computers, associated software, peripherals, terminals, human operations,
1629 physical processes, information transfer means, that form an autonomous whole, capable of
1630 performing information processing and/or information transfer.
1631 [ISO/IEC 14662:1997 (3.1.8)]
1632
1633 **3.058**
1634 **internal constraint**
1635 a **constraint** which forms part of the **commitment(s)** mutually agreed to among the parties to a
1636 **business transaction**.
1637
1638 NOTE Internal constraints are self-imposed. They provide a simplified view for modelling and

re-use of scenario components of a business transaction for which there are no external constraints or restrictions to the nature of the conduct of a business transaction other than those mutually agreed to by the buyer and seller.
[ISO/IEC 15944-1:2002 (3.33)]

3.059

IT-enablement

the transformation of a current **standard** utilized in **business transactions**, (e.g., code tables), from a manual to computational perspective so as to be able to support **commitment** exchange and **computational integrity**.

[ISO/IEC 15944-5:200n (3.nnn)]

3.060

IT interface equivalent

a computer processable identification of the unambiguous semantics of a **scenario**, **scenario attribute** and/or **scenario component(s)** pertaining to a **commitment** exchange in a **business transaction** which supports **computational integrity**.

NOTE 1 IT interface equivalents have the properties of identifiers (in business transaction) and are utilized to support semantic interoperability in commitment exchange.

NOTE 2 An IT interface equivalent at times is a composite identifier.

NOTE 3 An IT interface equivalent as a composite identifier can consist of the identifier of a coded domain plus an ID Code of that coded domain.

NOTE 4 An IT interface equivalent is at times utilized as a semantic identifier.

NOTE 5 An IT interface equivalent may have associated with it one or more human interface equivalents (HIEs).

NOTE 6 An IT Interface Value is independent of its encoding in programming languages or APIs.

[ISO/IEC 15944-2:200n (3.37)]

3.061

jurisdictional domain

a jurisdiction, recognized in law as a distinct legal and/or regulatory framework, which is a source of **external constraints** on **Persons**, their behaviour and the making of **commitments** among **Persons** including any aspect of a **business transaction**.

NOTE 1 The pivot jurisdictional domain is a United Nations (UN) recognized member state. From a legal and sovereignty perspective they are considered "peer" entities. Each UN member state, (a.k.a. country) may have sub-administrative divisions as recognized jurisdictional domains, (e.g., provinces, territories, cantons, länder, etc.), as decided by that UN member state.

NOTE 2 Jurisdictional domains can combine to form new jurisdictional domains, (e.g., through

1686 bilateral, multilateral and/or international agreements).

1687
1688 EXAMPLE Included here, for example, are the European Union (EU), NAFTA, WTO, WCO,
1689 ICAO, WHO, Red Cross, the ISO, the IEC, the ITU, etc.

1690
1691 NOTE 3 Several levels and categories of jurisdictional domains may exist within a jurisdictional
1692 domain.

1693
1694 NOTE 4 A jurisdictional domain may impact aspects of the commitment(s) made as part of a
1695 business transaction including those pertaining to the making, selling, transfer of goods, services
1696 and/or rights (and resulting liabilities) and associated information. This is independent of whether
1697 such interchange of commitments are conducted on a for-profit or not-for-profit basis and/or
1698 include monetary values.

1699
1700 NOTE 5 Laws, regulations, directives, etc., issued by a jurisdictional domain are considered as
1701 parts of that jurisdictional domain and are the primary sources of external constraints on business
1702 transactions.

1703 1704 **3.062**

1705 **language**

1706 system of signs for communication, usually consisting of a vocabulary and rules.

1707
1708 NOTE In this standard, language refers to "natural languages" or "special languages" but not
1709 "programming languages" or "artificial languages".

1710 [ISO 5127-1:2001 (1.1.2.01)]

1711 1712 **3.063**

1713 **language code**

1714 combination of characters used to represent a **language** or **languages**

1715 NOTE In this ISO/IEC 15944-2 standard, the ISO 639-2/T (terminology) three alpha-code, shall
1716 be used

1717 [ISO 639-2:1998 (3.2)]

1718 1719 **3.064**

1720 **legally recognized language (LRL)**

1721 a **natural language** which has status (other than an **official language** or **de facto language**) in a
1722 **jurisdictional domain** stated in an act, regulation, or other legal instrument, which grants a
1723 community of people (or its **individuals**) the right to use that **natural language** in the context
1724 stipulated by the legal instrument(s).

1725
1726 NOTE The LRL can be specified through either:

- 1727
- 1728 ▶ the identification of a language by the name utilized; or,
- 1729 ▶ the identification of a people and thus their language(s).

1730
1731 EXAMPLE In addition to acts and regulations, legal instruments include self-government
1732 agreements, land claim settlements, court decisions, jurisprudence, etc.

3.065

legally recognized name (LRN)

a **persona** associated with a role of a **Person** recognized as having legal status and so recognized in a **jurisdictional domain** as accepted or assigned in compliance with the **rules** applicable of that **jurisdictional domain**, i.e. as governing the **coded domain** of which the LRN is a member.

NOTE 1: A LRN may be of a general nature and thus be available for general use in commitment exchange or may arise from the application of a particular law, regulation, program or service of a jurisdictional domain and thus will have a specified use in commitment exchange.

NOTE 2: The process of establishment of a LRN is usually accompanied by the assignment of a unique identifier

NOTE 3: A LRN is usually a registry entry in a register established by the jurisdictional domain (usually by a specified public administration within that jurisdictional domain) for the purpose of applying the applicable rules and registering and recording LRNs (and possible accompanying unique identifiers accordingly).

NOTE 4: A Person may have more than one LRN (and associated LRN identifier).

3.066

list

an ordered set of data elements.

[ISO/IEC 2382-4:1999 (04.08.01)]

3.067

localization

pertaining to or concerned with anything that is not global and is bound through specified sets of **constraints** of:

- (a) a linguistic nature including natural and special languages and associated multilingual requirements;
- (b) jurisdictional nature, i.e., legal, regulatory, geopolitical, etc.;
- (c) a sectorial nature, i.e., industry sector, scientific, professional, etc.;
- (d) a human rights nature, i.e., privacy, disabled/handicapped persons, etc.,
- (e) consumer behaviour requirements; and/or
- (f) safety or health requirements.

3.068

location

a place, either physical or electronic, that can be defined as an **address**.

[ISO/IEC 15944-2:200n (3.41)]

3.069

medium

physical material which serves as a functional unit, in or on which information or data is normally recorded, in which information or data can be retained and carried, from which information or

data can be retrieved, and which is non-volatile in nature.

NOTE 1 This definition is independent of the material nature on which the information is recorded and/or technology utilized to record the information, (e.g., paper, photographic, (chemical), magnetic, optical, ICs (integrated circuits), as well as other categories no longer in common use such as vellum, parchment (and other animal skins), plastics, (e.g., bakelite or vinyl), textiles, (e.g., linen, canvas), metals, etc.).

NOTE 2 The inclusion of the "non-volatile in nature" attribute is to cover latency and records retention requirements.

NOTE 3 This definition of "medium" is independent of:

- i) form or format of recorded information;
- ii) physical dimension and/or size; and,
- iii) any container or housing that is physically separate from material being housed and without which the medium can remain a functional unit.

NOTE 4 This definition of "medium" also captures and integrates the following key properties:

- i) the property of medium as a material in or on which information or data can be recorded and retrieved;
- ii) the property of storage;
- iii) the property of physical carrier;
- iv) the property of physical manifestation, i.e., material;
- v) the property of a functional unit; and,
- vi) the property of (some degree of) stability of the material in or on which the information or data is recorded.

[ISO/IEC 15944-1:2002 (3.34)]

3.070

metadata

data about data elements, including their data descriptions, and data about data ownership, access paths, access rights and data volatility.

[ISO/IEC 2382-17:1999 (17.06.05)]

3.071

metadata entity

set of metadata elements describing the same aspect of data.

NOTE 1 May contain one or more metadata entities

NOTE 2 Equivalent to a class in UML terminology

[ISO 19115:2003 (4.7)]

3.072

metadata section

1828 subset of **metadata** which consists of a collection of related metadata entities and metadata
1829 elements.
1830 [ISO 19115:2003 (4.8)]
1831

1832 **3.073**

1833 **model**

1834 abstraction of some aspect of reality.
1835 [ISO 19115:2003 (4.9)]
1836

1837 **3.074**

1838 **multilingualism**

1839 the ability to support not only character sets specific to a (natural) **language** (or family of
1840 **languages**) and associated **rules** but also **localization** requirements, i.e., use of a **language** from
1841 **jurisdictional domain**, sectorial and consumer marketplace perspectives.
1842

1843 **3.075**

1844 **name**

1845 designation of an **object** by a linguistic expression.
1846 [ISO 1087:1990 (5.3.1.3)]
1847

1848 **3.076**

1849 **natural language**

1850 **language** which is or was in active use in a community of people, and the rules of which are
1851 mainly deduced from the usage.
1852 [ISO 5217:2000 (1.1.2.02)]
1853

1854 **3.077**

1855 **object**

1856 anything perceivable or conceivable.
1857

1858 NOTE Objects may be material (e.g. engine, a sheet of paper, a diamond), or immaterial (e.g.
1859 conversion ratio, a project play) or imagined, (e.g., a unicorn).
1860 [ISO 1087-1:2000 (3.1.1)]
1861

1862 **3.078**

1863 **object class**

1864 a set objects. A set of ideas, abstractions, or things in the real world that can be identified with
1865 explicit boundaries and meaning and whose properties and behaviour follow the same rules.
1866 [ISO/IEC 11179-1:1999 (3.45)]
1867

1868 **3.079**

1869 **official language**

1870
1871 an external constraint in the form of a natural language specified by a jurisdictional
1872 domain for official use by Persons forming part of and/or subject to that jurisdictional
1873 domain for use in communication(s) either (1) within that jurisdictional domain as a
1874 whole; and/or, (2) among such Persons, where such communications are recorded

information involving commitment(s).

NOTE 1 Unless official language requirements state otherwise, Persons are free to choose their mutually acceptable natural language and/or special language for communications as well as exchange of commitments.

NOTE 2 An official language(s) can be mandated for formal communications as well as provision of goods and services to Persons subject to that jurisdictional domain and for use in the legal and other conflict resolution system(s) of that jurisdictional domain, etc.

NOTE 3 Where applicable, use of an official language may be required in the exercise of rights and obligations of individuals in that jurisdictional domain.

NOTE 4 Where an official language of a jurisdictional domain has a controlled vocabulary of the nature of a terminology, it may well have the characteristics of a special language. In such cases, the terminology to be used must be specified.

NOTE 5 For an official language, the writing system(s) to be used shall be specified, where the spoken use of a natural language has more than one writing system.

EXAMPLE The spoken language of use of an official language may at times have more than one writing system. For example, two writing systems exist for the Inuktitut language, namely, one Latin-1 based (Roman), the other is syllabic-based. Another example is that of Norway which has two official writing systems both Latin-1 based namely “Bokmål (Dano-Norwegian) and Nynorsk (New Norwegian).

NOTE 6 A jurisdictional domain may have more than one official language but these may or may not have equal status.

EXAMPLE Canada has two official languages, Switzerland has three, while the Union of South Africa has eleven official languages.

NOTE 7 The BOV requirement of the use of a specified language will place that requirement on any FSV supporting service.

EXAMPLE A BOV requirement of Arabic, Chinese, Russian, Japanese, Korean, etc., as an official language requires the FSV support service to be able to handle the associated character sets

3.080

Open-edi

electronic data interchange among multiple autonomous **Persons** to accomplish an explicit shared business goal according to Open-edi standards.
[ISO/IEC 14662:2004 (3.1.9)]

3.081

Open-edi Descriptive Techniques (OeDT)

a specification method such as a **Formal Description Technique**, another methodology having the characteristics of a **Formal Description Technique**, or a combination of such techniques as needed to formally specify **BOV** concepts, in a computer processable form.
[ISO/IEC 14662:1997 (4.1.1)]

3.082

Open-edl Party (OeP)

a **Person** that participates in **Open-edl**.

NOTE Often in this ISO/IEC 15944-5 standard referred to generically as "party" or "parties" for any entity modelled as a Person as playing a role in Open-edl scenarios.
[ISO/IEC 14662:2004 (3.1.11)]

3.083

Open-edl scenario

a formal specification of a class of **business transactions** having the same business goal.
[ISO/IEC 14662:2004 (3.1.12)]

3.084

Open-edl Support Infrastructure (OeSI)

a model of the set of functional capabilities for **Open-edl systems** which, when taken together with the **Decision Making Applications**, allows **Open-edl Parties** to participate in Open-edl transactions.
[ISO/IEC 14662:2004 (4.2.1)]

3.085

Open-edl system

an **information technology system** which enables an **Open-edl Party** to participate in Open-edl transactions.
[ISO/IEC 14662:2004 (4.2.1)]

3.086

organization

a unique framework of authority within which a person or persons act, or are designated to act, towards some purpose.

NOTE The kinds of organizations covered by this International Standard include the following examples:

EXAMPLE 1 An organization incorporated under law.

EXAMPLE 2 An unincorporated organization or activity providing goods and/or services including:

- 1) partnerships;
- 2) social or other non-profit organizations or similar bodies in which ownership or control is vested in a group of individuals;

- 1969 3) sole proprietorships
1970 4) governmental bodies
1971

1972 EXAMPLE 3 Groupings of the above types of organizations where there is a need to identify
1973 these in information interchange.
1974 [ISO/IEC 6523-1: 1998 (3.1)]
1975

1976 **3.087**

1977 **organization part**

1978 any department, service or other entity within an organization, which needs to be identified for
1979 information interchange.
1980 [ISO/IEC 6523-1:1998 (3.2)]
1981

1982 **3.088**

1983 **organization Person**

1984 an **organization part** which has the properties of a **Person** and thus is able to make
1985 **commitments** on behalf of that **organization**.
1986

1987 NOTE 1 An organization can have one or more organization Persons.
1988

1989 NOTE 2 An organization Person is deemed to represent and act on behalf of the organization and
1990 to do so in a specified capacity.
1991

1992 NOTE 3 An organization Person can be a "natural person" such as an employee or officer of the
1993 organization.
1994

1995 NOTE 4 An organization Person can be a legal person, i.e., another organization.
1996 [ISO/IEC 15944-1:2002 (3.46)]
1997

1998
1999 **3.089**

2000 **Person**

2001 an **entity**, i.e., a natural or legal person, recognized by law as having legal rights and duties, able
2002 to make **commitment(s)**, assume and fulfil resulting obligation(s), and able of being held
2003 accountable for its action(s).
2004

2005 NOTE 1 Synonyms for "legal person" include "artificial person", "body corporate", etc.,
2006 depending on the terminology used in competent jurisdictions.
2007

2008 NOTE 2 Person is capitalized to indicate that it is being utilized as formally defined in the
2009 standards and to differentiate it from its day-to-day use.
2010

2011 NOTE 3 Minimum and common external constraints applicable to a business transaction often
2012 require one to differentiate among three common subtypes of Person, namely "individual",
2013 "organization", and "public administration".
2014 [ISO/IEC 15944-1:2002 (3.47)]
2015

2016 **3.090**

2017 **persona**

2018 the set of **data elements** and their values by which a **Person** wishes to be known and thus
2019 identified in a **business transaction**.

2020 [ISO/IEC 15944-1:2002 (3.51)]

2021
2022 **3.091**

2023 **Person authentication**

2024 the provision of the assurance of a **recognized Person identity (rPi)** (sufficient for the purpose of
2025 the **business transaction**) by corroboration.

2026 [ISO/IEC 15944-1:2002 (3.48)]

2027
2028 **3.092**

2029 **personal information**

2030 any information about an identifiable **individual** that is recorded in any form, including
2031 electronically or on paper.

2032
2033 NOTE Some examples would be information about a person's religion, age, financial transactions,
2034 medical history, address, or blood type.

2035 [ISO/IEC 15944-5]

2036
2037 **3.093**

2038 **pivot ID code**

2039 the most stable **ID code** assigned to identify a member of a **coded domain** where more than one
2040 **ID code** may be assigned and/or associated with a member of that **coded domain**.

2041
2042 EXAMPLE ISO 3166-1:1997 (E/F) "Codes for the representation of names of countries and their
2043 subdivisions - Part 1: Country codes/Codes pour la représentations des noms de pays et de leur
2044 subdivisions - Partie 1: Codes pays" contains three code sets:

- 2045 - a three digit numeric code;
- 2046 - a two alpha code
- 2047 - a three alpha code.

2048 Here, the three digit numeric code serves as the pivot code. It is the most stable, remains the same
2049 even though the two alpha and/or three alpha codes may and do change.

2050 [ISO/IEC 15944-5]

2051
2052 **3.094**

2053 **pivot code set**

2054 the set of **ID codes** in a **coded domain** which is made publicly known and available, the most
2055 stable, representing the defined semantics. Most often it is the same as the ID code.

2056
2057 NOTE 1 The use of the pivot code set as distinguished from the ID code supports the possible
2058 requirement of a Source Authority to maintain internally and on a confidential basis the ID code
2059 of its members.

2060
2061 NOTE 2 At times a coded domain has more than one valid code set, (e.g., ISO 639, ISO 3166,
2062 etc.).

2063
2064 EXAMPLE In ISO 3166-1 the 3-digit numeric code is the pivot. The 2-alpha and 3-alpha code
2065 sets can change when the name of the entity referenced is changed by that entity.
2066 [ISO/IEC 15944-5]
2067
2068 **3.095**
2069 **preferred term**
2070 **term** recommended by an authoritative body.
2071 [ISO 1087:1990 (5.6.1)]
2072
2073 **3.096**
2074 **principle**
2075 a fundamental, primary assumption and quality which constitutes a source of action determining
2076 particular objectives or results

2077 NOTE 1 A principle is usually enforced by rules that affect its boundaries.

2078 NOTE 2 A principle is usually supported through one or more rules.

2079 NOTE 3 A principle is usually part of a set of principles which together form a unified whole.
2080 EXAMPLE: Within a jurisdictional domain, examples of a set of principles include a charter,
2081 a constitution, etc.
2082 [ISO/IEC 15944-2:200n (3.85)]
2083
2084 **3.097**
2085 **process**
2086 a series of actions or events taking place in a defined manner leading to the accomplishment of an
2087 expected result.
2088 [ISO/IEC 15944-1:2002 (3.53)]
2089
2090 **3.098**
2091 **property**
2092 a peculiarity common to all members of an **object class**.
2093 [ISO/IEC 11179-1:1999 (3.48)]
2094
2095 **3.099**
2096 **public administration**
2097 an **entity**, i.e., a **Person**, which is an **organization** and has the added attribute of being authorized
2098 to act on behalf of a **regulator**.
2099 [ISO/IEC 15944-1:2002 (3.54)]
2100
2101 **3.100**
2102 **recognized Person identity (rPi)**
2103 the identity of a **Person**, i.e., Person identity, established to the extent necessary for a specific
2104 purpose in a **business transaction**.
2105 [ISO/IEC 15944-1:2002 (3.55)]
2106
2107 **3.101**

recognized individual name (RIN)

a **persona** of an **individual** having the properties of a **legally recognized name (LRN)**

NOTE 1: On the whole, a persona presented by an individual should have a basis in law (or recognized jurisdictional domain) in order to be considered as the basis for a recognized individual name (RIN)

NOTE 2: An individual may have more than one RIN and more than one LRN at the same time.

NOTE 3: The establishment of a RIN is usually accompanied by the assignment of a unique identifier, i.e. by the jurisdictional domain (or public administration) which recognizes the persona as a RIN.

3.102

recorded information

any information that is recorded on or in a **medium** irrespective of form, recording medium or technology utilized, and in a manner allowing for storage and retrieval.

NOTE 1 This is a generic definition and is independent of any ontology, (e.g., those of "facts" versus "data" versus "information" versus "intelligence" versus "knowledge", etc.).

NOTE 2 Through the use of the term "information," all attributes of this term are inherited in this definition.

NOTE 3 This definition covers:

- (i) any form of recorded information, means of recording, and any medium on which information can be recorded; and,
- (ii) all types of recorded information including all data types, instructions or software, databases, etc.

[ISO/IEC 15944-1:2002 (3.56)]

3.103

registration

a **rule-based process**, explicitly stated, involving the use of one or more data elements, whose value (or combination of values) are used to identify uniquely the results of assigning a **registry entry**

3.104

Registration Authority (RA)

a **Person** responsible for the maintenance of one or more **Registration Schemas** including the assignment of a unique identifier for each recognized **entity** in a **Registration Schema**.

[ISO/IEC 15944-1:2002 (3.57)]

3.105

Registration Authority Identifier (RAI)

an identifier assigned to a **registration authority**.

2155 [ISO/IEC 11179-1:1999 (3.57)]

2156

2157 **3.106**

2158 **Registration Schema (RS)**

2159 the formal definition of a set of rules governing the data fields for the description of an entity and
2160 the allowable contents of those fields, including the rules for the assignment of identifiers.

2161 [ISO/IEC 15944-1:2002 (3.58)]

2162

2163 **3.107**

2164 **regulator**

2165 a **Person** who has authority to prescribe **external constraints** which serve as **principles**, policies
2166 or **rules** governing or prescribing the behaviour of **Persons** involved in a **business transaction** as
2167 well as the provisioning of goods, services, and/or rights interchanged.

2168 [ISO/IEC 15944-1:2002 (3.59)]

2169

2170 **3.108**

2171 **repertoire**

2172 a specified set of characters that are represented in a **coded character set**.

2173 [ISO/IEC 10646-1:1993;ISO/IEC TR 15285:1998 (3.16)]

2174

2175 **3.109**

2176 **retention period**

2177 the length of time for which data on a data medium is to be preserved.

2178 [ISO/IEC 2382-12:1988 (12.04.11)]

2179

2180 **3.110**

2181 **role**

2182 a specification which models an external intended behaviour (as allowed within a scenario) of an
2183 **Open-edi Party**.

2184 [ISO/IEC 14662:2004 (4.1.2.1)]

2185

2186 **3.111**

2187 **rule**

2188 a statement governing conduct, procedure, conditions and relations.

2189

2190 NOTE 1 Rules specify conditions that must be complied with. These may include relations
2191 among objects and their attributes.

2192

2193 NOTE 2 Rules are of a mandatory or conditional nature.

2194

2195 NOTE 3 In Open-edi, rules formally specify the commitment(s) and role(s) of the parties
2196 involved, and the expected behaviour(s) of the parties involved as seen by other parties involved
2197 in (electronic) business transactions. Such rules are applied to:

- 2198 - content of the information flows in the form of precise and computer-processable
2199 meaning, i.e. the semantics of data; and,
- 2200 - the order and behaviour of the information flows themselves.

2201

2202 NOTE 4 Rules must be clear and explicit enough to be understood by all parties to a business
2203 transaction. Rules also must be capable of being able to be specified using a Formal Description
2204 Technique(s) (FDTs).

2205

2206 EXAMPLE A current and widely used FDT is "Unified Modelling Language (UML)".

2207

2208 NOTE 5 Specification of rules in an Open-edi business transaction should be compliant with the
2209 requirements of ISO/IEC 15944-3 "Open-edi Description Techniques (OeDT)".

2210 [ISO/IEC 15944-5]

2211

2212 3.112

2213 **rulebase**

2214 a pre-established set of **rules** which interwork and which together form an autonomous whole.

2215

2216 NOTE One considers a rulebase to be to rules as database is to data.

2217 [ISO/IEC 15944-5]

2218

2219 3.113

2220 **scenario attribute**

2221 the formal specification of information, relevant to an **Open-edi scenario** as a whole, which is
2222 neither specific to **roles** nor to **information bundles**.

2223 [ISO/IEC 14662:2004 (4.1.2.3)]

2224

2225 3.114

2226 **scenario component**

2227 one of the three fundamental elements of a **scenario**, namely **role**, **information bundle**, and
2228 **semantic component**.

2229 [ISO/IEC 15944-2:200n (3.nnn)]

2230

2231 3.115

2232 **scenario specification attribute**

2233 any **attribute** of a **scenario**, **role**, **information bundle** and/or **semantic component**.

2234 [ISO/IEC 15944-2:200n (3.nnn)]

2235

2236 3.116

2237 **seller**

2238 a **Person** who aims to hand over voluntarily or in response to a demand, a good, service and/or
2239 right to another **Person** and in return receives an acceptable equivalent value, usually in money,
2240 for the good, service and/or right provided.

2241 [ISO/IEC 15944-1:2002 (3.62)]

2242

2243 3.117

2244 **Semantic Component (SC)**

2245 a unit of **recorded information unambiguously** defined in the context of the business goal of the
2246 **business transaction**.

2247 NOTE A SC may be atomic or composed of other SCs.

2248 [ISO/IEC 14662:2004 (4.1.2.2)]

2249
2250 **3.118**

2251 **semantic identifier (SI)**

2252 an **IT-interface** identifier for a **semantic component** or other semantic for which (1) the
2253 associated context, applicable rules and/or possible uses as a semantic are predefined and
2254 structured and the **Source Authority** for the applicable rule base is identified; and (2) for which
2255 more than one or more **Human Interface Equivalents(HIEs)** exist.

2256
2257 NOTE 1: The identifier for a Semantic Component(SC), an Information Bundle(IB) and/or an ID
2258 Code for which one or more Human Interface Equivalents (HIEs) exist are considered to have the
2259 properties or behaviours of semantic identifiers.

2260
2261 **3.119**

2262 **Source Authority (SA)**

2263 a **Person** recognized by other **Persons** as the authoritative source for a set of **constraints**.

2264
2265 NOTE 1 A Person as a Source Authority for internal constraints may be an individual,
2266 organization, or public administration.

2267
2268 NOTE 2 A Person as Source Authority for external constraints may be an organization or public
2269 administration.

2270
2271 EXAMPLE In the field of air travel and transportation, IATA as a Source Authority, is an
2272 "organization," while ICAO as a Source Authority, is a "public administration".

2273
2274 NOTE 3 A Person as an individual shall not be a Source Authority for external constraints.

2275
2276 NOTE 4 Source Authorities are often the issuing authority for identifiers (or composite
2277 identifiers) for use in business transactions.

2278
2279 NOTE 5 A Source Authority can undertake the role of Registration Authority or have this role
2280 undertaken on its behalf by another Person.
2281 [ISO/IEC 19544-5]

2282
2283 NOTE 6 Where the sets of constraints of a Source Authority control a coded domain, the SA has
2284 the role of a coded domain Source Authority.

2285
2286 **3.120**

2287 **special language**

2288 **language** for special purposes (LSP), **language** used in a subject field and characterized by the
2289 use of specific linguistic means of expression.

2290
2291 NOTE The specific linguistic means of expression always include subject-specific terminology
2292 and phraseology and also may cover stylistic or syntactic features.
2293 [ISO 1087-1:2000 (3.1.3)]

2294
2295 **3.121**

2296 **standard**
2297 documented agreement containing technical specifications or other precise criteria to be used
2298 consistently as rules, guidelines, or definitions of characteristics, to ensure that materials,
2299 products, processes and services are fit for their purpose.

2300
2301 [This is the generic definition of "standards" of the ISO and IEC (and now found in the ISO/IEC
2302 JTC1 Directives, Part 1, Section 2.5:1998) {See also ISO/IEC Guide 2: 1996 (1.7)}
2303 <<<http://www.iso.ch/infoc/intro.html>>> ISO/IEC 15944-1:2002 (3.64)]
2304

2305 **3.122**

2306 **term**

2307 designation of a defined concept in a **special language** by a linguistic expression.

2308

2309 NOTE A term may consist of one or more words i.e. simple term, or complex term or even
2310 contain symbols.

2311 [ISO 1087:1990 (5.3.1.2)]
2312

2313

2313 **3.123**

2314 **third party**

2315 a **Person** besides the two primarily concerned in a **business transaction** who is **agent** of neither
2316 and who fulfils a specified role or function as mutually agreed to by the two primary **Persons** or
2317 as a result of **external constraints**.

2318

2319 NOTE It is understood that more than two Persons can at times be primary parties in a business
2320 transaction.

2321 [ISO/IEC 15944-1:2002 (3.65)]
2322

2323

2323 **3.124**

2324 **text**

2325 data in the form of characters, symbols, words, phrases, paragraphs, sentences, tables, or other
2326 character arrangements, intended to convey a meaning and whose interpretation is essentially
2327 based upon the reader's knowledge of some natural language or artificial language.
2328

2329

2329 EXAMPLE A business letter printed on paper or displayed on a screen.

2330 [ISO/IEC 2382-23:1994 (23.01.01)]
2331

2332

2332 **3.125**

2333 **treaty**

2334 an international agreement concluded between UN member states in written form and governed
2335 by international law.

2336

2337 NOTE 1 Treaties when entered into force shall be transmitted to the Secretariat of the United
2338 Nations for registration or filing or recording as the case may be and for publication. {See article
2339 80 of the Charter of the UN}
2340

2341

2341 NOTE 2 A treaty can be embodied in a single instrument or in two or more related instruments
2342 and whatever its particular designation.

2343 [adapted from the Vienna Convention on the Law of Treaties, 1(a)]

2344

2345 NOTE 3 A treaty, of whatever nature, is a primary source of external constraints

2346

2347 **3.126**

2348 **unambiguous**

2349 the level of certainty and explicitness required in the completeness of the semantics of the
2350 **recorded information** interchanged appropriate to the goal of a **business transaction**.

2351 [ISO/IEC 15944-1:2002 (3.66)]

2352

2353 **3.127**

2354 **vendor**

2355 a **seller** on whom consumer protection requirements are applied as a set of **external constraints**
2356 on a **business transaction**.

2357

2358 NOTE 1 Consumer protection is a set of explicitly defined rights and obligations applicable as
2359 external constraints on a business transaction.

2360

2361 NOTE 2 It is recognized that external constraints on a seller of the nature of consumer protection
2362 may be peculiar to a specified jurisdiction.

2363 [ISO/IEC 15944-1:2002 (3.67)]

2364

2365 **3.128**

2366 **vocabulary**

2367 terminological dictionary which contains designations and definitions for one or more specific
2368 subject fields.

2369

2370 NOTE The vocabulary may be monolingual, bilingual or multilingual.

2371 [ISO 1087-1:2000 (3.7.2)]

Acronym	Description
BOV	Business Operational View
DMA	Decision Making Application
EDI	Electronic Data Interchange
EU	European Union
FDT	Formal Description Technique
FSV	Functional Service View
HIE	Human Interface Equivalent
IATA	International Air Transport Association
IB	Information Bundle
ICAO	International Civil Aviation Organization
ICs	Integrated Circuits
INCOTERMS	International Commercial Terms
IPD	Information Processing Domain
ISO	International Organization for Standardization
IT System	Information Technology System
ITU	International Telecommunications Union
LSP	language for special purposes
LRL	Legally Recognized Language
LRN	Legally Recognized Name
NAFTA	North American Free Trade Agreement
OeDT	Open-edi Descriptive Techniques
OeP	Open-edi Party
OeSI	Open-edi Support Infrastructure
RA	Registration Authority
RAI	Registration Authority Identifier
RIN	Recognized Individual Name
rPi	recognized Person identity
RS	Registration Authority
SA	Source Authority
SC	Semantic Component
SI	Semantic Identifier
UML	Unified Modelling Language
UN	United Nations
UPC/EAN	Uniform Product Code/European Article Numbering
WCO	World Customs Organization
WTO	World Trade Organization

Acronym	Description

5 FUNDAMENTAL PRINCIPLES AND ASSUMPTIONS

5.1 INTRODUCTION

The Open-edition Reference Model identifies two basic classes of constraints; namely "internal constraints" and "external constraints". This Part 5 focuses on "external constraints". In doing so it builds on Part 1 of this multipart standard which provides the fundamental principles and assumptions.

As stated in Clause 6.1.6 of ISO/IEC 15944-1:

The class of "internal constraints" has been derived to provide a simplified view of business transactions for which there are no external constraints or restrictions to the nature and conduct of the transaction. The only constraints are those mutually agreed to by the buyer and seller for the explicitly stated goal of the business transaction, i.e., they are self-imposed. This allows one to build scenarios and scenario components for referencing, registering and re-use as generic or base scenarios without having to include potential external constraints. The rules governing specification of Open-edition scenarios and their Components require that all applicable external constraints must be stated at the time of instantiation but need not exist at the time of registration.

However, in most business transactions external constraints do apply, i.e., applicable laws and regulations. These range from taxation related regulation; health and safety or packaging and labelling requirements; ensuring that nature of the business transaction and/or the goods or services delivered do not comprise behaviour of a criminal nature.

Part 1, Clause 6.5.3 "External Constraints" states:

"The majority of business transactions will be subject to constraints applied by outside parties such as regulators, i.e., external constraints. These external constraints may vary according to the nature of the business transaction, the role being played by one of the parties or the nature of the information being sent. Sources of such external constraints include:

- (a) national law;*
- (b) national regulation;*
- (c) trade body regulation;*
- (d) codes of practice;*
- (e) treaties;*
- (f) international agreements;*
- (g) memorandum of understanding;*
- (h) international conventions;*
- (i) international protocols;*
- (j) international law".*

Clause 6.1.3 continues by providing various examples of external constraints.

5.2 KEY CONSTRUCTS

5.2.1 Principles and Rules

Clause 5.2 in the ISO/IEC 14662 "Open-edi Reference Model" states:

"Open-edi requires the use of clear and predefined principles, rules and guidelines. These rules formally specify the role(s) of the parties involved in Open-edi and the available expected behaviour(s) of the parties as seen by other parties engaging in Open-edi. Open-edi rules are applied to:

- *content of the information flows; and,*
- *the order and behaviour of information flows themselves".*

For the purposes of business semantic description techniques and in the context of Open-edi requirements, "principle" is defined as:

principle

a fundamental, primary assumption and quality which constitutes a source of action determining particular objectives or results.

NOTE 1 A principle is usually enforced by rules that affect its boundaries.

NOTE 2 A principle is usually supported through one or more rules.

NOTE 3 A principle is usually part of a set of principles which together form a unified whole.

EXAMPLE: Within a jurisdictional domain, examples of a set of principles include a charter, a constitution, etc.

and "rule" is defined as:

rule

a statement governing conduct, procedure, conditions and relations.

NOTE 1 Rules specify conditions that must be complied with. These may include relations among objects and their attributes.

NOTE 2 Rules are of a mandatory or conditional nature.

NOTE 3 In Open-edi, rules formally specify the commitment(s) and role(s) of the parties involved, and the expected behaviour(s) of the parties involved as seen by other parties involved in (electronic) business transactions. Such rules are applied to:

- content of the information flows in the form of precise and computer-processable meaning, i.e. the semantics of data; and,
- the order and behaviour of the information flows themselves.

NOTE 4 Rules must be clear and explicit enough to be understood by all parties to a business transaction. Rules also must be capable of being able to be specified using a using a Formal Description Technique(s) (FDTs).

EXAMPLE A current and widely used FDT is "Unified Modelling Language (UML)".

NOTE 5 Specification of rules in an Open-edi business transaction should be compliant with the requirements of ISO/IEC 15944-3 "Open-edi Description Techniques (OeDT)".

Another principle which this Part 5 supports and is based on, is that of key and distinguishing aspect of a business transaction is that it involves the exchange and making of "commitments" among the autonomous Persons which are parties to a business transaction.

Commitment is defined as:

commitment

*the making or accepting of a right, obligation, liability or responsibility by a **Person** that is capable of enforcement in the jurisdiction in which the commitment is made.*

[ISO/IEC 15944-1:2002 (3.9)]

Rule nnn:

In order for a commitment to be capable of enforcement, it shall have an identified and referenced jurisdictional domain.

It is a common practice for parties to a business transaction to mutually agree on the jurisdictional domain in which the business transaction takes place, (e.g., as part of the planning or negotiation process). Financial aspects, (e.g., "tax havens"), minimum external constraints, (e.g., "flags of convenience"), etc., are but some factors in the parties deciding on the jurisdictional domain in which a business transaction is deemed to take place. As such, the referenced jurisdictional domain also determines the nature and degree to which commitments made among the parties can be enforced.

Rule nnn:

Unless a particular external constraint governing the commitment made requires that it be made in a specific jurisdictional domain, Persons are free to choose the jurisdictional domain in which the business transaction is (deemed) to take place

In the making of commitments, parties are generally free to choose the jurisdictional domain in which the business transaction takes place. Parties in making contracts do negotiate and agree on the jurisdiction whose laws are to govern the contract. However, depending on the nature of the goods, services or rights being provided, applicable external constraints may specify and require

the transaction to be enacted in a specified jurisdictional domain¹³.

Rule nnn:

Within a particular jurisdictional domain, it may be required to reference a specific act or regulation as well as require the participation (in some form) of a regulator.

In addition, to business transactions of certain natures being subject to external constraints and the commitments among the parties taking place in a particular jurisdictional domain

5.2.2 The Role of "Regulator" Representing "External Constraints"

ISO/IEC 15944-1, Clause 6.2.6 titled "*Person and external constraints: the "regulator"*" introduced the role of "**regulator**" of a Person as in a business transaction. "Regulator" is one of the three (primitive) sub-types of roles of Person in a business transaction. The other two are "buyer" and "seller".¹⁴ However, it is the role of regulator which comes into play when any of the parties modelled in a business transaction and/or the good, service and/or right forming the goal of the business transaction is governed by an external constraint.

Rule nnn

For any business transaction (or part thereof) which involves external constraint(s), the role of regulator(s) shall be included and modelled as part of the scenario and scenario components.

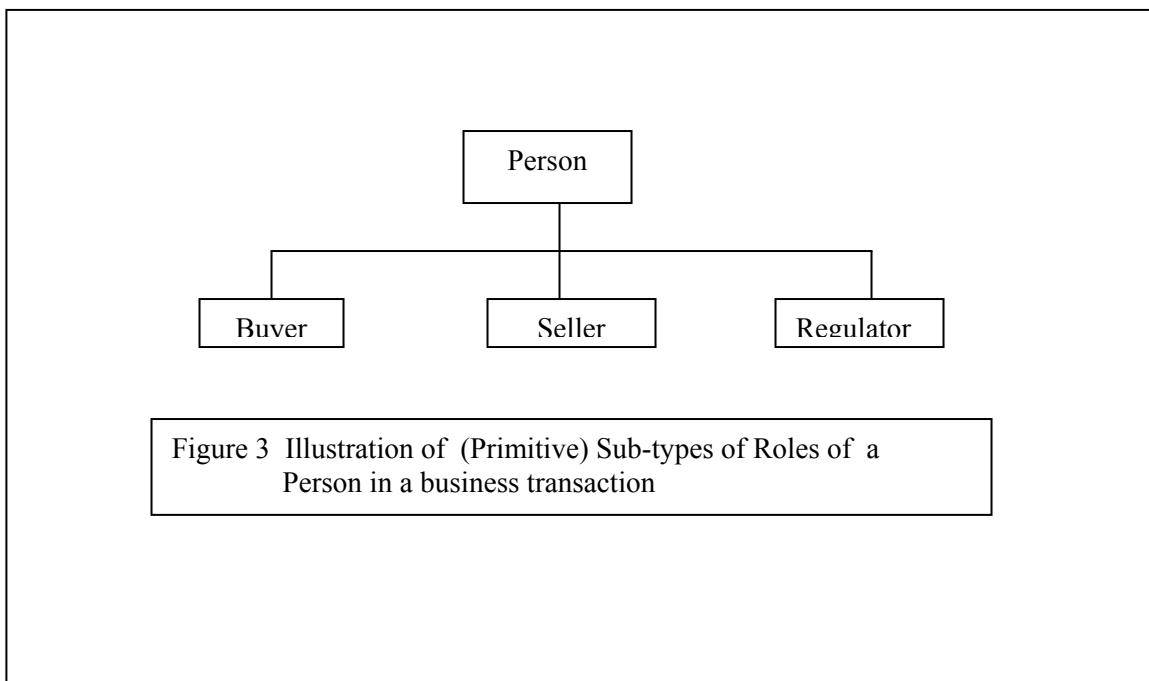
"Regulator" is one of the three (primitive) sub-types of roles of Person in a business transaction. The other two are "buyer" and "seller".¹⁵ However, it is the role of regulator is which comes into play when any of the parties modelled in a business transaction and/or the good, service and/or right forming the goal of the business transaction is governed by an external constraint.

The relationship is illustrated in Figure 3.

¹³ For example, the sale of a house must be registered and take place in the jurisdictional domain where the property is.

¹⁴See further in ISO/IEC 15944-1:2002, Clause 6.2.4 "Person and Roles: Buyer and Seller", and Clause 6.2.6 "Person and External Constraints: The "Regulator""

¹⁵See further in ISO/IEC 15944-1:2002, Clause 6.2.4 "Person and Roles: Buyer and Seller", and Clause 6.2.6 "Person and External Constraints: The "Regulator""



5.3 JURISDICTIONAL DOMAIN AS A SOURCE OF EXTERNAL CONSTRAINTS

Rule nnn:

The primary source of a regulator having the authority to prescribe external constraints is that of the nature of a jurisdictional domain.

The most frequent and prominent type of regulator having the authority to prescribe external constraints on business transactions, i.e., as a primitive, is that of the nature of a jurisdictional domain".

Project Editors' Note:

During the further development of Part 5 attention will be given to the identification of sources of external constraints other than jurisdictional domains. The results will be reflected in the FCD text for Clause 5.2.

A jurisdictional domain is defined as:

jurisdictional domain

a jurisdiction, recognized in law as a distinct legal and/or regulatory framework, which is a source of external constraints on Persons, their behaviour and the making of commitments among Persons including any aspect of a business transaction.

NOTE 1 *The pivot jurisdictional domain is a United Nations (UN) recognized (or candidate) member state. Each UN member state, (a.k.a. country) may have sub-administrative divisions as recognized jurisdictional domains, (e.g., provinces, territories,*

cantons, länder, etc.), as decided by that UN member state.

NOTE 2 Several levels and categories of jurisdictional domains may exist within a jurisdictional domain.

NOTE 3 Jurisdictional domains can combine to form new jurisdictional domains, (e.g., through bilateral, multilateral and/or international agreements).

EXAMPLE Included here, for example, are the European Union (EU), NAFTA, WTO, WCO, ICAO, WHO, Red Cross, the ISO, the IEC, the ITU, etc.

NOTE 4 A jurisdictional domain may impact aspects of the commitment(s) made as part of a business transaction including those pertaining to the making, selling, transfer of goods, services and/or rights (and resulting liabilities) and associated information. This is independent of whether such interchange of commitments are conducted on a for-profit or not-for-profit basis and/or include monetary values.

5.4 JURISDICTIONAL DOMAINS AS "PERSONS" AND "PUBLIC ADMINISTRATIONS"

Rule nnn:

A jurisdictional domain has the properties and behaviours of a Person.

In business transaction modelling, a jurisdictional domain has the properties and behaviours of a Person. This means that where required it may be modelled as a role player, i.e. as a regulator, and thus, a source or recipient of Information Bundles, a source of the (prescribed) contents of a Semantic Component, etc. in an Open-edi scenario.

Rule nnn:

As a sub-type of Person, a jurisdictional domain has the properties and behaviours of a public administration.

Where in business transaction modelling it is necessary to differentiate among the three common sub-types of Person, namely "individual", "organization" and "public administration", a jurisdictional domain shall be modelled as a "public administration".

Figure 7 provides an integrated view of jurisdictional domain from the perspectives of (1) constraints and its two sub-types; and, (2) Person and its three sub-types.

[[Project Editors' Note

This figure is under construction. It will likely be similar in nature to Figure 18 in Part1. Several views are possible. They will be presented to SC32/WG1 for discussion and feedback before being included in this document]

Figure 7 - Integrated View of (1) two classes of constraints and (2) three sub-types of Person.

Rule nnn:

A jurisdictional domain may consist of two or more other jurisdictional domains.

The definition of "public administration" is essentially that of the combination or "binding", of the definitions of "regulator" and "organization". Organizations are free to combine and form any "unique framework of authority" as they see fit and thus form an (new) organization. Similarly, two or more jurisdictional domains are free, according to the principles and rules which govern them, to join into the formation of a new jurisdictional domain(s), i.e., "framework(s) of authority". A very prevalent example here are UN member states forming new jurisdictional domains for which the framework of authority within which these Persons act, or are designated to act, towards some purpose is established via a treaty.

5.5 UN MEMBER STATES AS "PIVOT" JURISDICTIONAL DOMAINS (PJD)

Rule nnn:

The most primitive jurisdictional domain is a member state of the United Nations.

In order for an entity to be a Person, it must have the property of being "recognized by law". In order for a jurisdictional domain to have "the authority to prescribe external constraints", it must have a source for authority which is recognized (in law).

In the context of the Business Transaction Model (BTM), and from a world-wide perspective, the most primitive form of jurisdictional domain is deemed to be a member state of the United Nations.

Principles governing membership status are stated in "Chapter II, Membership" of the Charter of the United Nations. The rules governing admission of membership in the United Nations are those of the Security Council which recommends addition of new members to the General Assembly. The UN also has rules for the suspension of rights and privileges of its membership as well as expulsions. Annex C (Normative) "Codes Representing UN Member States and Their Official Languages" presents a coded domain including UN member states as well as the date at which they obtained this status.

Rule nnn:

UN recognized member states are deemed to be the pivot jurisdictional domains as sources of external constraints.

Multiple categories and combinations of jurisdictional domains exist. For the purpose of identification and mapping of categories of jurisdictional domains, these are considered to be either:

- (1) a jurisdictional domain consisting of a single UN recognized member state;
- (2) various sub-levels and types of jurisdictional domains within and/or created by a UN

- member state. (In many cases these are not homogeneous in nature);
- (3) various combinations of UN member states (as per Vienna Convention on the Law of Treaties); and/or,
- (4) various combinations of jurisdictional domains as sub-types of UN member states concerned and permitted by the same. (For example, several provinces of Canada and states of the United States forming a common jurisdictional domain).

Rule nnn:

A jurisdictional domain as a UN member state is free to create various sub-levels, i.e., more granular, jurisdictional domains of a geopolitical nature.

The most common example here is that of UN member states creating geopolitical based sub-divisions as distinct jurisdictional domains, (e.g., provinces, länder, territories, states, etc.)¹⁶ Not all these may have the same power to prescribe external constraints. Often one or more of these sub-divisions has a legal status different from the others. A sub-division of a UN member state as a jurisdictional domain may in turn also create new sub-divisions of its jurisdictional domain as jurisdictional domains, (e.g., municipalities, counties, parishes, townships, etc.).

Rule nnn:

A jurisdictional domain as a UN member state is free to join with other peer members in establishing new jurisdictional domains.

The most common example here is that of UN member states forming new jurisdictional domains in accordance with the rules of the Vienna Convention on the Law of Treaties. The combination of the application of these rules and the registering of the treaty with the United Nations results in the establishment of a new recognized jurisdictional domain. It also results in all the signatory jurisdictional domains being identified. The title of UN treaty which governs the jurisdictional domain often also serves as the title of the jurisdictional domain so created.

Rule nnn:

Jurisdictional domains which are of a geopolitical nature but not UN member states are free to form new jurisdictional domains according to the rules which apply to the formation of such a new jurisdictional domain. If so, the legal instrument underlying this new jurisdictional domain shall be referenced.

5.6 JURISDICTIONAL DOMAINS AS "PEERS"

Rule nnn:

For the purposes of specifying (and modelling) external constraints for which the sources are jurisdictional domains, such jurisdictional domains are considered to be "peers" unless stated otherwise.

¹⁶The international standard which provides a facility for UN member states to register their first level administration sub-divisions is ISO 3166-2:1998 "Codes for the representations of countries and their subdivisions - Part 2: Country subdivision code".

From a legal environment perspective, all UN member states are considered to be "peers", i.e., as Persons, which have equal rights and duties, ability to make commitments, ability to be held accountable, i.e., they are "sovereign" in their own domain. From a modelling perspective, all UN member states are members of the same object class, i.e. the UN where as that as entities as members of this "club", their properties and behaviours follow the same rules.

UN member states as jurisdictional domains are considered to be "peer" entities at that level or category. However, whether or not a UN-member has any internal sub-divisions, i.e., parts, is for each f UN member to decide (e.g. have cantons, provinces, states, federal district, länder, etc.). Further, it is also for each UN member state to decide and specify whether its sub-divisions all have equal status or not, i.e. are "peer" entities or not¹⁷.

5.7 IDENTIFICATION AND MAPPING OF EXTERNAL CONSTRAINTS TO BUSINESS TRANSACTIONS, SCENARIOS AND THEIR COMPONENTS AS BUSINESS OBJECTS

Based on the requirements of ISO/IEC 14662 "Open-edi Reference Model" and Parts 1 and 2 of ISO/IEC 15944, the following rules apply to the identification and mapping of external constraints to business transaction scenarios and scenario components as business objects.

Rule nnn:

An external constraint may specify the "explicitly shared goal" of a business transaction as a whole.

Irrespective of internal constraints which two or more Persons as buyers and sellers may agree to as their "explicitly shared goal" of a business transaction, their requirements of an external constraints nature exist where a Person in the role of a "regulator" specifies (1) the explicitly shared goal of a business transaction; and, (2) mandates the execution of such business transactions, i.e., they are "mandatory business transactions (MBT). For example the filing of a tax return, the request for a permit or a license, the clearance of goods through customs, etc. specifies the "explicitly shared goal" of the parties to a business transaction. {See also Annex I in ISO/IEC 15944-1:2002 which provides a scenario of the enterprise processes required for a telecommunications service provider based on regulatory requirement of the United States as a jurisdictional domain.}

Project Editors' Note(s):

To consider making this a term/definition, i.e., "the class/a type of business transactions for which the explicitly shared goal has been established and specified by a jurisdictional domain as a Person in the role of a regulator.

Consequently, the modelling identification and mapping and consequently the specified mandated

¹⁷ In some UN-member states, all its administrative sub-divisions as jurisdictional domains have equal legal status i.e. are "peers". Other U.N. member states may have administrative sub-divisions as jurisdictional domains with different, if not varying, legal status.

2753 business transaction (MDT) can apply:

2754

2755 (1) to the business transaction as a whole;

2756

2757 Examples include the paying of taxes, filing requirements (primarily organizations),
2758 license, permits, registration in relation to use of services provided by regulators or the
2759 provisioning of goods, services and/or rights as a "seller" and/or acquiring the same as a
2760 "buyer".

2761

2762 (2) Apply to the particular scenario component, role, information bundle, or semantic
2763 component or any combination of the same.

2764

2765 Examples here include those already identified in Clauses 7 and 8 and the templates in
2766 ISO/IEC 15944-1:2002 as attributes of scenario and scenario components. They include
2767 qualification on role, notarization (and other mandated third parties), security services,
2768 records retention requirements on IBs or SCs, etc.

6.0 PRINCIPAL REQUIREMENTS OF JURISDICTIONAL DOMAINS

6.1 INTRODUCTION

Project Editors' Note(s):

1. *The 2nd CD text of Clause 6.1 will be amended based on revision to the text of sub-clauses of Clause 6.*
2. *Are there other "primitive" common external constraints requirements on commitment exchange of a "horizontal" nature arising from jurisdictional domains which need to be included in Part 5 in addition to language, public policy (e.g., re "individuals" with respect to "consumer protection", "privacy protection", "individual accessibility"), identification, records retention or information management ?*

This standard focuses on the identification of the principal common requirements of jurisdictional domains as the primary sources of external constraints.

6.2 JURISDICTIONAL DOMAINS AND OFFICIAL LANGUAGES

6.2.1 Introduction - Choice of Use of Language (in a Business Transaction)

Choice of use of language is important in order to ensure unambiguity in the semantics of the recorded information exchanged among autonomous Persons in a business transaction particularly with respect to the commitments made.

Rule nnn:

Choice of use of language(s) is governed by three primary factors:

- (1) seller, i.e., supplier choice;**
- (2) buyer, i.e., user, demands; and/or;**
- (3) requirements of a jurisdictional domain.**

Choice of language(s) is governed by the primary factors; namely:

- (1) seller, i.e., supplier choice

It is up to sellers in providing a good, service and/or right to decide which natural language(s) they wish to utilize in the provision of such a good, service and/or right, i.e., depending on the nature of the good, service, and/or right being offered by a seller and the (primary) markets targeted by the seller.

As such, sellers are free to decide the use of language(s) in which they wish to offer their goods, services and/or right. Here from a supplier perspective decision on choice of language use is driven by the nature of the markets to which such offerings are targeted.

- (2) buyer, i.e., user, demands

Buyers are free to decide which language to use in obtaining a good, service and/or right. Choice of language of a buyer is generally restricted to those languages in which the buyer is capable of using to making commitments. At times a buyer may obtain the services of an "agent" to bridge differences in use of language between the seller and buyer in a business transaction. [Note: Where the "buyer" is an "individual", requirements of a consumer protection nature may dictate choice of language. If so, these are to be considered an external constraint of a jurisdictional domain].

Here combinations of seller choice and buyer demands can be modelled and specified as internal constraints¹⁸ with respect to choice of language(s) can be predefined, a negotiable.

Here combinations of seller choice and buyer demands can be modelled and specified as internal constraints¹⁹ with respect to choice of language(s) can be predefined and be negotiable.

(3) requirements of jurisdictional domain

Depending on the nature of the good, service and/or right forming the goal of the business transaction, requirements of a jurisdictional domain can specify the language to be used. Further the location chosen by the buyer and seller in which a business transaction takes place or is deemed to take place The jurisdiction domain of the location where a business transaction takes place or is deemed to take place²⁰ may also specify the language to be utilized. {See further Clause 6.2+}

Rule nnn:

In business transactions which are modelled and registered as scenarios and scenario components which involve internal constraints only, the parties involved are free to choose and decide among themselves the natural language(s) to be used for the recorded information in a business transaction.

Guideline nnn-n:

In modelling business transactions which involve internal constraints only, it is advisable that the parties concerned choose a combination of (1) a natural language and (2) its use in a designated jurisdictional domain, i.e., as identified in Annex C.

On the whole, parties to a business transaction are free to choose and decide among themselves the language(s) to be used for the recorded information, i.e., in the form of form of scenarios, scenario attributes, information bundles and semantic components. This can be a natural language or a special language, (e.g., as may be appropriate in a specific industry sector, technical area, scientific discipline, etc.). As such, choice of language is an internal constraint".

¹⁸Choice of language here is considered a "private" contractual decision among the parties to a business transaction.

¹⁹Choice of language here is considered a "private" contractual decision among the parties to a business transaction.

²⁰ The phrase "deemed to take place" covers transaction of the nature where a buyer in one jurisdictional domain and a seller in another jurisdictional domain together decide to conduct/enact the business transaction in another, third, jurisdictional domain.

The existing ISO definition for "**language**", "**natural language**" and "**special language**" (see Clause 3) are applicable to Part 5.

Many sectors have through custom and usage developed a special language. Use of such a special language minimizes ambiguity in the semantics of the recorded information utilized to make commitments among the parties concerned. A key hallmark of a special language is that it has a recognized distinct controlled vocabulary (or special dictionary) which specifies terms used and defines their meaning.

Examples include "specialized agencies" of the UN system as (a jurisdictional domain) utilizing special language(s) and controlled vocabulary(ies) to ensure required unambiguity in semantics from a worldwide perspective and context, (e.g., the ILO, ICAO, IMO, WHO, IMF, etc.²¹ {See further, Clause 6.2.7 below}

Project Editors' Note

Added draft text and some examples to be provided as part of the FCD version.

6.2.2 Jurisdictional Domain as an External Constraint on Choice of Language(s)

Internal constraints are self-imposed rules, i.e. those which parties to a business transaction negotiate and agree to among themselves. This includes the choice of language in which the commitments are made and the business transaction actualized. As such one can model business scenarios and scenario components, identify, register and re-use them in whatever language one chooses.

Any combination of:

- seller, i.e., supplier, choice and requirements of jurisdictional domains;
- buyer, i.e., user, requirements and jurisdictional domain; and/or,
- supplier choices, buyer demands and requirements of jurisdictional domains

requires the incorporation and ability to support the demands of external constraints with respect to use of language in the modelling, specification, registration and re-use of scenarios, scenario attributes and scenario components, i.e., roles, Information Bundles (IBs) and their Semantic Components (SCs).

Rule nnn:

In business transactions which are modelled (and registered) as scenarios and scenario components which involve external constraints, one shall specify the official language(s) to be supported based on the requirements of the jurisdictional domain(s) which is the source(s) for these external constraints.

²¹Specific examples are in the process of being prepared.

Rule nnn:

In modelling a business transaction (or parts thereof) and registering them as re-useable business objects involving external constraints, these shall be modelled in a manner which supports the language requirements, including a multilingual approach, of the source of such external constraint(s), (e.g., jurisdictional domain(s)).

Guideline nnnGn:

It is recommended that support for multiple languages in business transaction be modelled at the architectural (or lowest structural level).

Key concepts, constructs, methodologies, etc., in this multipart standard already support such an approach through use of "identifiers" , ID codes, semantic identifiers, etc. to identify and represent the relevant entities, semantics, etc., and then making provision for multiple human interface equivalents (HIEs).

Rule nnn:

A jurisdictional domain has either an official language(s) or a de facto language.

Guideline nnn-n:

Each sub-level, (e.g., administrative sub-division) in a jurisdictional domain may have official languages in addition to those of the jurisdictional domain of which it is a component part.

For example, in Canada, the Territory of Nunavut has Inuktitut as third official language, i.e. in addition to those of English and French which are official languages throughout Canada.

6.2.3 What is an "Official Language"²²

In Section 5 above, key aspects pertaining to "language" were brought forward. In Section 6.1 and 6.2, were brought forward relevant Open-edi terms/definitions. Within the scope and context of the Open-edi Reference Model, business semantic description techniques and in particular that of ISO/IEC 5944-5, the focus is that of natural language as a system of communication in use in a "community of people".

Integrating two sets of concepts, i.e., "language" and "Open-edi" in the context of "jurisdictional domain", i.e., ISO/IEC 15944-5, the proposed definition for "official language" is as follows:

official language

an external constraint in the form of a natural language specified by a jurisdictional domain for official use by Persons forming part of and/or subject to that jurisdictional domain for use in communication(s) either (1) within that jurisdictional domain; and/or, (2) among such Persons, where such communications are recorded information involving commitment(s).

²² See further document JTC1/SC32/WG1 N210R M. Janice Pereira and Jake V. Knoppers "Languages and Jurisdiction: "Natural", "Special", "Official", "Artificial", "Indexing", "Programming," etc.

NOTE 1 Unless official language requirements state otherwise, Persons are free to choose their mutually acceptable natural language and/or special language for communications as well as exchange of commitments.

NOTE 2 An official language(s) can be mandated for formal communications as well as provision of goods and services to Persons subject to that jurisdictional domain and for use in the legal and other conflict resolution system(s) of that jurisdictional domain, etc.

NOTE 3 Where applicable, use of an official language may be required in the exercise of rights and obligations of individuals in that jurisdictional domain.

NOTE 4 Where an official language of a jurisdictional domain has a controlled vocabulary of the nature of a terminology, it may well have the characteristics of a special language. In such cases, the terminology to be used must be specified.

NOTE 5 For an official language, the writing system(s) to be used shall be specified, where the spoken use of a natural language has more than one writing system.

EXAMPLE 1 The spoken language of use of an official language may at times have more than one writing system. For example, two writing systems exist for the Inuktitut language, namely, one Latin-I based (Roman), the other is syllabic-based. Another example is that of Norway which has two official writing systems both Latin-I based namely “Bokmål (Dano-Norwegian) and Nynorsk (New Norwegian).

NOTE 6 A jurisdictional domain may have more than one official language but these may or may not have equal status.

EXAMPLE Canada has two official languages, Switzerland has three, while the Union of South Africa has eleven official languages.

NOTE 7 The BOV requirement of the use of a specified language will place that requirement on any FSV supporting service.

EXAMPLE A BOV requirement of Arabic, Chinese, Russian, Japanese, Korean, etc., as an official language requires the FSV support service to be able to handle the associated character sets.

NOTE 8 It is for a jurisdictional domain to decide whether or not it has an official language. If not, it will have a de facto language.

Similarly, international organizations of the nature of a jurisdictional domain also have official languages²³

²³For example, the official languages of the UN are Arabic, Chinese, English, French, Russian, and, Spanish. The official languages of the ISO are English, French, and Russian. On the other hand, the official language of the International Civil Aviation Organization (ICAO) is English.

Rule nnn:

Where a jurisdictional domain has more than one official languages, Persons as suppliers shall be capable of communicating with buyers (particularly as individuals) in any one of the official languages of that jurisdictional domain

From a business transaction perspective, a key role of an official language is to ensure that in the making of the commitments among the participating parties that the commitment can be enforced should a dispute arise. The legal system, courts and other arbitration or dispute resolution mechanisms of a jurisdictional domain function in the official languages of that jurisdictional domain. Another role of an official language is to ensure that parties making a commitment among themselves (e.g. as formulated in a business transaction) that all parties use the same language.

Further, where the nature of the business transaction being modelled is one which involves external constraints, suppliers must be capable of communicating with the regulator(s) of the jurisdictional domain(s) involved in one of the official languages of these jurisdictional domains.

Guideline nnnGn: Where a jurisdictional domain has three or more official languages may or may not have equal status²⁴.

It is not uncommon that where a jurisdictional domain has three or more official languages that not all these have equal status. For example, for use of some official language(s) in a jurisdictional domain, there could be criteria such as "where and when numbers warrant", "there is a significant demand for communication with and services from a public administration in that language", etc.

Project Editors' Note(s):

1. *Text to be added.*
2. *In footnote provide example of Canada re: Quebec, New Brunswick and Manitoba,*
3. *complete text on use of official language and validity of commitments made. Link to "commitment" and "capable of enforcement in the jurisdiction in which the commitment is made.*

Some jurisdictional domains do not have a specified official language(s). However, the institutions of such a jurisdictional domain do use a natural language for communications among Persons and administration of justice, provision of public services, etc. These are often labelled a "de facto language".

²⁴ This Guideline is here to alert suppliers to this fact as well as those who model business transactions as business objects. Part 5 focuses on the essential basic, i.e. primitive, aspect of jurisdictional domains as sources of external constraints. As such this edition of ISO/IEC 15944-5 does not address differences in status that may exists among official languages within a jurisdictional domain.

The definition for "de facto language" is:

de facto language

a natural language used in a jurisdictional domain which has the properties and behaviours of an official language in that jurisdictional domain without having formally been declared as such by that jurisdictional domain.

NOTE 1 A de facto language of a jurisdictional domain is often established through long term use and custom.

NOTE 2 Unless explicitly stated otherwise and for the purposes of modelling a business transaction through scenario(s), scenario attributes and/or scenario components, a de facto language of a jurisdictional domain is assumed to have the same properties and behaviours of an official language.

Rule nnn:

A jurisdictional domain either may have one or more official languages and, if not, may have only one “de facto language”.

A de facto language of a jurisdictional domain achieves its “legal status” through long time use and custom. This is not an uncommon feature, in jurisdictional domains whose legal system is that of a “common law” nature. However, a jurisdictional domain can not have more than one de facto language since such a condition would require it to legally recognize the two (or more) de facto languages as having equal status. Such recognition in law of equal status of two (or more) de facto languages in that jurisdictional domain would make the same as having the status of “official languages”. Annex C is constructed based on this rule.

Project Editors’ Notes

- 1. The following text and definition pertaining to “national language” was accepted as “normative text” without comment in the 1st CD ballot document. It therefore is required to be carried forward into this 2nd CD ballot document, the FCD and eventual FDIS ballot documents.*
- 2. However, response to comments on Annex C by Norway on the 1st CD ballot document and work within Canada pertaining to linguistic requirements and right of Aboriginal peoples led to the development of the concept/definition of “legally recognized language (LRL) as the 3rd sub-type of language from an external constraints perspective and incorporated as such in this 2nd CD.*
- 3. Consequently, the Project Editors ask “Is the following text and definition of “national language” useful or should it be deleted?”*
- 4. Currently, we have three sub-types of language from an external constraints perspective, namely “official language”, “de facto language”, and “legally recognized language”. The example given here, i.e. that of Raeto-Romance (“roh”) may well be covered by “legally recognized language” insofar it has legal status in one or more jurisdictional domains.*

Sometimes, the concept "national language"²⁵ is used. It is not the same as "official language".

The definition of "national language" is:

Sometimes, the concept "national language"²⁶ is used. It is not the same as "official language".

The definition of "national language" is:

national language

a language used by a community of people within a jurisdictional domain or among several jurisdictional domains.

EXAMPLE In Switzerland, Raeto-Romance (ISO 639-2/T code "roh") is a national language, but not an official language, i.e., it is not used in public administration.

6.2.4 Gender and Official Languages

Rule nnn:

In order to be able to specify the gender of a name or term used for a business object, the set of "Codes Representing Gender in Natural Languages" shall be used in the modelling of a business transaction and registration of any related business object.

Rule nnn:

Where the official language (or de facto language) of a jurisdictional domain has no gender this shall be stated.

Many natural languages have "gender" as part of their grammar while others do not (e.g. English does not). Knowing the gender of nouns as words, terms, "names", etc., is often needed to ensure unambiguity in interoperability of semantics among different languages from both IT interface and human interface perspectives. At times, specification of gender of the term or noun is important to ensure unambiguity in semantics of the semantic component(s) and information bundle(s) interchanged among parties in making commitments in a business transaction. (See further Annex K for some examples).

Further, in natural languages where gender is an essential part of the language, the gender of the noun governs both the meaning and the representation of the associated/relevant words in the noun phrase. The gender of the noun also may impact the representation of the associated verb phrases. Therefore, gender of the noun is important in the use of official languages.

²⁵ A "national language" is more of the nature of a linguistic construct a being a language of a people who form a "nation" whose boundary in turn may well not match that of present day jurisdictional domains of "nation-states" as peer members of the United Nations.

²⁶ A "national language" is more of the nature of a linguistic construct a being a language of a people who form a "nation" whose boundary in turn may well not match that of present day jurisdictional domains of "nation-states" as peer members of the United Nations.

It is a fact that standards both (1) use existing natural language words in different contexts and thus different meanings, i.e., semantics; and, (2) in standards development work new terms are often coined/invented and thus not readily found in standard dictionaries. Consequently, it is important to be able to specify the gender of each term (noun), label, etc., where gender is a crucial element in the use of a natural language especially where such a natural language(s) is used as an "official language" in specifying external constraints and/or the formulation and establishment of a coded domain.

With respect to gender, in language the three (most) common possible states are: neuter, masculine, or feminine.

Also, gender is language specific, i.e., a noun in one natural language may have one gender code, and the equivalent noun in another language may have a different gender code.

It is deemed important to note the gender of nouns at the human interface because gender determines the use of "linkage words"/«mots liens», as well as the correct representation and thus understanding and meaning, i.e., semantics, of such nouns and noun phrases in their daily use.

The coding scheme presented here incorporates present international conventions and is presented below as "Table nn" of ISO/IEC 15944-5 and is titled "Codes Representing Gender in Natural Languages".

ISO/IEC 15944-5:nn Codes Representing Gender in Natural Languages					
IT Interface			Human Interface Equivalent: Linguistic - Written Form		
Coded Domain ID	Table ID	ID Code	ISO English	ISO French	ISO Spanish
15944-5	nn	00	unknown	inconnu	desconocido
15944-5	nn	01	masculine	masculin	masculino
15944-5	nn	02	feminine	féminin	feminino
15944-5	nn	03	neutral	neutre	neutro
15944-5	nn	99	not applicable	sans objet	no aplica

Project Editors' Note:

If more gender codes are required, they will be added.

6.2.5 Official Languages and Human Interchange Equivalents (HIEs) of Semantic Components

From an IT interface as well as an IT interoperability perspective, one needs, in business transactions, unique, unambiguous and linguistically-neutral identifiers for scenarios and scenario components. These required properties and behaviours of an identifier for use in (electronic) business transactions were addressed in ISO/IEC 15944-1:2002. The resulting definitions for an identifier (in a business transaction) apply also in this part. For the purposes of this part, they are "eb-identifiers".

Project Editors' Note(s):

1. *To be completed prior to FCD ballot version..*

From a jurisdictional domain perspective, it is important that persons making the commitments in a business transaction are able to have a complete understanding of the semantic(s) of a eb-identifier. That is, where and when required, "human interface equivalent" (HIE) may need to be made available.

"Human interface equivalent" (HIE) is defined as:

Human Interface Equivalent (HIE): a representation of the ***unambiguous*** and ***IT-enabled semantics of an IT interface equivalent (in a business transaction)***, often the ***ID code of a coded domain (or a composite identifier)***, in a formalized manner suitable for communication to and understanding by humans.

NOTE 1 Human interface equivalents can be linguistic or non-linguistic in nature.

NOTE 2 In most cases there will be multiple human interface equivalent representations as required to meet localization requirements, i.e. those of a linguistic nature, jurisdictional nature, and/or sectorial nature.

NOTE 3 Human interface equivalents include representations in various forms or formats, (e.g., in addition to written text those of an audio, symbol (and icon) nature, glyphs, image, etc.)

Rule nnn:

Where a jurisdictional domain has more than one official language, human interface equivalents (HIEs) are required in each official language in order to ensure unambiguity in the semantics of the commitments made.

Rule nnn:

It is up to a jurisdictional domain to establish HIEs in its official language(s) where these are part of the specification and implementation of external constraints.

6.2.6 UN Member States and Their Official (or de facto) Languages

A key attribute of a jurisdictional domain is that it predefines and specifies the language (s) in

which it acts and communicates in any matter of a legal nature but also with respect to any commitments it makes, services it provides, rights it grants, etc. with any Person within its domain, i.e. as its official language(s). This is especially so for UN member states. Where a UN member state does not have an official language(s), it has a de facto language.

A key aspect of a business transaction, which sets it apart from any information exchanges in general, is that it involves the making of commitments among the parties involved. A commitment in turn is that it must be capable of enforcement in a jurisdictional domain. Any such enforcement action will need to take place in the official language(s) of the jurisdictional domain in which it is being enforced.

As such, it is important to know what the official language(s) are (or de facto language is) of a jurisdictional domain in order to which apply as external constraints when modelling and instantiating a modelled business transaction, i.e. as an Open-edi scenario or any scenario component. This information is provided in “*Annex C (Normative) ; Codes Representing UN Member States and their Official (or de facto) Language(s)*”

Project Editors' Note(s):

1. *The current version of Annex C as part of this 2nd CD already incorporates the ballot comments received on the 1st CD document..*

6.2.7 International Organizations and Official Languages

Project Editors Notes

1. No P-member comments were received on this clause and its sub-clauses on the 1st CD ballot document. Consequently, Clause 6.2.7 and its sub-clauses should be progressed to 2nd CD, FCD and FDIS

2. The Project Editors in responding to other 1st CD ballot document comments as well as working on other parts of this 2nd CD document found it more efficient to eliminate the sub-clauses for Clause 6.2.7 and make it a single clause instead.

International organizations often have the status of a jurisdictional domain, particularly those in the public sector. A primary example are those international organizations established as a result of treaties among UN member states. UN member states by being treaty members, i.e. signatories, to the document establishing an international organization bind themselves, i.e. commit themselves, to the principles and rules of the international organization including the use of the official language(s) of the international organization taking precedence over the official languages of the jurisdictional domains who are signatories to that treaty. Even international organizations in the private sector can have this characteristic (e.g. the International Chamber of Commerce (ICC) and its INCOTERMS).

The most common example of international "public administration" are the UN "specialized agencies". Each of these has one or more official languages. They at times also specify one (or more of these) as their daily "working" languages. Another example are entities of the nature of the World Trade Organization (WTO), the World Customs Organization (WCO), etc. and other non-UN system organization that functions as a jurisdictional domain.

Rule nnn

The official language of a treaty-based international organization recognized as having primary competence in a specific sector can override the official language requirements of the jurisdictional domains of UN member states.

UN member states as signatories to an internationally recognized treaty and thus having the force of law from a global, i.e. worldwide, application perspective commit themselves, as signatory parties, to have the principles and rules of such a treaty-based international organization as taking precedence over the principles and rules governing their own jurisdictional domains.

For example, in the sector of civil aviation, the International Civil Aviation Organization (ICAO)²⁷ has been designated and recognized as the world-wide Source Authority (including being the "coded domain Source Authority" for many coded domains. The one "official language" of ICAO is "ICAO English"²⁸. This means that all the definitions and terms for use in communications, navigation and surveillance (CNS) for civil aviation world-wide, particularly for any international flights among all jurisdictional domains shall be conducted in "ICAO English".

Rule nnn:

In modelling a business transaction (or parts thereof) and registering them as re-useable business objects involving internal constraints these should be modelled in a manner which supports the language(s) of the source authorities referenced and utilized in such referenced specifications.

An example here is the International Chamber of Commerce (ICC) is a private sector organization. The ICC is the Source Authority for the "International Commercial Terms" (INCOTERMS). INCOTERMS are widely used in domestic and international business transactions. These INCOTERMS have been made available in over 30 languages

6.2.8 Legally Recognized Languages (LRLs)²⁹

²⁷ See further the ICAO website at < www.icao.org > .

²⁸ "ICAO English" is in parentheses here to indicate that it represents a particular use of the English language as a "special language" with respect to definitions and associated terms as an official language of ICAO, i.e. as stated and defined in official ICAO documents

²⁹ This 1st edition of Part 5 focuses on the key essential aspects, i.e. primitives, only. The LRL concept is introduced here as the stakeholder sub-type for linguistic requirements within a jurisdictional domain which are of a particular, i.e. non-general, nature versus those of "official language" and "de facto language" which are of a general nature within a jurisdictional domain.

The official language(s) (or de facto language(s)) of a UN member state (or a sub-division thereof) serves as a common external constraint on the modelling and instantiations of business transactions within that jurisdictional domain as a whole. However, within a jurisdictional domain, there may exist acts, regulations, legal instruments, etc., which contain requirements or rights of a linguistic nature, i.e., for languages other than those already identified as an official language(s) in that jurisdictional domain. These are languages which have legal recognition in a specific context, for a specific purpose and/or for a specified geographic territory within a jurisdictional domain³⁰. Linguistic requirements of this nature can be categorized as legally recognized languages (LRL) defined as:

legally recognized language (LRL): a **natural language** which has status (other than an **official language** or **de facto language**) in a **jurisdictional domain** as stated in an act, regulation, or other legal instrument, which grants a community of people (or its **individuals**) the right to use that language in the context stipulated by the legal instrument(s).

NOTE The LRL can be specified through either:

- the identification of a language by the name utilized; or,
- the identification of a people and thus their language(s).

EXAMPLE In addition to acts and regulations, legal instruments include self-government agreements, land claim settlements, court decisions, jurisprudence, etc.

One area which has seen a rapid rise in the introduction of LRLs is with respect to recognition of rights of Aboriginal peoples, rights of a "minority" in a specific jurisdictional domain, etc.

6.3 JURISDICTIONAL DOMAINS AND PUBLIC POLICY REQUIREMENTS

6.3.1 Introduction

Increasingly jurisdictional domains require those providing a good, service and/or right in making such offers, and those executing resulting (electronic) business transactions, to comply with generic horizontal requirements of the nature of rights pertaining to natural persons in their role as individuals. Clause 0.2 and Figure 3 in ISO/IEC 15944-1:2002 identified these as "public policy" requirements "particularly" those of a generic nature such as consumer protection, privacy, etc."

In addition, Clause 6.2.8 in ISO/IEC 15944-1:2002 titled "Person and external constraints: constraints: consumer and vendor" already introduced "consumer protection" as a minimum external constraint which needs to be taken into account in modelling business transactions doing so in a limited, i.e., primitive manner.

There are other external constraints of a horizontal generic "public policy" nature which need to

³⁰Examples here include education/school acts, heritage or culture acts, self-government agreements, language for use at the municipal level, etc.

be taken into account in modelling business transactions. These include privacy, special needs, etc. As per Clause 6.1.6 "Business transaction model: Classes of constraints" (in ISO/IEC 15944-1:2002), these form part of the category of "External Constraints: Public Administration" (as identified in Figure 8 in Part 1).

This Clause 6.3 focuses on some of the most basic categories of public policy as minimum external constraints that need to be taken into account in modelling (electronic) business transactions which involve, i.e., pertain to, "individuals" as "buyers". Those already identified include:

- consumer protection;
- privacy;
- accessibility; and,
- human rights.

As such one distinct category of external constraints for which the source is a jurisdictional domain is that of "public policy" which is defined as:

public policy:

*a category of **external constraints** of a **jurisdictional domain** specified in the form of a right of an **individual** or a requirement of an **organization** and/or **public administration** with respect to an **individual** pertaining to any exchange of **commitments** among the parties concerned involving a good, service and/or right including information management and interchange requirements.*

NOTE 1 Public policy requirements may apply to any one, all or combinations of the fundamental activities comprising a business transaction, i.e., planning, identification, negotiation, actualization and post-actualization. {See further Clause 6.3 "Rules governing the process component" in ISO/IEC 15944-1:2002}.

NOTE 2 It is up to each jurisdictional domain to determine and specify where or not a natural person in the role of "individual" or "organization Person" is deemed to be competent to make a commitment of whatever nature or declared to be "incompetent", i.e., declared to be incapable to make a commitment.

NOTE 3 It is up to each jurisdictional domain to determine whether or not the age of an individual qualifies a public policy requirement, (e.g., those which specifically apply to an individual under the age of thirteen (13) as a "child", those which require an individual to have attained the age of adulthood, (e.g., 18 years or 21 years of age) of an individual to be able to make commitments of a certain nature.

NOTE 4 Jurisdictional domains may have consumer protection or privacy requirements which apply specifically individuals who are considered to be "children", "minors", etc.(e.g. those who have not reached their 18th or 21st birthday according to the rules of the applicable jurisdictional domain).

The three sub-clauses which follow on the minimal external constraints of this nature so in a primitive, i.e., limited manner. It is outside the scope of this part of this multipart standard to address and specify external constraints on a business transaction of the nature of "consumer protection", "privacy", "accessibility", etc., in detail. The sole purpose of this clause is to ensure that when one uses this standard to model business transactions or parts of business transactions as reusable business objects in the form of scenarios and scenario components, one is able to identify under "external constraints" in the template provided in Clause 10 requirements of a "public policy" nature.

Project Editors' Note(s):

Following resolution of 2nd CD ballot comments, the Clause 10 "template" will be prepared as part of the preparation of the FCD document. The contents of this template will support Clause 6.3 requirements. Its purpose and structure will be the same as the templates found in Clause 7.3 and Clause 9 in ISO/IEC 15944-1:2002.

6.3.2 Person and External Constraints: Consumer Protection³¹

In modelling (electronic) business transactions, a common minimum external constraint that needs to be taken into account is that commonly known as "consumer protection".

Rule nnn:

From a minimal external constraints perspective, a common set of constraints of a jurisdictional domain on a business transaction, where the buyer is an individual, are those of a consumer protection nature³².

In ISO/IEC 15944-1:2002, "**consumer**" and "**vendor**" has already been defined {For text see above Clause 3.nnn and 3.nnn respectively}.

Based on these definitions, "consumer protection" is defined as:

***consumer protection:** a set of external constraints of a jurisdictional domain as rights of a consumer and thus as obligations (and possible liabilities) of a vendor in a business transaction which apply to the good, service and/or right forming the object of the business transaction (including associated information management and interchange requirements including applicable (sets of) recorded information).*

***NOTE 1** Jurisdictional domains may restrict the application of their consumer protection requirements as applicable only to individuals engaged in a business transaction of a*

³¹Clause 6.3.2 builds on and utilizes Clause 6.2.8 "Person and external constraints: Consumer and vendor" of ISO/IEC 15944-1:2002

³²This is a restatement of "Rule 38" in ISO/IEC 15944-1:2002.

commercial activity undertaken for personal, family or household purposes, i.e., they do not apply to natural persons in their role as "organization" or "organization Person".

NOTE 2 Jurisdictional domains may have particular consumer protection requirements which apply specifically to individuals who are considered to be a "child" or a "minor", (e.g., those individuals who have not reached their thirteenth (13) birthday).

NOTE 3 Some jurisdictional domains may have consumer protection requirements which are particular to the nature of the good, service and/or right being part of the goal of a business transaction.

Rule nnnn

Where the buyer is an individual, the seller shall ascertain that the individual has the age qualification required by the jurisdictional domain to be able to be involved in and make commitments pertaining to the good, service and/or right being offered in the proposed business transaction

Guideline nnnG1

Sellers shall take the required precautions to ensure that they do not communicate inappropriate information, engage in monetary transactions or the making of any commitments with children (without the verifiable consent of their parents or guardians)

This rule and guideline captures common consumer protection requirements pertaining sales in general as well of particular goods or services to children and minors.

Rule nnn

Seller shall ensure that where they intend to sell a good, service and/or right to a buyer as an individual that consumer protection requirements of the applicable jurisdictional domain of the buyer are supported.

These consumer protection requirements include the provision of "complete" information, the use of language of the individual, terms of contract formation and fulfilment, privacy of the on-line information, security of the personal information and payment, procedures for redress, stop to unsolicited e-mail, etc.

6.3.3 Privacy Protection

In modelling (electronic) business transactions, a common minimum external constraint that needs to be taken into account is that commonly known as "privacy" requirements (or in some jurisdictional domains as "data protection"). In this standard, the term "privacy protection" is used to identify this category of public policy requirements.

Rule nnn:

From a minimal external constraints perspective, a common set of constraints of a

jurisdictional domain on a business transaction where the buyer is an individual are those of a privacy protection nature.

In this standard "privacy protection" is defined as:

privacy protection: a set of **external constraints** of a **jurisdictional domain** pertaining to (a set of) **recorded information** on or about an identifiable **individual**, i.e., **personal information**, with respect to the creation, collection, management, retention, access and use and/or distribution of such recorded information about that individual including its accuracy, timeliness, and relevancy.

NOTE 1 Recorded information collected or created for a specific purpose on an identifiable individual, i.e., the explicitly shared goal of the business transaction involving an individual, shall not be utilized for another purpose without the explicit and informed consent of the individual to whom the recorded information pertains.

NOTE 2 Privacy requirements include the right of an individual to be able to view the recorded information about him/her and to request corrections to the same in order to ensure that such recorded information is accurate and up-to-date.

NOTE 3 Where jurisdictional domains have legal requirements which override privacy protection requirements these must be specified, (e.g., national security, investigations by law enforcement agencies, etc.).

It is noted that from a supplier perspective, privacy protection requirements can be summarized as maintaining recorded information about an identifiable individual which is as timely, accurate, and relevant as possible, is utilized only for its original purpose and not for any other purpose (unless consented to by the individual concerned), and that any such recorded information which does not meet these requirements is expunged, unless there are other external constraints of a jurisdictional domain nature which override such privacy protection requirements, (e.g., law enforcement, national security, etc.). Key privacy principles include (1) accountability, (2) identified purpose, (3) informed consent, (4) limiting collection, (5) limiting use, disclosure and retention, (6) accuracy, (7) safeguards, (8) openness of privacy policy, (9) individual access to their personal information, (10) challenging compliance, (11) transborder data flow controls, and likely others.

Guideline nnG1:

Where a jurisdictional domain differentiates in criteria of privacy protection with respect to a natural person in its role as an "individual" or an "organization Person", this needs to be specified.

Guideline nnG1:

Where a jurisdictional domain has privacy protection requirements as a set of external constraints which are applicable to a specific sector (public versus private, per industry sector, etc.), or type of business transaction, this needs to be specified.

6.3.4 Individual Accessibility

A third increasingly common minimum external constraint of a public policy nature that needs to be taken into account in modelling (electronic) business transactions through re-useable business objects, are those which are categorized as accessibility requirements in the form of either (1) rights of individuals in their use of information technologies at the human interface; and/or (2) those providing goods or service in general or in particular to ensure that the provisioning of the same does not discriminate against or provides for participation by “non-typical” users, i.e. those persons with an impairment or disability of some kinds, who require some form of adaptive semantics and technologies to participate in a business transaction, i.e. “individual accessibility”. Here “accessibility” pertains to ensuring that goods or services being provided in (electronic) business transactions that, in the making of the commitments of the parties, the IT systems utilized are capable of supporting people with impairments or disabilities.

Jurisdictional domains often specify human accessibility requirements as being (1) of a generic nature and applicable irrespective of the goals of a business transaction and the commitments being entered into among the participating parties, (e.g., as part of basic human rights, as part of its constitution, etc.); and/or (2) as applicable to a particular sector, (e.g., e-government, education, etc.). Particular human accessibility requirements also exist at the UN member state’s sub-division level, (e.g., a state, province, länder, etc.), at the regional level, (e.g., the European Union)³³.

Here disabilities can be of either a functional or cognitive nature.

“Individual accessibility” is defined as:

individual accessibility: a set of **external constraints** of a **jurisdictional domain** as rights of an **individual** with disabilities to be able to utilize IT systems at the human, i.e., user, interface and the concomitant obligation of a seller to provide such adaptive technologies.

NOTE [to be added, if required]

Examples of disabilities in the form of functional and cognitive limitations include:

- people who are blind;
- people with low vision;
- people with colour blindness;
- people who are hard of hearing or deaf, i.e., are hearing impaired;
- people with physical disabilities;
- people with language or cognitive disabilities.

It is noted that language and cognitive disabilities are very difficult to specify and thus model as

³³The United Nations has an Overview of International Frameworks for Disability Legislation available at <<http://www.un.org/esa/socdev/enable/disother.htm>>.

human interface requirements³⁴, but often it is possible to do so. They include mental retardation, lack of short term memory, dyslexia, dyscalculia, dysgraphia, auditory and perceptual disabilities, cognitive disorganization, and visual perceptual disabilities.³⁵

Nevertheless, unless a human disability(ies) of an individual is of the nature where the jurisdictional domain considers or declares the individual to be "incompetent", i.e., not able to make a commitment as a party to a business transaction, from an external constraints perspective, there is a need to be able to support human accessibility requirements.

As such in the development of human interface equivalents (HIEs) for an ID code or a semantic identifier, these also include those HIEs of a nature to ensure individual accessibility³⁶.

6.3.5 Human Rights

The three primitive public policy requirements identified above have as a common thread that they apply to Persons in their role as an individual engaged as a "buyer" (or "consumer") in a business transaction. There are other public policy requirements which may need to be supported of a "human rights" nature in modelling a business transaction. Here in the context of "cultural adaptability" as the third strategic direction of ISO/IEC JTC1 for its standards development³⁷, other public policy requirements which may need to be incorporated into the specification and re-use of business objects include:

- the UN "Universal Declaration of Human Rights" (1948);
- the UN "Universal Declaration of Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities";
- the UN "Universal Declaration of Cultural Diversity" (Paris, November, 2001); and,
- others.

³⁴Here Annex A in ISO/IEC 5218:2004 "Codes representing the human sexes" titled "Annex A(Informative) Annex A (Informative) — Codes for the representation of the human sexes supporting (linguistic) cultural adaptability Annexe A (Informative) — Codes de représentation des sexes humains supportant l'adaptabilité culturelle (linguistique)".

³⁵See further the US National Institute of Neurological Disorders and Stroh resources on dyslexia at <<http://www.ninds.nih.gov/healthandmedical/disorders/dyslexiadoc.htm>. See also the "[IMS Guidelines for Developing Accessible Learning Applications](#)", Version 1.0 White Paper, 2002-06-22 (publicly available via <http://www.ims.org>) as well as other IMS documents containing very useful information and IT systems specifications for individual accessibility requirements from an "e-learning" perspective.

³⁶Table 1 in Annex A of ISO 5218:2004 provides an example of an IT-enabled approach to supporting individual accessibility. It has been reproduced in Annex N.

³⁷The other two strategic directions of ISO/IEC JTC1 for standards development are "portability" and "interoperability".

6.4 JURISDICTIONAL DOMAINS AND IDENTIFICATION SYSTEMS

It is a common requirement for a jurisdictional domain to require that a specific identification system to be utilized with respect to the identification of the good(s), service(s), and/or right(s) forming an explicitly shared goal of the business transaction being modelled.

Rule nnn:

When an external constraint of a jurisdictional domain requires use of a specific identification system with respect to a Person identity (rPi) and/or with respect to a good, service and/or right, pertaining to the business transaction being modelled as scenarios and scenario components as re-useable business objects, such modelling shall be done in a manner which supports the requirement of the identification system referenced.

Project Editors' Note(s):

Added draft text being completed by the Project Editors, based in large part on Annex C and D of Part I providing the examples. It also includes rules governing "composite identifiers".

6.5 JURISDICTIONAL DOMAINS AND CLASSIFICATION SYSTEMS

A key characteristic of jurisdictional domains is that:

- (1) where they are geopolitical nature and issue laws, regulations, codes, etc., the implementation of such external constraints includes of a particular perspective on the real world and from that perspective develop predefined and structured a classification system which is to be utilized whenever that particular external constraint applies to the business transaction;
- (2) where they are of focused and established with respect to goods, services and/or right, by subject or discipline, etc., they, almost invariable, have a classification system for the domain which they govern and their rulebase applies to.

Rule nnn:

Where an external constraint of a jurisdictional domain requires the use of a specific classification system form part of the business transaction being modelled or as an identifiable and registered scenario component, i.e., as a re-useable business object, this shall be done in a manner which supports the requirements of the classification system being referenced.

Rule nnn:

Where a classification system uses identifiers for distinct entry and associated semantics in that classification system such identifiers (or "composite identifiers") shall be utilized and their structure in modelling a scenario or scenario component.

In a classification system, the identifier for each distinct entry is often of the nature of a "composite" identifier representing a block-numeric coding approach, a hierarchical approach, etc. The use of such composite identifiers is very prevalent where the source authority as a jurisdictional domain (or private sector organization) has more than one official (or working) language. Here the (composite) identifier of a classification system (considered in e-business to be a Registration Schema) forms part of the IT interface equivalent with which are associated HIEs in multiple languages.

The same real world entity can and is "classified" and assigned different identifiers in various classification systems. The ID of a real world entity in one classification system may well be not appropriate for use in another context.

Project Editors' Note(s):

1. *Additional text, examples here are in progress of being developed. A common "entity" is being utilized, i.e., "potato" from import/export, agriculture, disease control, etc., and other external constraint requirements and perspectives. {See further Annex I and the "Harmonized System" which is the classification system of the WCO}*
2. *Another example is that of "PCBs" from an environmental health requirements perspective.*
3. *Link of classification systems to ISO thesauri standards also to be noted.*

6.6 JURISDICTIONAL DOMAINS AND "PREDEFINED" SCENARIOS AND SCENARIO COMPONENTS

6.6.1 Introduction

Clauses 6.2 through 6.5 identify principle requirements of jurisdictional domains. They identify some of the more common, i.e., primitive, types of requirements which jurisdictional domains impose on (electronic) business transactions depending on the nature of the parties involved, and the goal of the business transaction in terms of the good, services and/or right being exchanged.

On the whole, external constraints are specified in writing particularly where their source is a jurisdictional domain. Jurisdictional domains as the primary source of external constraints prescribe, limit, govern or specify any aspect of a business transaction including:

- any aspect of the Person Component;
- any aspect of the Process Component; and/or,
- any aspect of the Data Component

and modelling the same as re-useable business objects in scenarios, scenario components and/or or scenario attributes.

6.6.2 Person Component

6.6.2.1 General

Clause 6.2.2 in ISO/IEC 15944-1 provided definitions and rules for "*Person, personae, identification and person signature*". Clause 6.2.3 provided the definitions and rules for "*Person - identity and authentication*". The purpose of this Clause in Part 5 is to build on these rules and definitions from an external constraints requirements perspective. The focus here is the external constraints of jurisdictional domains as they apply to the formation, use and registration of personae of Persons.

In modelling business transactions involving internal constraints only, buyers and sellers are free to choose and negotiate the nature of the Person identities, especially the persona utilized. From a seller's perspective, the buyer can even be "mickey mouse"³⁸ (as long as the payment for the good or services is secure, i.e., like a cash payment).

The two Clauses 6.2.2 and 6.2.3 in ISO/IEC 15944-1:2002 recognized that a Person can have multiple personae³⁹, i.e., name representations, and associated identifiers for use in the context of different business transactions and their governing rules. As such, a Person can and does have multiple "Person identities", i.e., unique combinations of a persona and an identifier. When utilized in a business transaction, a Person identity becomes a "recognized Person identity (rPi)", basically because such an activity is based on commitments made among the parties involved.

A common requirement of jurisdictional domains is that it imposes rules as external constraints on the formation and assignment of personae, i.e., names of a Person, as well as use of the same in specified contexts and roles.

Rule nnn:

Any external constraint of a jurisdictional domain which governs, limits or qualifies a

³⁸On "anonymity", see further Clause D.5.2 "Anonymity" in Annex D titled "*Existing standards for the unambiguous identification of Persons in business transactions (organizations and individuals) and some common policy and implementation considerations*" in ISO/IEC 15944-1:2002. In addition, one can purchase a "prepaid value card" (magnetic stripe or "chip" based) and utilize it in the role of "buyer" in an e-business transaction having the specified good or service delivered to any location anywhere in the world as specified via a (physical or electronic) address.

³⁹While "organizations" and "public administrations (as sub-types of Person)" are limited by external constraints with respect to the variant personae they can use, no such constraints apply to individuals in the number of variant personae they can and do utilize in electronic business transactions. An increasing trend of individuals in utilizing the Internet is: (1) that of utilizing pseudonyms; and, (2) that of utilizing numbers to represent their phonetic alphabet base equivalents, (e.g., "4" = for) or Latin-1 characters as abbreviations for their meaning, (e.g., "U" = "you", "R" = "are, etc.).

Further, since many Internet-based services allow one to register and use their services for free (in large part because they are based on "advertising" driven business models), the variant forms of personae that a single individual may and does use on the Internet can be numerous. Here an increasing trend is that of the use by individuals of pseudonyms, i.e., a personae of a "fictional" nature, which may well have no link or bear any resemblance to any variant form of their actual name, i.e., they are not based on one (or more) of any of their existing legally recognized names (LRNs).

Person, a Person sub-type, any role qualification, etc., with respect to a business transaction of a particular nature shall be specified unambiguously and in a manner so as to be able to be modelled using an OeDT.

The application and implementation of this rule will result in scenarios and scenario components for which use and semantics is predefined.

Rule nnn:

Any external constraint of a jurisdictional domain which governs or qualifies the nature and source of a Person Identity (rPi) with respect to a business transaction of a particular nature shall be specified unambiguously and in a manner so as to be able to be modelled using an OeDT.

6.6.2.2 Persona as Legally Recognized Names (LRLs)

It is a common requirement in business transactions for the parties involved to utilize a persona which is recognized as having a legal status of some kind. Further, external constraints of a jurisdictional domain often specify and require the use of a specified persona of a Person which has a legal status of some kind and is recognized as such by all parties concerned, i.e, is a "legally recognized name" (LRN), defined as follows:

legally recognized name (LRN)

a **persona** associated with a role of a **Person** recognized as having legal status and so recognized in a **jurisdictional domain** as accepted or assigned in compliance with the **rules** applicable of that **jurisdictional domain**, i.e. as governing the **coded domain** of which the LRN is a member.

NOTE 1: A LRN may be of a general nature and thus be available for general use in commitment exchange or may arise from the application of a particular law, regulation, program or service of a jurisdictional domain and thus will have a specified use in commitment exchange.

NOTE 2: The process of establishment of a LRN is usually accompanied by the assignment of a unique identifier

NOTE 3: A LRN is usually a registry entry in a register established by the jurisdictional domain (usually by a specified public administration within that jurisdictional domain) for the purpose of applying the applicable rules and registering and recording LRNs (and possible accompanying unique identifiers accordingly).

NOTE 4: A Person may have more than one LRN (and associated LRN identifier).

Rule nnn:

A LRN may have both a long, i.e., complete, persona, or a short, i.e., truncated, persona.

The rules of a specific act or regulation of a jurisdictional domain governing the registration of a LRN often place little or no restriction on the number of characters, i.e., length, for that persona of a Person. (These at times are referred to as the long form and short form). However, IT-systems may require or set

limits on the length of the persona of a Person it is able to support⁴⁰. Such short forms are commonly referred to as a "truncated name". Where this is the case, rules exist for truncation of names in the applicable act or regulation. International standards with truncated names also have rules for truncation. A prime and most relevant example here is ISO/IEC 7501-3 which has detailed rules and examples for the truncation of names of individuals⁴¹.

Project Editors Note:

Do we need a definition for the concept of a "truncated recognized name", or "truncated LRN"? If so, a draft definition could be:

truncated recognized name: a truncation of a **legally recognized name** based on a predefined set of **rules**, i.e., a rulebase, for establishing a maximum length.

NOTE 1 Truncated recognized name(s) may be required for use in IT systems, the issuance of identity tokens, (e.g., machine readable travel documents or cards), electronic data interchange, etc.

NOTE 2 A truncated recognized name serves as a type of persona.

NOTE 3 A truncated recognized name may be deemed to be a legally recognized name (LRN) of that Person.

Rule nnn:

The formation of a LRN of an incorporated organization, i.e., a legal person, is governed by the rules of the jurisdictional domain in which it is incorporated, registered and recognized as such.

Guideline nnnG1:

When a jurisdictional domain agrees to establish a legal person, it usually assigns a unique identifier, i.e., ID Code, for that entity as a mandatory element of such an identification process as part of the Registration Schema (RS) of it being the Registration Authority (RA).

Guideline nnnG2:

Where the jurisdictional domain has more than one official language, an incorporated organization may have equivalent LRN in each official language, i.e., as HIEs associated with its identifier.

On the whole, the name of an incorporated entity, i.e., legal person, is unique within the

⁴⁰ A prime example is the maximum length of the name of a Person identity card. {See for example, the applicable rules here of ISO/IEC 7812:2000 "Identification cards - Identification of issuers". For a brief summary of this standard in an e-business context, see Annex D.4.2.3 "(Global) Unambiguous identification of "Buyers and Sellers in ISO/IEC 7812" in ISO/IEC 15944-1:2002.

⁴¹ See further the multipart ISO/IEC 7501 standard "Identification cards - machine readable travel documents". For a brief summary of the multipart ISO/IEC 7501 standard in an e-business context, see Annex D.4.2.4 "(Global) Unambiguous Identification of individuals - ISO/IEC 7501" in ISO/IEC 15944-1:2002.

jurisdictional domain within which it is registered and officially recognized. Corporate names can consist of characters, numbers or may be combinations of the same. Another type of LRN of an organization can be a trademark which at times is also utilized as a persona of the trademark holder.

Rule nnn:

The establishment and representation of name(s) of a public administration, i.e., its personae, is determined by the jurisdictional domain of which it is part.

Guideline nnnG1:

A public administration of a jurisdictional domain may or may not have a unique identifier of the nature of an ID Code within its Registration Schema (RS).

Guideline nnnG2:

If the jurisdictional domain has more than one official language, the public administration may have equivalent LRNs in each official language.

Guideline nnnG3:

A public administration may have both a long, i.e., complete, formal LRN as well as a short form LRN.

For example, ISO 3166-1 provides an example of both the "official name" and the "short form" of countries.

Rule nnn:

The personae of an individual shall include at least one LRN in order to confirm the existence of that individual as a "natural person", i.e., the birth certificate name (or a similar name)⁴².

Rule nnn:

The establishment and representation of an individual, i.e., its personae, is determined by the role and context of that individual within a jurisdictional domain, i.e., as controlled by a regulator and the associated public administration.

Guideline nnnG1:

Each public administration, acting on behalf of a regulator, may and does have different rules as to which personae it will accept as being a legally recognized name for an individual and registered as such in the specific context and associated rulebase which it administers.

Guideline nnnG2:

An individual, may and likely will have multiple and at times quite different LRN and associated different unique identifiers.

⁴²While the common foundation document for the registration of the existence of an individual is the birth certificate, procedures exist for the establishment of a legal name of adopted children, foundlings, etc.

Examples here include differences among a birth name, currently common use name, a change in surname (due to marriage or legal name change), etc. A transliteration of an individual's birth name from one language into another language especially where different scripts are involved.

JAKE TO COMPLETE

6.6.3 Process Component

Project Editors' Note(s):

This is a stakeholder clause which will capture expected additional inputs. There is a link here with development of ISO/IEC 15944-3 and Part 4.

6.6.4 Data Component

6.6.4.1 General

There are many categories of external constraints of jurisdictional domains which govern the management of sets of recorded information not only within a organization or public administration, but especially in information interchange. Many of these information management and interchange requirements arising from external constraints are already identified under Clause 6.5.3 "External Constraints" in ISO/IEC 15944-1:2002. These include confidentiality, integrity, use of notaries or third parties, specified presentations, etc.

One such external constraint of an information management and interchange nature which is noted several times and as an attribute of Open-edi scenarios and that of scenario components is that of "records retention"⁴³.

6.6.4.2 Record Retention

Project Editors' Note:

This Clause is currently under construction. Time and resource constraints of the Project Editors did not permit for the completion of draft text for this Clause by 2nd CD submission deadline. It is anticipated that this Clause will be completed as part of the FCD document including incorporation of ballot comments received.

As stated in ISO/IEC 15944-1:2002 records retention requirements need to be specified:

⁴³ Another common requirement is that of security services. Here many ISO/IEC and ITU standards already exist of an FSV nature which facilitate the specification and implementation of the same based on BOV requirements.

- *in the scoping of an Open-edi scenario, (e.g., as a Post-actualization requirement, or a Data Component requirement);*
- *as an attribute of an Information Bundle, (e.g., for specifying internal constraints) {See Clause 8.5.2.8 and Rule 140; and, for external constraints, see Clause 8.5.2.9 and Rule 141}.*

A very common external constraint of jurisdictional domains is that of requiring Persons to retain recorded information on their activities particularly those which involve the making of commitments with other parties, (e.g., in a business transaction). As stated in ISO/IEC 15944-1:2002 (p.53) "*there may be retention requirements for a specified time period for defined sets of recorded information*⁴⁴, i.e., as one or more predefined groupings of Information Bundles".

An example of a set of recorded information here would be all the Information Bundles (and their Semantic Components) forming part of the recorded information exchanged among the parties to a business transaction. Another example would be that required for evidentiary purposes or as specified in a particular legislative or regulatory requirement.

Further, a common requirement of external constraints of a public policy nature is that they mandate records retention (and deletion) requirements, (e.g., consumer protection, privacy protection, etc.).

It is important to be able to specify which of the parties to a business transaction is responsible for retention of IBs or the complete set of recorded information. Records retention requirements of jurisdictional domains have conditions. The basic options here are identified in the following coded domain⁴⁵.

ISO/IEC 15944-4:nn Codes Representing Specification of Records Retention Responsibility				
IT Interface			Human Interface Equivalent: Linguistic - Written Form	
Coded Domain ID	Table ID	ID Code	ISO English	ISO French
15944-5	nn	00	other	autre ⁴⁶
15944-5	nn	01	seller is responsible	
15944-5	nn	02	buyer is responsible	
15944-5	nn	03	seller and buyer are both	

⁴⁴ A draft definition here for "set of recorded information " (SRI) is "any recorded information of a Person which is under the control of that Person and is treated as a unit in its information life cycle".

⁴⁵ This is a draft only and requires further work.

⁴⁶ The missing French text will be added at the FCD stage.

ISO/IEC 15944-4:nn Codes Representing Specification of Records Retention Responsibility				
IT Interface			Human Interface Equivalent: Linguistic - Written Form	
Coded Domain ID	Table ID	ID Code	ISO English	ISO French
			responsible	
15944-5	nn	04	buyer shall specify to seller what IB to retain, (e.g., order number, transaction number, etc.)	
15944-5	nn	05	seller and buyer shall use a common third party, (e.g., a notary)	
15944-5	nn	06	regulator is responsible	
15944-5	nn	07	regulator and seller are responsible	
15944-5	nn	08	regulator and buyer are responsible	
15944-5	nn	09	regulator, buyer and seller are all responsible	
15944-5	nn	10	regulator mandates the involvement of a (role) qualified or designated third party, i.e., on behalf of seller, buyer and regulator.	
15944-5	nn	98	not known	inconnu
15944-5	nn	99	not applicable	sans objet

Project Editors' Note:

Draft text is in preparation to provide examples for each of the ID codes. On the whole, the greater and specific the external constraint governing the nature of the good, service or right being transacted the more extensive and specific the records retention requirements, (e.g., a business transaction involving radioactive isotopes (for medical purposes) requires records retention of a much more detail nature than that for aspirin).

The reverse of records retention is "disposition". Disposition is an authorized action to remove, i.e., alienate, a set of recorded information, from under the control of a Person and thereby extinguishing ownership and accountability. There are basically a limited number of disposal actions. These are identified in the following coded domain.

ISO/IEC 15944-4:nn Codes Representing Disposition of Recorded Information				
IT Interface			Human Interface Equivalent: Linguistic - Written Form	
Coded Domain ID	Table ID	ID Code	ISO English	ISO French
15944-5	nn	00	other	autre ⁴⁷
15944-5	nn	01	destruction or expungement	
15944-5	nn	02	transfer to another organization	
15944-5	nn	03	transfer to an archive (for historical and research purposes)	
15944-5	nn	98	not known	inconnu
15944-5	nn	99	not applicable	sans objet

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3929 Project Editors' Note - Retention Triggers:

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3931 *External constraints of a records retention nature have requirements which specify (1) when a*
3932 *retention requirement is to start, i.e., a limited number of triggers; and, (2) then a specified*
3933 *(minimum) retention period. On the whole, records retention requirements are triggered by an*
3934 *action or event, (e.g., the trigger could be "start from the time the data was received/created or*
3935 *collected", or "start retention period from date of last action/use", i.e., the set of recorded*
3936 *information becomes "non-active", is deemed to be "dormant". The basic conditions here from*
3937 *an external constraints perspective for "retention triggers" are limited. A coded domain on this*
3938 *matter is in preparation.*

3939

3940 Project Editors' Notes - State Changes of Values in IBs"

3941

3942 *A key characteristic of Open-edi is that "**parties control and maintain their states**". {See*
3943 *Clause 5.4, ISO/IEC 15944-1:2002}. As such, it is important to know whether or not the value*
3944 *of an Information Bundle (IB) (or one of its Semantic Components (SCs) interchanged among*
3945 *parties to a business transaction is allowed to be changed during any stage in the process*
3946 *component. Knowing whether or not state changes are allowed for a specific IB or SC is*
3947 *important for the management of state description and automated change management of the*
3948 *state machines of the parties involved in an electronic business transaction.*

3949

3950 *This is a requirement which also exists in modelling business transactions involving internal*
3951 *constraints only. However, those which exist here are likely to be a sub-set of those which arise*

⁴⁷The missing French text will be added at the FCD stage.

3952 *from external constraints. Consequently, the question is asked "Whether or not Part 5 should*
3953 *contain a short Clause and associated coded domain for specifying change management of*
3954 *values of IBs?"*

3955

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3958 6.7 <<OPEN>>

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7 RULES GOVERNING THE IDENTIFICATION OF CATEGORIES OF JURISDICTIONAL DOMAINS

Project Editors' Notes:

1. *At the time of preparation of this 2nd CD document expected (detailed) text was not yet received in final, i.e. redistributable, form.*
2. *However, the overall approach can still be presented. The text which already follows captures the essential aspects.*

7.1 INTRODUCTION

Rule nnn:

The basic rules for the identification of categories of jurisdictional domains are governed by the Charter of the United Nations and more specifically by the Vienna Convention on the Law of Treaties⁴⁸

7.2 AS SINGLE ENTITIES - UN MEMBER STATES

This clause focuses on a scenario and scenario components incorporating external constraints at the UN member state level, i.e., incorporating external constraints only of a single jurisdictional domain, (e.g., Japan, USA, UK, China, Korea, etc.).

Rule nnn:

UN member states as peer jurisdictional domains are to be referenced by their 3-digit numeric code as stated by the UN statistical system and provided in Annex C (Normative) of this standard⁴⁹.

⁴⁸See further "Charter of the United Nations" (as signed 1945 and amended 1965, 1968, and 1973) available at <<<http://www....>>> and the "Vienna Convention on the Law of Treaties" (as signed 1945 and amended 1965, 1968, and 1973) available at <<http://www....>>

- ⁴⁹
- (1) Not all the entities listed in ISO 3166-1 are UN member states, i.e., peer jurisdictional domains. The ones which are not UN member states are identified and listed in Annex J.
 - (2) It is recognized on noted that many parties in their IT-systems utilize in their applications the complete (or partial) set of codes of the entities enumerated in ISO 3166-1. Any party is free to continue to reference and use all of the ISO 3166-1 codes, and to do so in specified, self-contained applications. Further, various "stand-alone" applications use and will continue to use the 2-alpha "Country code", (e.g., as part of Internet top-level domains, by postal authorities, etc.), or 3-alpha country codes as they see fit.
 - (3) In the telecommunications sector and financial services sector, (e.g., ISO 8538-based financial transactions messages) the 3-digit numeric codes are utilized.
 - (4) The whole issue of and problems associated with "country codes" and their interworking with "language codes" and "currency codes" is of concern to ISO/IEC JTC1 and needs to be resolved. ISO/IEC JTC1 has requested JTC1/SC32/WG1 to assist in resolving these issues. The proposed solutions in the form of default conventions

As such, one can model business transactions as Open-edi scenarios and scenario components, and then register, and reference them as business objects for use in a specified UN member state⁵⁰. Quite often, the external constraints of a specific e-business protocol in one jurisdictional domain has much in common with those of other jurisdictional domains. As such, buyers or sellers as well as e-business service providers are free to use a scenario and scenario components developed as re-useable business objects in one jurisdictional domain as the base for the development of scenarios and scenario components in another jurisdictional domain.

7.3 Jurisdictional Domains Resulting from International Agreements

Project Editors' Notes:

1. Existing sub-clauses 7.3, 7.4, 7.5 and 7.6 basically pertain to various basic, i.e., primitive, categories whereby "peer" jurisdictional domains, jointly agree to establish a new common jurisdictional domain.
2. These sub-clauses have therefore been integrated into a single multipart sub-clause with an Introduction.
3. Within Canada, some contributions to Clause 7.3 are expected.
4. P-member bodies are invited to make contributions to Clause 7.3 prior to it reaching FCD stage.

7.3.1 Introduction

UN member states as Person are free to establish binding agreements among themselves known as "treaties". The UN defines "treaty" as follows:

treaty: *an international agreement concluded between UN member states in written form and governed by international law.*

NOTE *A treaty can be embodied in a single instrument or in tow or more related instruments and whatever its particular designation.*

[adapted from the Vienna Convention on the Law of Treaties, 1(a)]

Rule nnn:

Treaties when entered into force shall be transmitted to the Secretariat of the United Nations for registration or filing or recording as the case may be and for publication.

are out for comment by JTC1 as document J1N7335 "Response to JTC1 Sophia Resolution #39: Development of a Solution for the Unambiguous Identification and Interworking of Codes Representing Countries, Languages, and Currencies", the results of responses will be reflected and in incorporated further versions of this Part 5.

⁵⁰For an example, see Annex I (Informative) in ISO/IEC 15944-1:2002. The title of this Annex I is "Scenario descriptions using the Open-edi scenario template: "Telecommunications Operations Map" example". It models a USA regulatory requirement for a telecommunications service provider.

Project Editors' Note:

1. *A promised contribution from legal experts summarizing the UN registration process for "treaties" (based on the Vienna Convention of the Law of Treaties) is overdue.*
2. *It is expected to become available prior to 2nd CD ballot resolution meeting, i.e., in time for use and consideration at the next meeting of SC32/WG1 (as soon as the ballot closes in this 2nd CD).*
3. *It remains to be decided whether what parts of this contribution should be part of Clause 7 and which should be part of an Annex.*
4. *Each "treaty" (or equivalent) registered with the UN Secretariat is assigned a unique identifier, i.e. ID Code, in accordance with the rules governing this Registration Schema (RS) of the UN. An expected contribution here is also "overdue". When received the essential normative elements will be added to Clause 7.3 and the remaining text will be placed in an annex.*

In addition, to international treaties registered as treaties with the UN, jurisdictional domains be they UN member states or administrative sub-divisions of UN member states can make (legally binding) commitments among themselves in the form of a new "framework of authority" many categories of which have the properties and behaviours of jurisdictional domain.

These can be of the nature of an "Exchange of Letters", "Memorandum of Understanding (MOU)", bilateral, trilateral, and multilateral agreements (including protocols and conventions).

7.3.2 Bilateral Agreements

Project Editors' Note:

1. *A contribution is expected from legal experts for a draft definition of a "bilateral agreement" which integrates international law, e-business and IT perspectives. It is expected to be ready for review by SC32/WG1 members prior to the next SC32/WG1 meeting.*
2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of the 2nd CD Editing meeting will be incorporated.*

Basically, a "bilateral agreement" is a "between" and not "among" relationship of jurisdictional domains who consider themselves to be "peers". Bilateral agreements can exist among any level or category of sets of jurisdictional domain who consider themselves as being "peers" including:

- among UN member states;
- among administrative sub-divisions within a UN member state, (e.g., among provinces, territories, states, länder, cantons, etc.), as jurisdictional domains within a UN member state;
- among administrative sub-divisions of two different UN member states. [Examples here include agreements between Canadian provinces and American states];
- among two international organizations recognized as jurisdictional domains. Bilateral agreements among peer jurisdictional domains may well serve as sources of external constraints on business transactions include those referred to a s"Exchange of Letters", "Memorandum of

Understanding (MOU)", etc.

7.3.3 Trilateral Agreements

Project Editors' Note:

1. *A contribution is expected from legal experts for a draft definition of a "trilateral agreement" which integrates international law, e-business and IT perspectives. It is expected to be ready for review by SC32/WG1 members prior to the next SC32/WG1 meeting.*
2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of the 2nd CD Editing meeting will be incorporated.*

Basically, a "trilateral agreement" is one among three jurisdictional domains who consider themselves to be "peers". Trilateral agreements can exist among any level or category of jurisdictional domains as "peers" including:

- among UN member states;

A prime example here is the North American Free Trade Agreement (NAFTA) as well as its "environment" and "labour" sub-agreements.

Project Editors' Note:

Prior to or as part of the FCD document, NAFTA based examples will be provided.

- among administrative sub-divisions within a UN member state;
- among administrative sub-divisions of three different UN member states;
- among three international organizations.

Trilateral agreements among peer jurisdictional domains may well serve as sources of external constraints on business transactions and the modelling and registration of the same as business objects.

7.3.4 Multilateral Agreements

Project Editors' Note:

1. *A contribution is expected from legal experts for a draft definition of a "multilateral agreement" which integrates international law, e-business and IT perspectives. It is expected to be ready for review by SC32/WG1 members prior to the next SC32/WG1 meeting.*
2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of the 2nd CD Editing meeting will be incorporated.*

Basically, a "multilateral agreement" is one among four or more jurisdictional domains who consider themselves to be "peers".

Multilateral agreements constitute a category of jurisdictional domain which is in force on a wide global basis as that of formally UN recognized and registered "treaties".

Multilateral agreements can exist among any level or category of jurisdictional domains as peers, including:

- among UN member states;

Examples here include the "Multilateral-Textile Five Agreement. It remains to be determined whether organizations such as the WTO, WCO, etc., are to be categorized as UN "treaty" organizations or as "multilateral organizations" and identified and referenced as such.

Project Editors' Note:

Work is under way to prepare more information on examples of multilateral agreements as well as extracting their commonalities to be able to specify them as mandatory elements in modelling and registering these requirements and integrating this requirement into re-useable business objects.

- among administrative sub-divisions within a UN member state, (e.g., among four or more provinces, states, territories, länders, cantons, etc.), as jurisdictional domains within a UN member state;
- among administrative sub-divisions among four or more administrative sub-divisions of UN.

Examples here include those involving more than three Canadian provinces and American states.

5. *The Project Editors (and others, i.e. legal experts) are working on a single/simplified mapping between this UN register requirement and the rules governing the Vienna Convention.*

7.4 AS A REGIONAL ENTITY

Project Editors' Note(s):

In the context of Part 5, a jurisdictional domain as a "regional entity" pertains to more than three jurisdictional domains, i.e., it is situated between a bilateral and multilateral. Whether it should be considered as a particular sub-type of multilateral or "category" on its own is not yet resolved (with participating experts in international law). Examples include EU, MERCOSUR, etc. {See further Annex L}

Project Editors' Notes:

1. *Multilateral is more than two.*

2. *Need criteria for differentiating between "regional" and "multilateral". {See further Annex L}*

3. *On the whole a multilateral involves multiple UN member states but is short of the status of international convention/agreement.*

7.5 AS AN INTERNATIONAL ENTITY

Project Editors' Notes:

1. *Jurisdictional domains as "international entity" pertain to "international agreements" according to the Vienna Convention.*

2. *Under the Vienna Convention [1.1] "international organizations" is considered to be a synonym for "intergovernmental organization".*

3. *See further Annex L.*

7.6 AS SUB-TYPES OF A UN MEMBER STATE

Project Editors' Notes:

1. *At the time of preparation of this draft CD document, expected (detailed) text was not yet received. However, the overall approach can still be presented.*

2. *In summary:*

2.1 *Each UN member state can sub-type its jurisdictional domains on a function/accountability basis/mirroring the approach of the UN system.*

2.2 *On a geopolitical basis where "administrative subdivisions" may or may not be "peers" as sub-divisions of their respective jurisdictional domains.*

[Enter examples for Canada, USA, and Mexico]

Note: Need to link legal "peer" jurisdictional domains to IT "peer-to-peer" computing.

2.3 *Annex F {See JTC1N7335} provides some recommended default conventions.*

4229 **8 MAPPING JURISDICTIONAL DOMAINS VIA ROLE, FUNCTION, GOOD,**
4230 **SERVICE AND/OR RIGHT**

4231
4232 Project Editors' Notes:
4233

- 4234 1. *At the time of preparation of this CD document expected text was not yet received or*
4235 *ready.*
4236
4237 2. *On the whole, the mapping here is likely to be based on two primitive sub-types of*
4238 *intergovernmental organizations; namely:*
4239
4240 (1) *those which are part of the UN System including its "Specialized Agencies" such*
4241 *as the ILO, ICAO, IMO, UNESCO, ITU, UPU, WIPO, World Bank Group*
4242
4243 *These are autonomous entities working with the United Nations and each other*
4244 *through the coordinating machinery of the Economic and Social Council of the*
4245 *UN.*
4246
4247 (2) *those which are independent of the UN System but through UN member state*
4248 *participation, i.e. as signatories, are deemed to have "equivalent" status from a*
4249 *jurisdictional domain perspective.*
4250
4251 *Examples here include the WCO (and its Harmonized System (HS) (as well as its*
4252 *"Customs Data Model"), the World Trade Organization (WTO) and others.*
4253
4254 3. *Analysis is still under way as to how and where international organizations such as the*
4255 *ICC (source of INCOTERMS, etc.), IATA, etc., map into Part 5. They are basically*
4256 *"private international" in nature but are often, in the real world deemed to have the status*
4257 *of a Source Authority equivalent to that of a jurisdictional domain.*
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4262 8.1 INTRODUCTION
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4265 8.2 INTERGOVERNMENTAL ORGANIZATIONS
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4268 **8.2.1 UN Specialized Agencies**
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4270 **8.2.2 Non-UN Intergovernmental Organizations**
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4273 8.3 INTERNATIONAL ORGANIZATIONS

9 JURISDICTIONAL DOMAINS AND CODED DOMAINS

Project Editors' Note(s):

1. *Much of the text, rules, definitions and terms related to this Clause is already found in Clauses 1 through 8, as well as Normative and Informative Annexes to this Part.*
2. *Other aspects of "coded domains" are already being covered in the development of ISO/IEC 15944-2:200n.*
3. *As a result of ballot resolutions of FCD document for Part 2, this 2nd CD document for this Part 5, relevant text here for Clause 9 will be inserted in this Clause, i.e. that additional text which is required from an external constraints and jurisdictional domain perspective.*

10 TEMPLATE FOR THE IDENTIFICATION OF EXTERNAL CONSTRAINTS OF JURISDICTIONAL DOMAINS⁵¹

10.1 INTRODUCTION AND BASIC PRINCIPLES

The approach taken for Clause 10 is the same as that for Part 1 of this multipart standard as well as that taken in Part 2..

This Clause builds on the structure developed in Clauses 1 through 8. Together with the rules contained in these clauses, it provides the user with the rules for the specification of Open-edition scenarios, Open-edition scenario attributes and attributes of Scenario Components, i.e., roles, Information Bundles (IBs) and scenario components (SCs). The purpose of this template, like the others, is to capture in a systematic, i.e., coded form, their aspects.

10.2 TEMPLATE STRUCTURE AND CONTENTS

Project Editors' Note(s):

1. *As a result of the SC32/WG1 decision sat its in Tallin, Estonia meeting, some major changes were made to the Part 2 document. These are reflected in the ISO/IEC FCD 15944-5. Consequently, the existing draft text for this Clause has been withdrawn to align its with the FCD ballot document for Part 2. It will be inserted based on resultuion of the ballot comments on the FCD document for Part 2 and be based on the rules in Clauses 5 through 9 and resolution of 2ndCD ballot comments on this document.*
2. *The content of the templates in Part 1 and Part 2 (FCD) are based on rules stated in the relevant clauses. At the 2nd CD ballot resolution meeting the issue of one single template or several templates for Part 5 will be discussed and resolved.*
3. *To the Part 1 Template will need to be added {See its Clause 7.3.2}:*
 - **1150 External constraints and agents**
 - *1151 External constraints require a buyer to use an agent*
 - *1152 External constraints require a seller to use an agent*
 - **1160 External constraints and Third Party**
 - *1161 External constraints require participation of a qualified Third Party.*
 - **1170 External constraints and regulator**
 - *1171 External constraints require direct participation of a regulator*
 - *1172 External constraints allow for a Third Party to act on behalf of a regulator.*

⁵¹This Clause is based on and similar in structure to Clauses 7, 8 and 9 in ISO/IEC 15944-1:2002.

4333 In addition, there will be additional entries under "1700 EXTERNAL
4334 CONSTRAINTS".
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4337 **11 REFERENCES**

4338

4339

4340 [To be inserted as required prior to FCD ballot document issuance]

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Annex	Title
Annex A	(Normative) Consolidated List of Terms and Definitions with Cultural Adaptability: ISO English and ISO French Language Equivalency
Annex B	(Normative) Consolidated Set of Rules of ISO/IEC 15944-1:2002 Governing Business Transactions, their Scoping and Specification as Open-edi Scenarios and their Components of Particular Relevance to "External Constraints"
Annex C	(Normative) Codes Representing UN Member States and Their Official (or "de facto") Languages
Annex D	(Normative) Codes Representing Categories of Jurisdictions
Annex E	(Normative) Business Transaction Model: Classes of Constraints
Annex F	(Normative) Unambiguous Semantic Components and Jurisdictional Domains: Standard Default Convention for Identification, Interworking and Referencing of Combinations of Codes Representing countries, Languages, and Currencies
Annex G	(Informative) Examples of Various Ontologies Resulting from Modelling Business Scenarios with (1) Internal Constraints <u>only</u> ; and, (2) with External Constraints: Use Case - "Buyer", "Seller", "Third Party" and "Regulator".
Annex H	(Informative) Matrix of Codes Representing Administrative Subdivisions of Three Nation States Comprising a "Single Jurisdiction" from a Particular Context - The North American Free Trade Agreement (NAFTA)
Annex I	(Informative) Example of Classification System: Harmonized System Nomenclature of the World Customs Organization (WCO)
Annex J	(Informative) Non-UN Member States Listed in ISO 3166-1:1997
Annex K	(Informative) Examples of Need for Specifying Gender of Terms and Nouns to Ensure Unambiguity in Use of an Official Language
Annex L	(Normative/Informative) Codes Representing Levels of International Regulatory Regimes (Non-Exhaustive Spectrum)
Annex M	(Informative) Use of UML and XML
Annex N	(Informative); Examples of Multiple Human Interface Equivalents (HIEs) For a Single IT-Interface Identifier
Annex Y	(Informative) Complete Table of Contents for ISO/IEC 15944-1:2002
Annex X	(Informative) Referencing Explanatory Reports (RER)

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Project Editors' Note(s):

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1. *At this 2nd CD ballot state, it has not yet been determined as to what should be the final set of normative and informative annexes for ISO/IEC 15944-5, i.e., in addition to those presented at this time.*

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2. *P, O, and L members reviewing this 2nd CD ballot document are encouraged by the project editors to identify and provide rationale for additional annexes.*

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**ANNEX A (NORMATIVE) CONSOLIDATED LIST OF TERMS AND DEFINITIONS
WITH CULTURAL ADAPTABILITY: ISO ENGLISH AND ISO FRENCH
LANGUAGE EQUIVALENCY**

Project Editors' Notes:

(1) *Annex A Matrix will be updated to reflect the content of Clause 3.1 and all the French language equivalent terms and definitions provided.*

Clause	Table of Contents	Page
A.1	Introduction	xx
A.2	ISO English and ISO French	xx
A.3	Cultural Adaptability and Quality Control	xx
A.4	Organization of Annex A Consolidated List in Matrix Form	xx
A.5	Consolidated List of ISO/IEC 18038 Terms and Definitions	xx

A.1 Introduction

Users of this ISO/IEC 18038 standard may not have ready access to all standards referenced in either the ISO English language version or the ISO French language equivalent where available.

This standard maximizes the use of existing standards where and whenever possible including relevant and applicable existing terms and definitions. This Annex A contains the consolidated list of the ISO English and ISO French language paired terms and definitions used in this standard including those terms and definitions introduced in this standard. The source is Clause 3 "Definitions".

A.2 ISO English and ISO French⁵²

This standard recognizes that the use of English and French as natural languages is not uniform or

⁵² The terms "ISO English" and "ISO French" refer to the use of the English language and French language as found in ISO standards documents. It is recognized that there are different uses of the English and the French languages in use around the world in various jurisdictional domains. This pertains not only to the spelling of word but also to the meaning and choice of words. Further, ISO standards contain terms and words which are not found in dictionaries. As such the variant use of the English and French language in this standard is referred to as ISO English and ISO French (in Annex A of this Part and the other Parts of this multipart standard). ISO/IEC 15944-1:2002 used this approach. ISO/IEC 5218:2004 takes a similar approach.

Finally, it should be noted that different jurisdictional domains have official variant of a language as stated through official dictionaries and terminology bureaus, etc.

harmonized globally. (Other examples include use of Arabic, German, Portuguese, Russian, Spanish, etc. as natural languages in various jurisdictions).

Consequently, the terms "ISO English" and "ISO French" are utilized here to indicate ISO specialized use of English and French as natural languages in the specific context of international standardization, i.e., as a "special language".

A.3 Cultural Adaptability

ISO/IEC JTC1 has added "cultural adaptability" as the third strategic direction which all standards development work should support. The two other existing strategic directions are "portability" and "interoperability". Not all ISO/IEC JTC1 standards are being provided in more than one language, i.e., in addition to "ISO/IEC English," in part due to resource constraints.

Terms and definitions are an essential part of a standard. This Annex serves to support the "cultural adaptability" aspects of standards as required by ISO/IEC JTC1. Its purpose is to ensure that if, for whatever reason, a ISO/IEC JTC1 standard is developed in one ISO/IEC "official" language only, at the minimum the terms and definitions are made available in more than one language.

A key benefit of translation of terms and definitions is that such work at providing bilingual/multilingual equivalency:

- should be considered a "quality control check" in that establishing an equivalency in another language ferrets out "hidden" ambiguities in the source language. Often it is only in the translation that ambiguities in the meaning, i.e., semantics, of the term/definition are discovered. Ensuring bilingual/multilingual equivalency of terms/definition should thus be considered akin to a minimum "ISO 9000-like" quality control check⁵³; and,
- is considered a key element in the widespread adoption and use of standards world-wide (especially by users of this standard who include those in various industry sectors, within a legal perspective, policy makers and consumer representatives, other standards developers, IT hardware and service providers, etc.).

A.4 Organization of Annex A⁵⁴

The terms/definitions are organized in matrix form in alphabetical order (English language). The columns in the matrix are as follows:

⁵³ No ISO 9000-type standards exist pertaining to the quality, integrity and unambiguity of the "data" or "data element" itself, let alone unambiguity in its semantics.

⁵⁴ One should consider Annex A to be (1) a matrix-based approach to the English and French elements already found in any part of the ISO/IEC 2382 *Information technology-Vocabulary standard* ; (2) an approach which is multilingual expandable; and (3) to be able to reference any standard.

4420

Col. No.	Use
1	ID as per ISO/IEC 15944-5 (3.nnn)
2	Source. International standard referenced or ISO/IEC 15944-5
3	ISO English Language - Term
4	ISO English Language - Definition
5	ISO French Language - Term *
6	ISO French Language - Definition*

4421

4422 The primary reason for organizing the columns in this order is to facilitate the addition of
4423 equivalent terms/definitions in other languages as added sets of paired columns, (e.g., Spanish,
4424 Japanese, German, Russian, etc.).

4425

4426 * Use of an asterisk (*) in Columns 5 and indicates that the ISO standard referenced (other
4427 than ISO/IEC 15944-5) in Column (2) does not have an ISO French language version.
4428 For these terms and definitions, ISO/IEC 15944-5 is providing the ISO French language
4429 equivalent.

4430

4431

4432 Project Editors' Note:

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4434 *The rest of Annex A is not included in this draft 2nd CD. Its structure will be the same as that for*
4435 *Annex A in Part 1 and its contents will be driven by Clause 3 "Definitions".*

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4438

ANNEX B (NORMATIVE) CONSOLIDATED SET OF RULES OF ISO/IEC 15944-1:2002 GOVERNING BUSINESS TRANSACTIONS, THEIR SCOPING AND SPECIFICATION AS OPEN-EDI SCENARIOS AND THEIR COMPONENTS OF PARTICULAR RELEVANCE TO "EXTERNAL CONSTRAINTS"

Project Editors Note

???????

B.1 INTRODUCTION

The purpose of Annex B is to provide a consolidated presentation of all the rules in ISO/IEC 15944-1 for the scoping and specification of Open-edi scenarios and their components which pertain to external constraints. Jurisdictional domains are the primary source of external constraints. This Part 5 of ISO/IEC 15944 addresses in an integrated manner the requirements arising from these rules in Part 1 pertaining to specifying external constraints insofar as these are applicable to jurisdictional domains.

[Note: Only the Rules themselves are presented here. For related text, as well as associated Guidelines, where applicable, see the relevant Clauses in ISO/IEC 15944-1:2002 as presented in the matrix below].

B.2 ORGANIZATION OF ANNEX B: CONSOLIDATED LIST IN MATRIX FORM

The rules and associated references are presented in matrix form. The rules are presented in the numeric order in which they are presented in ISO/IEC 15944-1:2002. The columns in the matrix are as follows:

Col. No	Use
1	Number of Rule as per ISO/IEC 15944-1:2002
2	Clause ID in ISO/IEC 15944-1:2002 of which the Rule is part
3	Rule Statement as per ISO/IEC 15944-1:2002 [Note: Only text of the Rule itself is presented. For associated requirements, see the relevant clause in ISO/IEC 15944-1:2002.

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4470
4471
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B.3 CONSOLIDATED LIST OF RULES IN ISO/IEC 15944-1:2002 PERTAINING TO EXTERNAL CONSTRAINTS

Rule No.	Clause ID	Rule Statement
(1)	(2)	(3)
3	6.1.3	In (electronic) business transactions, all commitments shall be stated explicitly and unambiguously and be understood by all Persons involved in a business transaction.
13	6.2.2	The level of unambiguity, i.e., certainty/reliability of a persona and resulting identification of the Person identity used by a Person shall be appropriate to the goal of the business transaction.
15	6.2.2	Business transactions having different goals may allow a Person to use the same persona and its associated identification schema (including resulting identifiers), while others may prohibit this.
27	6.2.4	Unless bound by external constraints, "buyers" and "sellers" as Persons are free to undertake any business transaction involving any good, service, and/or right they mutually agree to.
28	6.2.4	External constraints governing rules and practices of "buyers" and "sellers" in business transactions, apply either to Persons (undifferentiated) or distinguish among "individuals", "organizations", and "public administrations".
29	6.2.5	Rights or obligations arising from commitments in a business transaction shall be fulfilled either directly by the Person as the end entity or by an agent acting on its behalf.
30	6.2.5	The ability to delegate a role to an agent shall be explicitly stated. If constraints must be satisfied before such delegation can take place they shall be explicitly stated.
31	6.2.5	Where delegation of a role cannot take place this shall be explicitly stated.
32	6.2.5	A business transaction takes place between two Persons. Other Persons, i.e., third parties, may fulfil specified role(s) or functions(s) on mutual agreement or as a result of external constraints.
33	6.2.6	External constraints exist on the provisioning of goods and services and the behaviour of Persons as players in business transactions including those provided via electronic commerce.
34	6.2.7	From a minimal external constraints perspective, the three basic subtypes of Persons as role players in any business scenario are: A. individual, B. organization, and C. public administration.
35	6.2.7	A legal (or artificial) Person consists of one or more natural persons and/or one or more other legal persons. A unifying term and common concept used internationally is the standard term "organization" as the

Rule No.	Clause ID	Rule Statement
(1)	(2)	(3)
		collective common term for all the different ways legal (or artificial) persons can be composed and be recognized in various jurisdictions.
38	6.2.8	From a minimal external constraints perspective, a common set of constraints on a business transaction where the buyer is an individual are those of a consumer protection nature.
39	6.3.1	Conceptually a business transaction can be considered to be constructed from a set of fundamental activities. They are planning, identification, negotiation, actualization and post-actualization.
40	6.3.1	The five fundamental activities may take place in any order.
44	6.4.1	Electronic business transactions require "recorded information".
47	6.4.2	The definition of "data", and related information technology terms and definitions found in this standard shall able to be mapped into legal frameworks.
48	6.4.2	Standards development work in support of electronic business transactions shall incorporate and support data granularity requirements. The level of granularity reflects the degree of detail appropriate to the level of certainty required in the data being interchanged among the parties participating in a business transaction.
49	6.5.1	Open-edi scenarios and Information Bundles shall therefore be capable of reflecting constraints to be applied which may be as a result of: <ul style="list-style-type: none"> - commitments among parties, i.e., as internal constraints; - external constraints.
50	7.2	The requirement for an Open-edi scenario to incorporate external constraints on a business transaction shall be stated at the outset.
51	7.2	It is necessary to state whether the Open-edi Parties in the business transaction being modelled are (a) Persons in general, i.e., undifferentiated; or (b) differentiated among categories of Persons, i.e., subtypes, as individuals, organizations and public administration.
57	7.2	If the business transaction being modelled through an Open-edi scenario incorporates external constraints which impact FSV demands on Open-edi Support Infrastructure (OeSI), these shall be specified.
66	8.3.2.4	The set of Roles applicable to the scenario shall be specified and referenced through their Role Identifiers.
67	8.3.2.4	One shall state which roles are mandatory, conditional, or mandatory subject to a conditional.
68	8.3.2.4	Where applicable, constraints on the same Open-edi Party playing more than one of the roles in the set of roles applicable to the OeS shall be specified
70	8.3.2.5	If applicable, one should state which IBs are mandatory, conditional, or mandatory subject to a conditional.
71	8.3.2.5	Where applicable, constraints on IBs pertaining to roles in the OeS shall

Rule No.	Clause ID	Rule Statement
(1)	(2)	(3)
		be specified.
72	8.3.2.6	The business requirements, rules and practices applicable at the scenario level shall be specified. This specification shall be stated at a level of detail to ensure that there is no ambiguity in the commitments among Open-edition Parties at the scenario level.
73	8.3.2.6	Business constraints, if any at the scenario level, pertaining to Open-edition Parties and scenario components shall be specified. All of these shall be accounted for in scenario components, i.e., roles and/or Information Bundles.
74	8.3.2.7	Requirements or constraints arising from applicable laws or regulations at the scenario level shall be explicitly stated including the source jurisdictions.
75	8.3.2.7	Where multiple laws and regulations apply at the scenario level, the constraint applicable shall be integrated.
101	8.4.2.5	Constraints, if any, on an Open-edition Party being able to play a role shall be specified.
103	8.4.2.7	Any external constraints arising from laws or regulations to any aspect of the role and its attributes shall be identified and stated including the reference/source of the applicable law or regulation, i.e., qualifications for a role, prescribed behaviour, restrictions on the delegation of a role, etc.
135	8.5.2.4	Any business rules controlling content of an IB shall be identified and the nature and functioning of these rules explicitly stated. The source of such business rules shall also be referenced.
136	8.5.2.5	Any external constraints arising from laws and regulations governing the content of an IB shall be identified, the requirements explicitly stated and the source referenced.
137	8.5.2.5	Any IB created to meet a requirement of external constraints of the nature of laws and regulations should be so identified, the contents of the IB explicitly defined, at the level of granularity required, and the source law/regulation referenced.
140	8.5.2.8	Requirements for retention of recorded information for an IB, if any, shall be specified as well as which OePs involved in the associated role(s) have the primary responsibility for retaining this recorded information
141	8.5.2.9	Requirements arising from laws or regulations for the retention of recorded information applicable to the IB, if any, shall be explicitly stated and the source(s) referenced.
146	8.5.5.1	A Semantic Component can be a single (simple) data element, a composite data element, or a data structure, (e.g., a set of data elements which interwork in order to ensure semantic completeness and ensure the required unambiguousness).

Rule No.	Clause ID	Rule Statement
(1)	(2)	(3)
147	8.5.5.1	A Semantic Component shall be a component of at least one Information Bundle when exchanged among Open-edl Parties.
153	8.5.5.2.2	A SC name is the designation of the SC ID by a linguistic expression. More than one SC name as equivalent linguistic expressions may be associated with an SC ID, (e.g., as "aliases").

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4476 ANNEX C (NORMATIVE) CODES REPRESENTING UN MEMBER STATES AND THEIR OFFICIAL (OR DE
4477 FACTO) LANGUAGES

4480 Table of Contents

4482	<u>Section</u>	<u>Page</u>
4483		
4484	C.1 Introduction	88
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4491		

4492 Project Editors' Notes for Annex C

4493

4494 1. This 2nd CD version of Annex C incorporates the ballot comments made on the 1st CD document. (For further background
4495 information on this Annex C, see the Project Editors' Notes to the 1st CD document, i.e. JTC1/SC32 N1080).

4496

4497 2. Question of Whether this Should be a "Normative" or "Informative" Annex

4498

4499 This issue was discussed and resolved by SC32/WG1. This is a "Normative" annex. From the perspective of the Business
4500 Operational View (BOV) of business transactions and in the context of the rules governing business agreement semantic
4501 descriptive techniques, a key aspect of external constraints is that they are normative. This is even more true where the source
4502 of an external constraint is a jurisdictional domain.

4503

4504 As such, this Annex C is normative.

4505

4506 Should it happen that at the time of the preparation of the FDIS document the "official language(s)" status of any jurisdictional
4507 domain cited can not be verified, this will be so noted (via an asterisk) for that entry.

4508

4509 3. Deciding what is an "official language(s)" (or "de facto" language(s) of a UN member state

4510

4511 It is up to each UN member state to specify its official language(s), and if it has no "official language", then its de facto
4512 language(s). During the time of the 2nd CD ballot, into the FCD ballot and prior to the issuance of the FDIS ballot document,
4513 the Project Editors for ISO/IEC 15944-5 will be contacting the official UN representative, (e.g., at the Ambassador level) for
4514 each UN member state to verify whether its entry in this Annex C is correct or not.

4515

4516 It is recognized that the contents of an entry for a UN member state in this Annex C will change with respect to current "official"
4517 or "de facto" language(s) noted for a UN member state. Such changes, where required, will be based on decisions of the UN
4518 member state. As such, this Annex C will be amended as required during the progressing of ISO/IEC 15944-5 from CD through
4519 FDIS ballot stages.

4520

4521 4. Work on this Annex C and 2nd CD ballot comments received, have brought to the fore the consideration that this Annex C may need to be
4522 amended to refer to "official written languages". This is because electronic business transactions require the utilization of "recorded
4523 information", i.e., that which "recorded information" in written form. Normative text of Rule 46 in ISO/IEC 15944-1:2002 states

4524

4525 **"Rule 46**

4526 **Electronic business transactions require (1) data; and, (2) data that is recorded or stored in any medium in or by a computer system.**

Electronic commerce by definition requires the use of information technology and particularly that of a computer system. Any recorded information that does not have the properties of "data" and cannot be utilized in a computer system does not form part of an Open-edi business transaction. This is illustrated below in Figure 20 (of ISO/IEC 15944-1:2002).

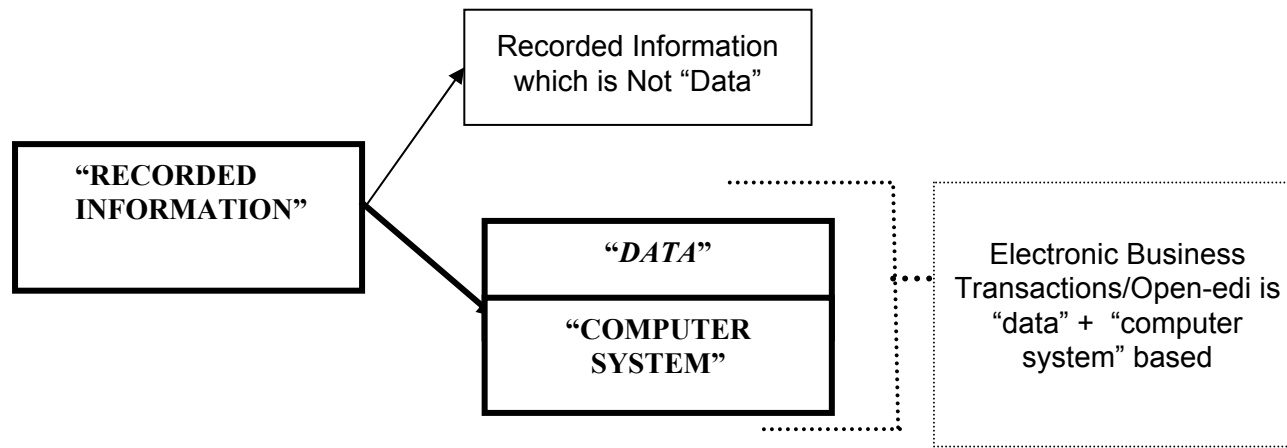


Figure 1 — Relation of “Recorded Information”, “Data” and “Computer System” in Electronic Business Transactions / Open-edi

This observation is made in the context of the response to the 1st CD ballot document comments by the P-member body of Norway, i.e. that of Norway having two official written languages. Each of these two official written languages of Norway have their own unique ISO 639-2/T language codes, i.e. “nob” and “nno”. This is in addition to the existing “nor” code for the Norwegian language. Further contributions have revealed that this situation is not unique to Norway (e.g. in Canada, other countries in the Circumpolar region, countries in Asia, Africa and the Americas may well have similar situations). Two approaches are possible:

- 1) Have Annex C contain only the ISO 639-2/T codes for a UN member state for its “official written languages”. This is the preferred approach as it focuses on the essential, i.e. primitive, aspects; or,
- 2) Have Annex C contain the ISO 639-2/T codes for a UN member state for all the codes representing its official languages (whether written or oral). This needs to be resolved prior to FCD stage. Comments from Norway here are welcomed.

C.1 INTRODUCTION

The purpose and scope of this Annex C is to provide a set of codes, i.e. ID codes, as composite identifiers, for (1) each UN member state, providing an ISO 3166-1 based code for which the UN is the coded domain Source Authority; and, the ISO 639-2/T language code(s) representing the official language(s) or de facto language of that UN member state.

The Annex C identifies those jurisdictional domains which are of the category of member states of the United Nations (UN). As such, they are, and are recognized as "peer jurisdictional domains".⁵⁵ It is accurate and up-to-date as of the date of this standard⁵⁶.

The source for the component parts of this Annex C is official information as provided by the UN. The UN has provided permission to reprint its 3-digit numeric and 3-digit alpha codes in ISO/IEC 15944-5.⁵⁷ The English and French (short) names of the UN member states are also those as provided by the UN.

The need for such a coded domain arises from:

- the fact that ISO 3166-1 contains in its set of permissible values, identification codes and name representation of many entities which are not "countries" although users of ISO 3166-1 (mistakenly) believe they are⁵⁸. {For all the details, see further Annex J

⁵⁵The Holy See, (a.k.a., Vatican), is a "non-member state" and is therefore not included. Until Switzerland became a UN member on 2002-09-10, it had a similar status as the Holy See.

⁵⁶The ISO/IEC JTC1 has decided to make the ISO/IEC 15944 multipart standard available for free, i.e., via its website <<http://www.jtc1.org>> under "Freely Available Documents". ISO/IEC 15944-1:2002 has already been posted. This facilitates posting amendments/changes to this Annex C resulting from changes in membership in the UN.

⁵⁷"The three-digit numeric and three-digit alpha codes are from Standard Country or Area Codes for Statistical Use, United Nations publication, Series M, No. 49, Rev. 4., Sales No. M.,98.XVII.9 (multilingual: English, French, Spanish, Russian, Chinese, Arabic), (c) 1999 United Nations, New York, all rights reserved, reprinted with permission of the United Nations (see also www.un.org.Depts/unsd). These codes have been developed for statistical purposes and do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The United Nations is not responsible for any use of these codes in the present publication, nor for errors, omissions or changes". "Member country names are given at the United Nations Internet site, www.un.org, which you may cite for that purpose". [Personal correspondence, Robert Johnston Statistics Division, UN, New York. (2000-10-24).]

In addition, the ISO, in a press release dated 30 September, 2003, reaffirmed its free-of-charge policy use of its country, currency and language codes.

⁵⁸The list of entities with their codes, names, etc., as enumerated in *ISO 3166-1:1997 "Codes for the representation of countries and their subdivisions - Part 1: Country Codes"* contains entries for many entities, i.e., 20%, which while being of the nature of a jurisdictional domain of some type, are not UN member states and thus not "countries". This list and the jurisdictional status of these "non countries" in ISO 3166-1 is being prepared as an Informative Annex for ISO/IEC 15944-5. At present ISO 3166-1 contains entries for forty-nine (49) entities which are not UN member states.

4573 below. See also JTC1/SC32 N0353 Annex B};

4574

4575 ➤ the fact that from a business transaction perspective, one needs to be able to support external constraints of a jurisdictional
4576 domain and especially those of a linguistic nature particularly in making commitments among autonomous parties, (e.g., product
4577 labelling, contract formation, material safety data sheets, consumer protection, Internet-based web services, etc.);

4578

4579 ➤ the fact that ISO 639-2⁵⁹ contains codes for names of languages which: (1) either are no longer in daily use in business
4580 transactions; and/or, (2) recognized as a "valid language" for use in commitment exchange, including product labelling, contract
4581 formation, public administration (including the courts), etc.; and,

4582

4583 ➤ the fact that ISO 639-2 not only contains two code sets but also variant name representations of languages. Further, these name
4584 representations of languages are from a bibliographic and/or terminological perspective. They may not be the same as the
4585 "official" names of that language in a specific jurisdictional domain.

4586

4587 Consequently, many of the "codes for names representing languages" found in ISO 639-2 do not and cannot serve as either "official" or
4588 "de facto" languages of UN member states. These issues were addressed and resolved through SC32/WG1 N0210R, which was adopted
4589 by SC32/WG1. The resulting solution has been incorporated in this 2nd CD. {See also document 32N0696}.

4590

4591 In short, the building blocks of Annex C are

4592

4593 ➤ only those entities which are recognized members of the UN with their 3 digit ID code, date that they became a member of
4594 the UN as well as their "short names" in English and French (as provided by the UN itself). From an ISO perspective, these
4595 entities are also subset of all those entities listed in ISO 3166-1; and,

4596

4597 ➤ a subset of all those languages listed in ISO 639-2/T, i.e., only those languages which are stated as official languages of UN
4598 member states (or serve as their de facto language)

4599

4600 As such this Annex C uses parts of these existing standards to provide unique combinations of "countries" and their official languages
4601 doing so from a jurisdictional domain perspective, i.e. that of UN member states as peer entities.

4602

4603

⁵⁹ ISO TC37 and ISO TC46 are jointly responsible for the ISO 639 series.

4604 **Exclusions to Annex C⁶⁰**

4605

4606 Excluded from Annex C are

4607

- 4608 ➤ languages which may be the official languages in an administrative subdivision of a UN member state; and,
- 4609 ➤ languages which are “legally recognized languages” in only part of jurisdictional domain such as the Sami language (ISO
- 4610 639-2/T = “smi⁶¹”) in parts of Norway, Sweden and Finland.

4611

4612 **C.2 ORGANIZATION OF ANNEX C**

4613

4614 The matrix is sorted and presented by the ID Code in Col. (03), the first part of which is the 3-digit numeric code of the UN Member

4615 State. Other orderings are possible, (e.g., by date of UN membership, English name of country, French name of country, by the ISO

4616 639-2/T language codes, etc).

4617

4618 The structure of Annex C, presented here in matrix form, is as follows.

4619

4620

Column ID	Label	Specification
-	IT-Interface	
-	Coded Domain ID	
(01)	Source Authority ID	The identifier for the Source Authority. Here set as "15944-5".
(02)	Table ID	An identifier assigned by the Source Authority where it is the source of more than one coded domain, currently set as "c".
-	Coded Domain ID	[Note: The source authority ID plus the Table ID are combined to provide a Coded Domain ID].
(03)	ID Code	This is the ID code for each member of the coded domain. [Note: The use of "delimiters" in the ID code is currently for visual

⁶⁰ If so desired the next edition on ISO/IEC 15944-5 can contain an additional Annex containing the identification of “legally recognized languages(LRLs) in the jurisdictional domain of an UN member state.

⁶¹ Within ISO 639-2/T, there are separate codes for many languages, i.e. as part of this language family, which have been added in recent years, including “sma” = Southern Sami, “smj” = Lule Sami, “sms” = Skolt Sami, “smn” = Inaria Sami, and “sme” = Northern Sami.

Column ID	Label	Specification
		purposes only and the use of the ":" as delimiter is to indicate a "syntax neutral" representation. It is likely that in the FCD version the current "004:fas:2" will become "004fas2" with appropriate parsing rules].
-	ID Code Components	<p>It is quite common for identifiers as ID Codes to be based or structured as a set of component parts.⁶² For example an ISO/IEC 6523 base identifier has a base structure of four Component parts. Similarly ISO/IEC 7812 identifiers as ID Codes are also based on a structure of four parts which together comprise the composite identifier.</p> <p>In this Coded Domain, there are three component parts to the ID Code; namely: (1) ID Code - UN Member State; (2) ID Code of Language; and, (3) Status of Language Code</p>
(04)	ID Code - UN Member State	The three (3) digit numeric ID code for the UN Member state as taken from the UN Statistics Office (and also used in ISO 3166-1).
(05)	ID Code of Language	The three (3)-digit alpha code for the (natural) language based on ISO 639-2/T
(06)	Status of Language Code	<p>A code representing the status of the language, where:</p> <ul style="list-style-type: none"> ➤ "1" = "official language"; and, ➤ "2" = "de facto language".
-	Change Management	
(07)	UN Member Date	The date the entity became a member state of the United Nations, and thus also a member of this coded domain.
-	Application Syntax	
(08)	Composite Identifier	The Composite Identifier consisting of a combination of the Coded Domain ID value plus the ID Code value.

⁶²See further in ISO/IEC 15944-1:2002 "Annex D (Informative) - Existing Standards for the unambiguous identification of Persons in business transactions (organization and individuals) and some common policy and implementation considerations".

Column ID	Label	Specification
		<p>[Note: The Composite Identifier is deemed to be a single data value and is independent of any syntax which may be utilized to interchange or represent it].</p> <p><i>[Project Editors' Note: The representation of the data values of the Composite Identifiers here as "15944-5:c:004:fas:2" is <u>syntax neutral</u>. It could just as well be "159441004fas2" where one would apply parsing rules as required for the component parts of the base structure].</i></p>
-	Human Interface Equivalents (Linguistic)	These are the human readable and understandable equivalent expressions of the semantics of the data values of the IT interface parts of a coded domain. Those presented here are for the use of natural languages of English and French.
(21)	UN Member State Short Name (English)	The UN official short name of the country - English
(22)	UN Member State Short Name (French)	The UN official short name of the country - French
(31)	ISO 639-2/T Language Name (English)	The name of the language - English
(32)	ISO 639-2/T Language Name (French)	The name of the language - French

C.3 NOTES

In addition to the statements made in C.1 and C.2 above, the following notes are required for understanding and use of this coded domain.

1. All the English and French names for languages are taken from ISO 639-2:1998, i.e., 2/T terminology set of codes (as well as any updates as per its Registration Authority (Library of Congress). Where there is another English name for the language, (e.g., as found in the UN member state Afghanistan (004)), it has been added as an "a.k.a" in a footnote.
2. The language code used for Spanish here is "esp". According to ISO 639-2:1998, this code will come into effect in 2003 with "esperanto" losing its "esp" code assignment.
3. This Annex C may from time to time require updates/amendments based on decisions taken by the United Nations or any of its UN member states. It is recognized that during the 1990s a significant number of changes occurred, (e.g., those related to the "Soviet Union", Yugoslavia", "Ethiopia", etc.). However, it is assumed that during the next five years there will be a higher level of stability and as such there is a much lower probability of the need to make changes to this Annex C.

Possible changes which may occur are of the following nature (or combinations thereof):

- (a) the code for the member entity remaining the same but the name representation(s) changing;
- (b) a change in the 2-alpha and/or 3-alpha code reflecting a change in name;
- (c) the code for the member entity remaining the same but a not only the name representation change but also a change in property or behaviour of that entity, (e.g., the Soviet Union not only changing its name to Russia, but also its territory reduced, or Ethiopia keeping its code and name but having its territory reduced, or Yugoslavia being split up into several new UN member states with two of its parts, i.e., Serbia and Montenegro, keeping the "891" code of the former Yugoslavia).

4. Stability of the Annex C "Composite Identifier"

The composite identifier found in Annex C, column (08) of this coded domain is formulated in support of maximizing its use as a reusable semantic component, i.e., business object, in modelling common business transactions as scenarios and scenario components in that:

- it is independent of changes in the 2-alpha or 3-alpha codes which may occur when a UN member changes its official

4655 name(s);
4656
4657 ➤ it is independent of the name(s) which the UN member state decides to utilize in either its "official" (or "de facto")
4658 language(s) for the language utilized as well as its ISO English and ISO French name equivalents, i.e., in the "official"
4659 (or "de facto") language(s) of that UN member state. {See for example, Afghanistan and Iran which uses the name
4660 "Farsi" not "Persian" as the human interchange ISO English equivalent for ISO 639-2/T code "fas".}

4661
4662 Annex C will need to be amended only when:

- 4663
4664 ➤ the UN adds a new member state;
- 4665
4666 ➤ a UN member state adds an official language, changes its official language and/or converts a de facto language to an
4667 official language; or,
- 4668
4669 ➤ ISO 639-2/T changes the 3-alpha code for a name of a language and/or adds a new 3-alpha code for a new language and
4670 this new language becomes an official (or de facto) language of a UN member state.

4671
4672 Changes of this nature are not frequent.

4673 **C.4 ANNEX C (NORMATIVE) CODES REPRESENTING UN MEMBER STATES AND THEIR OFFICIAL (OR DE**
4674 **FACTO) LANGUAGES**

4675

4676

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	004:fas:2	004	fas	2	1946-11-19	15944-5:c:004:fas:2	Afghanistan	Afghanistan	Persian ⁶³	persan
15944-5	c	004:pus:2	004	pus	2	1946-11-19	15944-5:c:004:pus:2	Afghanistan	Afghanistan	Pushto	pachto
19544-5	c	008:sqi:1	008	sqi	1	1955-12-14	15944-5:c:008:sqi:1	Albania	Albanie	Albanian	albanais
15944-5	c	012:ara:1	012	ara	1	1962-10-08	15944-5:c:012:ara:1	Algeria	Algérie	Arabic	arabe
15944-5	c	020:cat:1	020	cat	1	1993-07-28	15944-5:c:020:cat:1	Andorra	Andorre	Catalan	catalan
15944-5	c	024:por:1	024	por	1	1976-12-01	15944-5:c:024:por:1	Angola	Angola	Portuguese	portugais
15944-5	c	028:eng:1	028	eng	1	1981-11-11	15944-5:c:028:eng:1	Antigua and Barbuda	Antigua-et-Barbuda	English	anglais
15944-5	c	031:aze:2	031	aze	2	1992-03-09	15944-5:c:031:aze:2	Azerbaijan	Azerbaïdjan	Azerbaijani	azéri
15944-5	c	032:esp:1	032	esp	1	1945-10-24	15944-5:c:032:esp:1	Argentina	Argentine	Spanish	espagnol
15944-5	c	036:eng:2	036	eng	2	1945-11-01	15944-5:c:036:eng:2	Australia	Australie	English	anglais
15944-5	c	040:deu:1	040	deu	1	1955-12-14	15944-5:c:040:deu:1	Austria	Autriche	German	allemand
15944-5	c	044:eng:2	044	eng	2	1973-09-18	15944-5:c:044:eng:2	Bahamas	Bahamas	English	anglais
15944-5	c	048:ara:2	048	ara	2	1971-09-21	048:ara:2	Bahrain	Bahreïn	Arabic	arabe
15944-5	c	050:ben:1	050	ben	1	1974-09-17	15944-5:c:050:ben:1	Bangladesh	Bangladesh	Bengali	bengali
15944-5	c	051:hye:2	051	hye	2	1992-03-02	15944-5:c:051:hye:2	Armenia	Arménie	Armenian	arménien
15944-5	c	052:eng:2	052	eng	2	1966-12-09	15944-5:c:052:eng:2	Barbados	Barbade	English	anglais
15944-5	c	056:fra:1	056	fra	1	1945-12-27	15944-5:c:056:fra:1	Belgium	Belgique	French	français

⁶³ aka Farsi

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	056:nld:1	056	nld	1	1945-12-27	15944-5:c:056:nld:1	Belgium	Belgique	Dutch	néerlandais
15944-5	c	056:deu:1	056	deu	1	1945-12-27	15944-5:c:056:deu:1	Belgium	Belgique	German	allemand
15944-5	c	064:dzo:1	064	dza	1	1971-09-21	15944-5:c:064:dzo:1	Bhutan	Bhoutan	Dzongkha	dzongkha
15944-5	c	068:esp:1	068	esp	1	1945-11-14	15944-5:c:068:esp:1	Bolivia	Bolivie	Spanish	espagnol
15944-5	c	068:aym:1	068	aym	1	1945-11-14	15944-5:c:068:aym:1	Bolivia	Bolivie	Aymara	aymara
15944-5	c	068:que:1	068	que	1	1945-11-14	15944-5:c:068:que:1	Bolivia	Bolivie	Quechua	quechua
15944-5	c	070:bos:2	070	bos ⁶⁴	2	1992-05-22	15944-5:c:070:bos:2	Bosnia and Herzegovina	Bosnie-Herzégovine	Bosnian	bosniaque ⁶⁵
15944-5	c	070:hrv:2	070	hrv	2	1992-05-22	15944-5:c:070:hrv:2	Bosnia and Herzegovina	Bosnie-Herzégovine	Croatian	croate
15944-5	c	070:srp:2	070	srp	2	1992-05-22	15944-5:c:070:srp:2	Bosnia and Herzegovina	Bosnie-Herzégovine	Serbian	serbe
15944-5	c	072:eng:1	072	eng	1	1966-10-17	15944-5:c:072:eng:1	Botswana	Botswana	English	anglais
15944-5	c	076:por:1	076	por	1	1945-10-24	15944-5:c:076:por:1	Brazil	Brésil	Portuguese	portugais
15944-5	c	084:eng:1	084	eng	1	1981-09-25	15944-5:c:084:eng:1	Belize	Belize	English	anglais
15944-5	c	090:eng:1	090	eng	1	1978-09-19	15944-5:c:090:eng:1	Solomon Islands	Salomon, Îles	English	anglais
15944-5	c	096:msa:1	096	msa	1	1984-09-21	15944-5:c:096:msa:1	Brunei Darussalam	Brunéi Darussalam	Malay	malais
15944-5	c	100:bul:2	100	bul	2	1955-12-14	15944-5:c:100:bul:2	Bulgaria	Bulgarie	Bulgarian	bulgare

⁶⁴This will be a common comment throughout this table. 3 languages are not official and have been coded as de facto ("2"). Further clarification/verification/information is required re: status of these three languages. (03.08.25)

⁶⁵See ISO 639 Registration Authority (Library of Congress) re: this updated code (2000), see <http://www.loc.gov/standards/iso639-2/codechanges.html> (03.08.27).

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	104:mya:2	104	mya	2	1948-04-19	15944-5:c:104:mya:2	Myanmar	Myanmar	Burmese	birman
15944-5	c	108:fra:1	108	fra	1	1962-09-18	15944-5:c:108:fra:1	Burundi	Burundi	French	français
15944-5	c	108:run:1	108	run	1	1962-09-18	15944-5:c:108:run:1	Burundi	Burundi	Rundi	rundi
15944-5	c	112:bel:2	112	bel	2	1945-10-24	15944-5:c:112:bel:2	Belarus	Bélarus	Belarusian	biélorusse
15944-5	c	116:khm:1	116	khm	1	1955-12-14	15944-5:c:116:khm:1	Cambodia	Cambodge	Khmer	khmer
15944-5	c	120:eng:1	120	eng	1	1960-09-20	15944-5:c:120:eng:1	Cameroon	Cameroun	English	anglais
15944-5	c	120:fra:1	120	fra	1	1960-09-20	15944-5:c:120:fra:1	Cameroon	Cameroun	French	français
15944-5	c	124:eng:1	124	eng	1	1945-11-09	15944-5:c:124:eng:1	Canada	Canada	English	anglais
15944-5	c	124:fra:1	124	fra	1	1945-11-09	15944-5:c:124:fra:1	Canada	Canada	French	français
15944-5	c	132:por:2	132	por	2	1975-09-16	15944-5:c:132:por:2	Cape Verde	Cap-Vert	Portuguese	portugais
15944-5	c	140:fra:1	140	fra	1	1960-09-20	15944-5:c:140:fra:1	Central African Republic	Centrafricaine, République	French	français
15944-5	c	144:sin:1	144	sin	1	1955-12-14	15944-5:c:144:sin:1	Sri Lanka	Sri Lanka	Sihnalese	singhalais
15944-5	c	144:tam:2	144	tam	2* ⁶⁶	1955-12-14	15944-5:c:144:tam:2	Sri Lanka	Sri Lanka	Tamil	tamoul
15944-5	c	148:ara:1	148	ara	1	1960-09-20	15944-5:c:148:ara:1	Chad	Tchad	Arabic	arabe
15944-5	c	148:fra:1	148	fra	1	1960-09-20	15944-5:c:148:fra:1	Chad	Tchad	French	français
15944-5	c	152:esp:2	152	esp	2	1945-09-24	15944-5:c:152:esp:2	Chile	Chili	Spanish	espagnol
15944-5	c	156:zho:2	156	zho	2	1945-10-24	15944-5:c:156:zho:2	China	Chine	Chinese	chinois
15944-5	c	170:esp:2	170	esp	2	1945-11-05	15944-5:c:170:esp:2	Colombia	Colombie	Spanish	espagnol
15944-5	c	174:ara:1	174	ara	1	1975-11-12	15944-5:c:174:ara:1	Comoros	Comoros	Arabic	arabe
15944-5	c	174:fra:1	174	fra	1	1975-11-12	15944-5:c:174:fra:1	Comoros	Comoros	French	français

⁶⁶Tamil (tam) is a national language of Sri Lanka (144)

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	178:fra:1	178	fra	1	1960-09-20	15944-5:c:178:fra:1	Congo	Congo	French	français
15944-5	c	180:fra:1	180	fra	1	1960-09-20	15944-5:c:180:fra:1	Congo, The Democratic Republic of the	Congo, La République démocratique du	French	français
15944-5	c	188:esp:1	188	esp	1	1945-11-02	15944-5:c:188:esp:1	Costa Rica	Costa Rica	Spanish	español
15944-5	c	191:hrv:2	191	hrv	2	1992-05-22	15944-5:c:191:hrv:2	Croatia	Croatie	Croatian	croate
15944-5	c	192:esp:2	192	esp	2	1945-10-24	15944-5:c:192:esp:2	Cuba	Cuba	Spanish	español
15944-5	c	196:ell:2	196	ell	2	1960-09-20	15944-5:c:196:ell:2	Cyprus	Chypre	Greek	grec
15944-5	c	196:tur:2	196	tur	2	1960-09-20	15944-5:c:196:tur:2	Cyprus	Chypre	Turkish	turc
15944-5	c	203:ces:2	203	ces	2	1993-01-19	15944-5:c:203:ces:2	Czech Republic	Tchèque, République	Czech	tchèque
15944-5	c	204:fra:1	204	fra	1	1960-09-20	15944-5:c:204:fra:1	Benin	Bénin	French	français
15944-5	c	208:dan:2	208	dan	2	1945-10-24	15944-5:c:208:dan:2	Denmark	Danemark	Danish	danois
15944-5	c	212:eng:1	212	eng	1	1978-12-18	15944-5:c:212:eng:1	Dominica	Dominique	English	anglais
15944-5	c	214:esp:2	214	esp	2	1945-10-24	15944-5:c:214:esp:2	Dominican Republic	Dominicaine, République	Spanish	español
15944-5	c	218:esp:1	218	esp	1	1945-12-21	15944-5:c:218:esp:1	Ecuador	Équateur	Spanish	español
15944-5	c	222:esp:2	222	esp	2	1945-10-24	15944-5:c:222:esp:2	El Salvador	El Salvador	Spanish	español
15944-5	c	222:nah:2	222	nah	2 ⁶⁷	1945-10-24	15944-5:c:222:nah:2	El Salvador	El Salvador	Nahuatl	nahuatl
15944-5	c	226:esp:1	226	esp	1	1968-11-12	15944-5:c:226:esp:1	Equatorial	Guinée	Spanish	español

⁶⁷Note: Both Spanish and Nahuatl are non-official. Not known if both are de facto or official, hence both are currently coded as "2", i.e., as de facto, until further verification. (03.08.25)

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
								Guinea	équatoriale		
15944-5	c	226:fra:1	226	fra	1	1968-11-12	15944-5:c:226:fra:1	Equatorial Guinea	Guinée équatoriale	French	français
15944-5	c	231:amh:2 ⁶⁸	231	amh	2	1945-11-13	15944-5:c:231:amh:2 ⁶⁹	Ethiopia	Éthiopie	Amharic	amharique
15944-5	c	231:tir:2	231	tir	2	1945-11-13	15944-5:c:231:tir:2	Ethiopia	Éthiopie	Tigrinya	tigrigna
15944-5	c	231:eng:2	231	eng	2	1945-11-13	15944-5:c:231:eng:2	Ethiopia	Éthiopie	English	anglais
15944-5	c	232:aar:2 ⁷⁰	232	aar	2	1993-05-28	15944-5:c:232:aar:2 ⁷¹	Eritrea	Érythrée	Afar	afar
15944-5	c	232:amh:2	232	amh	2	1993-05-28	15944-5:c:232:amh:2	Eritrea	Érythrée	Amharic	amharique
15944-5	c	232:ara:2	232	ara	2	1993-05-28	15944-5:c:232:ara:2	Eritrea	Érythrée	Arabic	arabe
15944-5	c	232:tig:2	232	tig	2	1993-05-28	15944-5:c:232:tig:2	Eritrea	Érythrée	Tigre	tigré
15944-5	c	232:eng:2	232	eng	2	1993-05-28	15944-5:c:232:eng:2	Eritrea	Érythrée	English	anglais
15944-5	c	233:est:1	233	est	1	1991-09-17	15944-5:c:233:est:1	Estonia	Estonie	Estonian	estonien

⁶⁸Note: All three languages are not declared as "official" and have thus been coded as "de facto", however, what is not known is if all three languages are in fact de facto official languages. Further verification/confirmation is needed here.

⁶⁹Note: All three languages are not declared as "official" and have thus been coded as "de facto", however, what is not known is if all three languages are in fact de facto official languages. Further verification/confirmation is needed here

⁷⁰The five languages for Eritrea are all coded as de facto ("2"). Further confirmation/verification is needed here to determine if they are all considered "de facto" or if not, which one is.

⁷¹The five languages for Eritrea are all coded as de facto ("2"). Further confirmation/verification is needed here to determine if they are all considered "de facto" or if not, which one is.

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	242:eng:1	242	eng	1	1970-10-13	15944-5:c:242:eng:1	Fiji	Fidji	English	anglais
15944-5	c	246:fin:1	246	fin	1	1955-12-14	15944-5:c:246:fin:1	Finland	Finlande	Finnish	finnois
15944-5	c	246:swe:1	246	swe	1	1955-12-14	15944-5:c:246:swe:1	Finland	Finlande	Swedish	suédois
15944-5	c	250:fra:2	250	fra	2	1945-10-24	15944-5:c:250:fra:2	France	France	French	français
15944-5	c	262:fra:1	262	fra	1	1977-09-20	15944-5:c:262:fra:1	Djibouti	Djibouti	French	français
15944-5	c	262:ara:1	262	ara	1	1977-09-20	15944-5:c:262:ara:1	Djibouti	Djibouti	Arabic	arabe
15944-5	c	266:fra:1	266	fra	1	1960-09-20	15944-5:c:266:fra:1	Gabon	Gabon	French	français
15944-5	c	268:kat:1	268	kat	1	1992-07-31	15944-5:c:268:kat:1	Georgia	Géorgie	Georgian	géorgien
15944-5	c	270:eng:1	270	eng	1	1965-09-21	15944-5:c:270:eng:1	Gambia	Gambie	English	anglais
15944-5	c	276:deu:2	276 ^{72***)}	deu	2	1973-09-18	15944-5:c:276:deu:2	Germany	Allemagne	German	allemand
15944-5	c	288:eng:1	288	eng	1	1957-03-08	15944-5:c:288:eng:1	Ghana	Ghana	English	anglais
15944-5	c	296:eng:1	296	eng	1	1999-09-14	15944-5:c:296:eng:1	Kiribati	Kiribati	English	anglais
15944-5	c	300:ell:1	300	ell	1	1945-10-25	15944-5:c:300:ell:1	Greece	Grèce	Greek	grec
15944-5	c	308:eng:1	308	eng	1	1974-09-17	15944-5:c:308:eng:1	Grenada	Grenade	English	anglais
15944-5	c	320:esp:2	320	esp	2	1945-11-21	15944-5:c:320:esp:2	Guatemala	Guatemala	Spanish	espagnol
15944-5	c	324:fra:1	324	fra	1	1958-12-12	15944-5:c:324:fra:1	Guinea	Guinée	French	français
15944-5	c	328:eng:2	328	eng	2	1966-09-20	15944-5:c:328:eng:2	Guyana	Guyana	English	anglais
15944-5	c	332:fra:1	332	fra	1	1945-10-24	15944-5:c:332:fra:1	Haiti	Haïti	French	français
15944-5	c	332:cpf:1	332	hat ⁷³	1	1945-10-24	15944-5:c:332:cpf:1	Haiti	Haïti	Creole	créole

^{72***)} 280 continues to represent "Germany" in certain standards by ISO/TC 68

⁷³See ISO 639 Registration Authority (Library of Congress) re: this updated code (as of 2003-02-26) <<http://www.loc.gov/standards/iso639-2/codechanges.html>> (03.08.25).

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	340:esp:2	340	esp	2	1945-12-17	15944-5:c:340:esp:2	Honduras	Honduras	Spanish	espagnol
15944-5	c	348:hun:2	348	hun	2	1955-12-14	15944-5:c:348:hun:2	Hungary	Hongrie	Hungarian	hongrois
15944-5	c	352:isl:2	352	isl	2	1946-11-19	15944-5:c:352:isl:2	Iceland	Islande	Icelandic	islandais
15944-5	c	356:eng:1	356	eng	1 ⁷⁴	1945-10-30	15944-5:c:356:eng:1	India	Inde	English	anglais
15944-5	c	356:ben:1	356	ben	1	1945-10-30	15944-5:c:356:ben:1	India	Inde	Bengali	bengali
15944-5	c	356:tel:1	356	tel	1	1945-10-30	15944-5:c:356:tel:1	India	Inde	Telugu	télougou
15944-5	c	356:mar:1	356	mar	1	1945-10-30	15944-5:c:356:mar:1	India	Inde	Marathi	marathe
15944-5	c	356:tam:1	356	tam	1	1945-10-30	15944-5:c:356:tam:1	India	Inde	Tamil	tamoul
15944-5	c	356:urd:1	356	urd	1	1945-10-30	15944-5:c:356:urd:1	India	Inde	Urdu	ourdou
15944-5	c	356:guj:1	356	guj	1	1945-10-30	15944-5:c:356:guj:1	India	Inde	Gujarati	goudjrati
15944-5	c	356:mal:1	356	mal	1	1945-10-30	15944-5:c:356:mal:1	India	Inde	Malayalam	malayalam
15944-5	c	356:kan:1	356	kan	1	1945-10-30	15944-5:c:356:kan:1	India	Inde	Kannada	kannada
15944-5	c	356:ori:1	356	ori	1	1945-10-30	15944-5:c:356:ori:1	India	Inde	Oriya	oriya
15944-5	c	356:pan:1	356	pan	1	1945-10-30	15944-5:c:356:pan:1	India	Inde	Punjabi	pendjabi
15944-5	c	356:asm:1	356	asm	1	1945-10-30	15944-5:c:356:asm:1	India	Inde	Assamese	assamais
15944-5	c	356:kas:1	356	kas	1	1945-10-30	15944-5:c:356:kas:1	India	Inde	Kashmiri	kashmiri
15944-5	c	356:snd:1	356	snd	1	1945-10-30	15944-5:c:356:snd:1	India	Inde	Sindhi	sindhi
15944-5	c	356:san:1	356	san	1	1945-10-30	15944-5:c:356:san:1	India	Inde	Sanskrit	sanskrit
15944-5	c	360:ind:1	360	ind	1	1950-09-28	15944-5:c:360:ind:1	Indonesia	Indonésie	Indonesian	indonésien

⁷⁴ Associate Official Status

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	364:fas:2	364	fas	2	1945-10-24	15944-5:c:364:fas:2	Iran, Islamic Republic of	Iran, République Islamique d'	Persian ⁷⁵	persan
15944-5	c	368:ara:2	368	ara	2	1945-12-21	15944-5:c:368:ara:2	Iraq	Iraq	Arabic	arabe
15944-5	c	372:eng:2	372	eng	2	1955-12-14	15944-5:c:372:eng:2	Ireland	Irlande	English	anglais
15944-5	c	376:heb:1	376	heb	1	1949-05-11	15944-5:c:376:heb:1	Israel	Israël	Hebrew	hébreu
15944-5	c	380:ita:1	380	ita	1	1955-12-14	15944-5:c:380:ita:1	Italy	Italie	Italian	italien
15944-5	c	384:fra:1	384	fra	1	1960-09-20	15944-5:c:384:fra:1	Côte d'Ivoire	Côte d'Ivoire	French	français
15944-5	c	388:eng:2	388	eng	2	1962-09-18	15944-5:c:388:eng:2	Jamaica	Jamaïque	English	anglais
15944-5	c	392:jpn:2	392	jpn	2	1956-12-18	15944-5:c:392:jpn:2	Japan	Japon	Japanese	japonais
15944-5	c	398:rus:1	398	rus	1	1992-03-02	15944-5:c:398:rus:1	Kazakstan	Kazakstan	Russian	russe
15944-5	c	400:ara:1	400	ara	1	1955-12-14	15944-5:c:400:ara:1	Jordan	Jordanie	Arabic	arabe
15944-5	c	404:eng:1	404	eng	1	1963-12-16	15944-5:c:404:eng:1	Kenya	Kenya	English	anglais
15944-5	c	404:swa:1	404	swa	1	1963-12-16	15944-5:c:404:swa:1	Kenya	Kenya	Swahili	swahili
15944-5	c	408:kor:2	408	kor	2	1991-09-17	15944-5:c:408:kor:2	Korea, Democratic People's Republic of	Corée, République populaire démocratique de	Korean	coréen
15944-5	c	410:kor:2	410	kor	2	1991-09-17	15944-5:c:410:kor:2	Korea, Republic of	Corée, République de	Korean	coréen
15944-5	c	414:ara:1	414	ara	1	1963-05-14	15944-5:c:414:ara:1	Kuwait	Koweït	Arabic	arabe

⁷⁵ aka Farsi

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	417:kir:1	417	kir	1	1992-03-02	15944-5:c:417:kir:1	Kyrgyzstan	Kirghizistan	Kirghiz ⁷⁶	kirghize
15944-5	c	417:rus:1	417	rus	1	1992-03-02	15944-5:c:417:rus:1	Kyrgyzstan	Kirghizistan	Russian	russe
15944-5	c	418:lao:1	418	lao	1	1955-12-14	15944-5:c:418:lao:1	Lao People's Democratic Republic	Lao, République démocratique populaire	Lao	lao
15944-5	c	422:ara:1	422	ara	1	1945-10-24	15944-5:c:422:ara:1	Lebanon	Liban	Arabic	arabe
15944-5	c	426:eng:1	426	eng	1	1966-10-17	15944-5:c:426:eng:1	Lesotho	Lesotho	English	anglais
15944-5	c	428:lav:1	428	lav	1	1991-09-17	15944-5:c:428:lav:1	Latvia	Lettonie	Latvian	letton
15944-5	c	430:eng:1	430	eng	1	1945-11-02	15944-5:c:430:eng:1	Liberia	Libéria	English	French
15944-5	c	434:ara:2	434	ara	2 ⁷⁷	1955-12-14	15944-5:c:434:ara:2	Libyan Arab Jamahiriya	Libyenne, Jamahiriya arabe	Arabic	arabe
15944-5	c	434:ita:2	434	ita	2	1955-12-14	15944-5:c:434:ita:2	Libyan Arab Jamahiriya	Libyenne, Jamahiriya arabe	Italian	italien
15944-5	c	434:eng:2	434	eng	2	1955-12-14	15944-5:c:434:eng:2	Libyan Arab Jamahiriya	Libyenne, Jamahiriya arabe	English	anglais
15944-5	c	438:deu:1	438	deu	1	1990-09-18	15944-5:c:438:deu:1	Liechtenstein	Liechtenstein	French	français

⁷⁶ aka Kyrgyz

⁷⁷ There are no official language(s) here. Arabic, Italian and English have been coded as de facto official languages, i.e., "2". Further clarification/verification/information is required here to determine which (if not all three) language is official (de facto or otherwise) (03.08.25).

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	440:lit:1	440	lit	1	1991-09-17	15944-5:c:440:lit:1	Lithuania	Lituanie	Lithuanian	lituanien
15944-5	c	442:ltz:2	442	ltz	2 ⁷⁸	1945-10-24	15944-5:c:442:ltz:2	Luxembourg	Luxembourg	Letzebergesch	luxembourgeois
15944-5	c	442:deu:2	442	deu	2	1945-10-24	15944-5:c:442:deu:2	Luxembourg	Luxembourg	German	allemand
15944-5	c	442:fra:2	442	fra	2	1945-10-24	15944-5:c:442:fra:2	Luxembourg	Luxembourg	French	français
15944-5	c	450:fra:1	450	fra	1	1960-09-20	15944-5:c:450:fra:1	Madagascar	Madagascar	French	français
15944-5	c	450:mlg:1	450	mlg	1	1960-09-20	15944-5:c:450:mlg:1	Madagascar	Madagascar	Malagasy	malgache
15944-5	c	454:eng:1	454	eng	1	1964-12-01	15944-5:c:454:eng:1	Malawi	Malawi	English	anglais
15944-5	c	454:nya:1	454	nya	1	1964-12-01	15944-5:c:454:nya:1	Malawi	Malawi	Nyanja ⁷⁹	nyanja
15944-5	c	458:msa:1	458	msa	1	1957-09-17	15944-5:c:458:msa:1	Malaysia	Malaisie	Malay	malais
15944-5	c	462:div:2	462	div	2 ⁸⁰	1965-09-21	15944-5:c:462:div:2	Maldives	Maldives	Divehi ⁸¹	maldivien
15944-5	c	462:eng:2	462	eng	2	1965-09-21	15944-5:c:462:eng:2	Maldives	Maldives	English	anglais
15944-5	c	466:fra:1	466	fra	1	1960-09-28	15944-5:c:466:fra:1	Mali	Mali	French	français
15944-5	c	470:mlt:1	470	mlt	1	1964-12-01	15944-5:c:470:mlt:1	Malta	Malte	Maltese	maltais
15944-5	c	470:eng:1	470	eng	1	1964-12-01	15944-5:c:470:eng:1	Malta	Malte	English	anglais

⁷⁸The three languages for Luxembourg have been coded as de facto official ("2"). However, Luxembourgish (aka Letzeburgesch)/luxembourgeois is a national language, German and French are administrative languages. Further clarification/verification/information is required here. (03.08.25).

⁷⁹aka Chichewa

⁸⁰Neither Divehi nor English are official languages. They have both currently been coded as de facto ("2"). Further clarification/verification/information is required here. (03.08.25).

⁸¹aka Maldivian Dhivehi

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	478:ara:1	478	ara	1	1961-10-07	15944-5:c:478:ara:1	Mauritania	Mauritanie	Arabic (Hassaniya)	arabe
15944-5	c	478:wol:1	478	wol	1	1961-10-07	15944-5:c:478:wol:1	Mauritania	Mauritanie	Wolof	wolof
15944-5	c	480:eng:1	480	eng	1	1968-04-24	15944-5:c:480:eng:1	Mauritius	Maurice	English	anglais
15944-5	c	480:fra:1	480	fra	1	1968-04-24	15944-5:c:480:fra:1	Mauritius	Maurice	French	français
15944-5	c	484:esp:2	484	esp	2	1945-11-07	15944-5:c:484:esp:2	Mexico	Mexique	Spanish	espagnol
15944-5	c	492:fra:1	492	fra	1	1993-05-28	15944-5:c:492:fra:1	Monaco	Monaco	French	français
15944-5	c	496:mon:2	496	mon	2	1961-10-27	15944-5:c:496:mon:2	Mongolia	Mongolie	Mongolian ⁸²	mongol
15944-5	c	498:mol:1	498	mol	1	1992-03-02	15944-5:c:498:mol:1	Moldova, Republic of	Moldova, République de	Moldovan	moldave
15944-5	c	498:rus:1	498	rus	1	1992-03-02	15944-5:c:498:rus:1	Moldova, Republic of	Moldova, République de	Russian	russe
15944-5	c	504:ara:1	504	ara	1	1956-11-12	15944-5:c:504:ara:1	Morocco	Maroc	Arabic	arabe
15944-5	c	508:por:1	508	por	1	1975-09-16	15944-5:c:508:por:1	Mozambique	Mozambique	Portuguese	portuguais
15944-5	c	512:ara:1	512	ara	1	1971-10-07	15944-5:c:512:ara:1	Oman	Oman	Arabic	arabe
15944-5	c	516:eng:1	516	eng	1	1990-04-23	15944-5:c:516:eng:1	Namibia	Namibie	English	anglais
15944-5	c	520:nau:2	520	nau	2	1999-09-14	15944-5:c:520:nau:2	Nauru	Nauru	Nauru ⁸³	nauruan
15944-5	c	524:nep:1	524	nep	1	1955-12-14	15944-5:c:524:nep:1	Nepal	Népal	Nepali	népalais

⁸² aka Khalkha Mongol

⁸³ aka Nauruan

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	528:nld:1	528	nld	1	1945-12-10	15944-5:c:528:nld:1	Netherlands	Pays-Bas	Dutch	néerlandais
15944-5	c	528:fry:1	528	fry	1	1945-12-10	15944-5:c:528:fry:1	Netherlands	Pays-Bas	Frisian	frison
15944-5	c	548:eng:1	548	eng	1	1981-09-15	15944-5:c:548:eng:1	Vanuatu	Vanuatu	English	anglais
15944-5	c	548:fra:1	548	fra	1	1981-09-15	15944-5:c:548:fra:1	Vanuatu	Vanuatu	French	français
15944-5	c	548:bis:1	548	bis	1	1981-09-15	15944-5:c:548:bis:1	Vanuatu	Vanuatu	Bislama ⁸⁴	bichlamar
15944-5	c	554:eng:1	554	eng	1	1945-10-24	15944-5:c:554:eng:1	New Zealand	Nouvelle-Zélande	English	anglais
15944-5	c	554:mri:1	554	mri	1	1945-10-24	15944-5:c:554:mri:1	New Zealand	Nouvelle-Zélande	Maori	maori
15944-5	c	558:esp:1	558	esp	1	1945-10-24	15944-5:c:558:esp:1	Nicaragua	Nicaragua	Spanish	espagnol
15944-5	c	562:fra:1	562	fra	1	1960-09-20	15944-5:c:562:fra:1	Niger	Niger	French	français
15944-5	c	566:eng:1	566	eng	1	1960-10-07	15944-5:c:566:eng:1	Nigeria	Nigéria	English	anglais
15944-5	c	578:nno:1	578	nno	1	1945-11-27	15944-5:c:578:nno:1	Norway	Norvège	Norwegian nynorsk ⁸⁵	norvégien nynorskbo
15944-5	c	578:nob:1	578	nob	1	1945-11-27	15944-5:c:578:nob:1	Norway	Norvège	Norwegian bokmål ⁸⁶	norvégien bokmål

⁸⁴ aka Bichelama

⁸⁵ As of 2000-02-18, ISO 639-2/T also has two codes for Norwegian Nynorsk/norvégien nynorsk (nno), and Norwegian Bokmål/norvégien bokmål (nob). These are the two official written languages of Norway.

⁸⁶ As of 2000-02-18, ISO 639-2/T also has two codes for Norwegian Nynorsk/norvégien nynorsk (nno), and Norwegian Bokmål/norvégien bokmål (nob). These are the two official written languages of Norway.

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	583:eng:1	583	eng	1	1991-09-17	15944-5:c:583:eng:1	Micronesia, Federated States of	Micronésie, États fédérés de	English	anglais
15944-5	c	584:eng:1	584	eng	1	1991-09-17	15944-5:c:584:eng:1	Marshall Islands	Marshall, Îles	English	anglais
15944-5	c	584:mah:1	584	mah	1	1991-09-17	15944-5:c:584:mah:1	Marshall Islands	Marshall, Îles	Marshallese	marshall
15944-5	c	585:eng:1	585	eng	1	1994-12-15	15944-5:c:585:eng:1	Palau	Palaos	English	anglais
15944-5	c	585:pau:1	585	pau	1	1994-12-15	15944-5:c:585:pau:1	Palau	Palaos	Palauan	palau
15944-5	c	586:urd:1	586	urd	1	1947-09-30	15944-5:c:586:urd:1	Pakistan	Pakistan	Urdu	ourdou
15944-5	c	586:eng:1	586	eng	1	1947-09-30	15944-5:c:586:eng:1	Pakistan	Pakistan	English	anglais
15944-5	c	591:eng:1	591	esp	1	1945-11-13	15944-5:c:591:eng:1	Panama	Panama	Spanish	espagnol
15944-5	c	598:eng:2	598	eng	2 ⁸⁷	1975-10-10	15944-5:c:598:eng:2	Papua New Guinea	Papouasie-Nouvelle-Guinée	English	anglais
15944-5	c	598:hmo:2	598	hmo	2	1975-10-10	15944-5:c:598:hmo:2	Papua New Guinea	Papouasie-Nouvelle-Guinée	Hiri Motu	hiri motu
15944-5	c	598:tpi:2	598	tpi	2	1975-10-10	15944-5:c:598:tpi:2	Papua New Guinea	Papouasie-Nouvelle-Guinée	Tok Pisin	tok pisin
15944-5	c	600:esp:1	600	esp	1	1945-10-24	15944-5:c:600:esp:1	Paraguay	Paraguay	Spanish	espagnol
15944-5	c	600:grn:1	600	grn	1	1945-10-24	15944-5:c:600:grn:1	Paraguay	Paraguay	Guarani	guarani

⁸⁷There is no official language. All three have been coded as de facto ("2"). Further clarification/verification/information is needed here. (03.08.25).

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	604:esp:1	604	esp	1	1945-10-31	15944-5:c:604:esp:1	Peru	Pérou	Spanish	espagnol
15944-5	c	604:que:1	604	que	1	1945-10-31	15944-5:c:604:que:1	Peru	Pérou	Quechua	quechua
15944-5	c	608:tgl:1	608	tgl	1	1945-10-24	15944-5:c:608:tgl:1	Philippines	Philippines	Tagalog ⁸⁸	tagalog
15944-5	C	608:eng:1	608	eng	1	1945-10-24	15944-5:c:608:eng:1	Philippines	Philippines	English	anglais
15944-5	c	616:pol:2	616	pol	2	1945-10-24	15944-5:c:616:pol:2	Poland	Pologne	Polish	polonais
15944-5	c	620:por:2	620	por	2	1955-12-14	15944-5:c:620:por:2	Portugal	Portugal	Portuguese	portugais
15944-5	c	624:por:1	624	por	1	1974-09-17	15944-5:c:624:por:1	Guinea-Bissau	Guinée-Bissau	Portuguese	portugais
15944-5	c	626:tet:1	626	tet	1	2002-09-27	15944-5:c:626:tet:1	Timor-Leste ⁸⁹	Timor-Leste	Tetum	tetum
15944-5	c	626:por:1	626	por	1	2002-09-27	15944-5:c:626:por:1	Timor-Leste	Timor-Leste	Portuguese	portugais
15944-5	c	634:ara:1	634	ara	1	1971-09-21	15944-5:c:634:ara:1	Qatar	Qatar	Arabic	arabe
15944-5	c	642:ron:1	642	ron	1	1955-12-14	15944-5:c:642:ron:1	Romania	Roumanie	Romanian	roumain
15944-5	c	643:rus:2	643	rus	2	1945-10-24	15944-5:c:643:rus:2	Russian Federation	Russie, Fédération de	Russian	russe
15944-5	c	646:kin:1	646	kin	1	1962-09-18	15944-5:c:646:kin:1	Rwanda	Rwanda	Kinyarwanda	rwanda
15944-5	c	646:fra:1	646	fra	1	1962-09-18	15944-5:c:646:fra:1	Rwanda	Rwanda	French	français
15944-5	c	646:eng:1	646	eng	1	1962-09-18	15944-5:c:646:eng:1	Rwanda	Rwanda	English	anglais
15944-5	c	659:eng:2	659	eng	2	1983-09-23	15944-5:c:659:eng:2	Saint Kitts and Nevis	Saint-Kitts-et-Nevis	English	anglais

⁸⁸ aka Filipino

⁸⁹ See ISO 3166-1 Newsletter V-6 2002-11-15.

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier <i>[Syntax Neutral]</i>	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	662:eng:1	662	eng	1	1979-09-18	15944-5:c:662:eng:1	Saint Lucia	Sainte-Lucie	English	anglais
15944-5	c	670:eng:2	670	eng	2	1980-09-16	15944-5:c:670:eng:2	Saint Vincent and the Grenadines	Saint-Vincent-et-les Grenadines	English	anglais
15944-5	c	674:ita:2	674	ita	2	1992-03-02	15944-5:c:674:ita:2	San Marino	Saint-Marin	Italian	italien
15944-5	c	678:por:1	678	por	1	1975-09-16	15944-5:c:678:por:1	Sao Tome and Principe	Sao Tomé-et-Principe	Portuguese	portugais
15944-5	c	682:ara:2	682	ara	2	1945-10-24	15944-5:c:682:ara:2	Saudi Arabia	Arabie saoudite	Arabic	arabe
15944-5	c	686:fra:1	686	fra	1	1960-09-28	15944-5:c:686:fra:1	Senegal	Sénégal	French	français
15944-5	c	690:eng:1	690	eng	1	1976-09-21	15944-5:c:690:eng:1	Seychelles	Seychelles	English	anglais
15944-5	c	690:fra:1	690	fra	1	1976-09-21	15944-5:c:690:fra:1	Seychelles	Seychelles	French	français
15944-5	c	694:eng:1	694	eng	1	1961-09-27	15944-5:c:694:eng:1	Sierra Leone	Sierra Leone	English	anglais
15944-5	c	702:zho:1	702	zho	1	1965-09-21	15944-5:c:702:zho:1	Singapore	Singapour	Chinese	chinois
15944-5	c	702:msa:1	702	msa	1	1965-09-21	15944-5:c:702:msa:1	Singapore	Singapour	Malay	maltais
15944-5	c	702:tam:1	702	tam	1	1965-09-21	15944-5:c:702:tam:1	Singapore	Singapour	Tamil	tamoul
15944-5	c	702:eng:1	702	eng	1	1965-09-21	15944-5:c:702:eng:1	Singapore	Singapour	English	anglais
15944-5	c	703:slk:1	703	slk	1	1993-01-19	15944-5:c:703:slk:1	Slovakia	Slovaquie	Slovak	slovaque
15944-5	c	704:vie:1	704	vie	1	1977-09-20	15944-5:c:704:vie:1	Viet Nam	Viet Nam	Vietnamese	vietnamien
15944-5	c	705:slv:2	705	slv	2	1992-05-22	15944-5:c:705:slv:2	Slovenia	Slovénie	Slovenian	slovène
15944-5	c	706:som:1	706	som	1	1960-09-20	15944-5:c:706:som:1	Somalia	Somalie	Somali	somali
15944-5	c	710:afr:1	710	afr	1	1945-11-07	15944-5:c:710:afr:1	South Africa	Afrique du Sud	Afrikaans	afrikaans
15944-5	c	710:nbl:1	710	nbl	1	1945-11-07	15944-5:c:710:nbl:1	South Africa	Afrique du Sud	Ndebele, South	ndébélé du Sud

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier <i>[Syntax Neutral]</i>	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	710:nso:1	710	sno	1	1945-11-07	15944-5:c:710:nso:1	South Africa	Afrique du Sud	Sotho, Northern	sotho du Nord
15944-5	c	710:sot:1	710	sot	1	1945-11-07	15944-5:c:710:sot:1	South Africa	Afrique du Sud	Sotho, Southern ⁹⁰	sotho du Sud
19544-5	c	710:ssw:1	710	ssw	1	1945-11-07	15944-5:c:710:ssw:1	South Africa	Afrique du Sud	Swati	swati
15944-5	c	710:tso:1	710	tso	1	1945-11-07	15944-5:c:710:tso:1	South Africa	Afrique du Sud	Tsonga	tsonga
15944-5	c	710:tsn:1	710	tsn	1	1945-11-07	15944-5:c:710:tsn:1	South Africa	Afrique du Sud	Tswana	tswana
19544-5	c	710:ven:1	710	ven	1	1945-11-07	15944-5:c:710:ven:1	South Africa	Afrique du Sud	Venda	venda
15944-5	c	710:xho:1	710	xho	1	1945-11-07	15944-5:c:710:xho:1	South Africa	Afrique du Sud	Xhosa	xhosa
15944-5	c	710:zul:1	710	sul	1	1945-11-07	15944-5:c:710:zul:1	South Africa	Afrique du Sud	Zula	soulou
15944-5	c	710:eng:1	710	eng	1	1945-11-07	15944-5:c:710:eng:1	South Africa	Afrique du Sud	English	anglais
15944-5	c	716:eng:1	716	eng	1	1980-08-25	15944-5:c:716:eng:1	Zimbabwe	Zimbabwe	English	anglais
15944-5	c	724:esp:1	724	esp	1	1955-12-14	15944-5:c:724:esp:1	Spain	Espagne	Spanish	espagnol
15944-5	c	736:ara:1	736	ara	1	1956-11-12	15944-5:c:736:ara:1	Sudan	Soudan	Arabic	arabe
15944-5	c	740:nld:1	740	nld	1	1975-12-04	15944-5:c:740:nld:1	Suriname	Suriname	Dutch	néerlandais
15944-5	c	748:eng:1	748	eng	1	1968-09-24	15944-5:c:748:eng:1	Swaziland	Swaziland	English	anglais

⁹⁰ aka Sesotho

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	748:ssw:1	748	ssw	1	1968-09-24	15944-5:c:748:ssw:1	Swaziland	Swaziland	Swati	swati
15944-5	c	752:swe:2	752	swe	2	1946-11-19	15944-5:c:752:swe:2	Sweden	Suède	Swedish	suédois
15944-5	c	756:deu:1	756	deu	1	2002-09-10	15944-5:c:756:deu:1	Switzerland	Suisse	German	allemand
15944-5	c	756:fra:1	756	fra	1	2002-09-10	15944-5:c:756:fra:1	Switzerland	Suisse	French	français
15944-5	c	756:ita:1	756	ita	1	2002-09-10	15944-5:c:756:ita:1	Switzerland	Suisse	Italian	italien
15944-5	c	756:roh:1	756	roh ⁹¹	1	2002-09-10	15944-5:c:756:roh:1	Switzerland	Suisse	Rhaeto-Romance ⁹²	rhéto-roman
15944-5	c	760:ara:1	760	ara	1	1945-10-24	15944-5:c:760:ara:1	Syrian Arab Republic	Syrienne, République arabe	Arabic	arabe
15944-5	c	762:tgk:1	762	tgk	1	1992-03-02	15944-5:c:762:tgk:1	Tajikistan	Tadjikistan	Tajik	tadjik
15944-5	c	764:tha:2	764	tha	1	1946-12-16	15944-5:c:764:tha:2	Thailand	Thaïlande	Thai	thaï
15944-5	c	768:fra:1	768	fra	1	1960-09-20	15944-5:c:768:fra:1	Togo	Togo	French	français
15944-5	c	776:ton:2	776	ton	2 ⁹³	1999-09-14	15944-5:c:776:ton:2	Tonga	Tonga	Tongan	tongan
15944-5	c	776:eng:2	776	eng	2	1999-09-14	15944-5:c:776:eng:2	Tonga	Tonga	English	anglais
15944-5	c	780:eng:1	780	eng	1	1962-09-18	15944-5:c:780:eng:1	Trinidad and Tobago	Trinité-et-Tobago	English	anglais
15944-5	c	784:ara:1	784	ara	1	1971-12-09	15944-5:c:784:ara:1	United Arab	Émirats	Arabic	arabe

⁹¹ Further clarification/verification/information is needed here re: the status of Rhaeto-Romance. Is it an official "national" language or just regional. Sources differ on status. For the present, it is included as an "official" national language. (03.08.25)

⁹² aka Romansch

⁹³ There is no official language here. Further clarification/verification/information is needed here as to the status of English and Tongan. (03.08.25)

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
								Emirates	arabes unis		
15944-5	c	788:ara:1	788	ara	1	1956-11-12	15944-5:c:788:ara:1	Tunisia	Tunisie	Arabic	arabe
15944-5	c	792:tur:1	792	tur	1	1945-10-24	15944-5:c:792:tur:1	Turkey	Turquie	Turkish	turc
15944-5	c	795:tuk:2	795	tuk	2 ⁹⁴	1992-03-02	15944-5:c:795:tuk:2	Turkmenistan	Turkménistan	Turkman	turkmène
15944-5	c	795:rus:2	795	rus	2	1992-03-02	15944-5:c:795:rus:2	Turkmenistan	Turkménistan	Russian	russe
15944-5	c	795:uzb:2	795	uzb	2	1992-03-02	15944-5:c:795:uzb:2	Turkmenistan	Turkménistan	Uzbek	ouzbek
15944-5	c	798:tlv:2	798	tlv	2 ⁹⁵	2000-09-05	15944-5:c:798:tlv:2	Tuvalu	Tuvalu	Tuvalu ⁹⁶	tuvalu
15944-5	c	798:eng:2	798	eng	2	2000-09-05	15944-5:c:798:eng:2	Tuvalu	Tuvalu	English	anglais
15944-5	c	800:eng:1	800	eng	1	1962-10-25	15944-5:c:800:eng:1	Uganda	Ouganda	English	anglais
15944-5	c	804:ukr:2	804	ukr	2	1945-10-24	15944-5:c:804:ukr:2	Ukraine	Ukraine	Ukrainian	ukrainien
15944-5	c	807:mkd:2	807	mkd	2	1993-04-08	15944-5:c:807:mkd:2	Macedonia, The former Yugoslav Republic of	Macédoine, L'ex- République yougoslave de	Macedonian	macédonien
15944-5	c	818:ara:1	818	ara	1	1945-10-24	15944-5:c:818:ara:1	Egypt	Égypte	Arabic	arabe
15944-5	c	826:eng:2	826	eng	2	1945-10-24	15944-5:c:826:eng:2	United Kingdom	Royaume-Uni	English	anglais

⁹⁴There is no official language. Three have been coded as de facto ("2"). Further clarification/verification/information is needed here to determine correct status of the three languages. (03.08.25).

⁹⁵There are no official languages here. Further clarification/verification/information is needed here re: status of Tuvalu and English. (03.08.25).

⁹⁶aka Tuvaluan

Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages											
IT-Interface						Human Interface Equivalents (Linguistic)					
Coded Domain ID		ID Code	ID Code Components			Change Management	Application Syntax	UN Member State Short Name		ISO 639-2T Language Names	
Source Authority ID	Table ID		ID Code - UN Member State	ID Code of Language	Status of Language Code	UN Member Date	Composite Identifier [Syntax Neutral]	English	French	English	French
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(21)	(22)	(31)	(32)
15944-5	c	834:swa:1	834	swa	1	1961-12-14	15944-5:c:834:swa:1	Tanzania, United Republic of	Tanzanie, République-Unie de	Swahili	swahili
15944-5	c	834:eng:1	834	eng	1	1961-12-14	15944-5:c:834:eng:1	Tanzania, United Republic of	Tanzanie, République-Unie de	English	anglais
15944-5	c	840:eng:2	840	eng	2	1945-10-24	15944-5:c:840:eng:2	United States	États-Unis	English	anglais
15944-5	c	854:fra:1	854	fra	1	1960-09-20	15944-5:c:854:fra:1	Burkina Faso	Burkina Faso	French	français
15944-5	c	858:esp:2	858	esp	2	1945-12-18	15944-5:c:858:esp:2	Uruguay	Uruguay	Spanish	espagnol
15944-5	c	860:uzb:2	860	uzb ⁹⁷	2	1992-03-02	15944-5:c:860:uzb:2	Uzbekistan	Ouzbékistan	Uzbek	ouzbek
15944-5	c	860:rus:2	860	rus	2	1992-03-02	15944-5:c:860:rus:2	Uzbekistan	Ouzbékistan	Russian	russe
15944-5	c	860:tgk:2	860	tgk	2	1992-03-02	15944-5:c:860:tgk:2	Uzbekistan	Ouzbékistan	Tajikik	tadjik
15944-5	c	862:esp:1	862	esp	1	1945-11-15	15944-5:c:862:esp:1	Venezuela	Venezuela	Spanish	espagnol
15944-5	c	882:smo:2	882	smo ⁹⁸	2	1976-12-15	15944-5:c:882:smo:2	Samoa	Samoa	Samoan	samoan
15944-5	c	882:eng:2	882	eng	2	1976-12-15	15944-5:c:882:eng:2	Samoa	Samoa	English	anglais
15944-5	c	887:ara:2	887	ara	2	1947-09-30	15944-5:c:887:ara:2	Yemen	Yémen	Arabic	arabe
15944-5	c	891:srp:2	891	srp	2	2000-11-01	15944-5:c:891:srp:2	Serbia and Montenegro	Serbie-et-Monténégro ⁹⁹	Serbian	serbe
15944-5	c	894:eng:1	894	eng	1	1964-12-01	15944-5:c:894:eng:1	Zambia	Zambie	English	anglais

4677

⁹⁷There are no official languages here. Further clarification/verification/information is needed re: status of the three languages coded as de facto. (03.08.25).

⁹⁸There are no official languages here. Further clarification/verification/information is needed here re: status of English and Samoan. (03.08.25).

⁹⁹See ISO 3166-1 Newsletter V-8 2003-07-03

4678 ANNEX D (NORMATIVE) CODES REPRESENTING CATEGORIES OF
4679 JURISDICTIONAL DOMAINS
4680

4681 Project Editors' Notes:
4682

- 4683 1. The purpose of this Annex D is to capture as a coded domain and in an IT-enabled manner, the
4684 contents of Clauses 6 and 7.
4685 2. It is likely that this Annex D and Annex L will be integrated into a single Annex.
4686
4687

ANNEX E (NORMATIVE) BUSINESS TRANSACTION MODEL: CLASSES OF CONSTRAINTS

Business transactions are modelled for registering, reference and re-use as scenarios and scenario components. Business semantic descriptive techniques are used to identify and specify the key components of a business transaction, i.e., as business objects.

The Business Transaction Model (BTM), as stated in Clause 6.1.5 of ISO/IEC 15944-1, has three required components namely "Person", "Process", and "Data". These three fundamental components of the Business Transaction Model are presented graphically in Figure 3¹⁰⁰

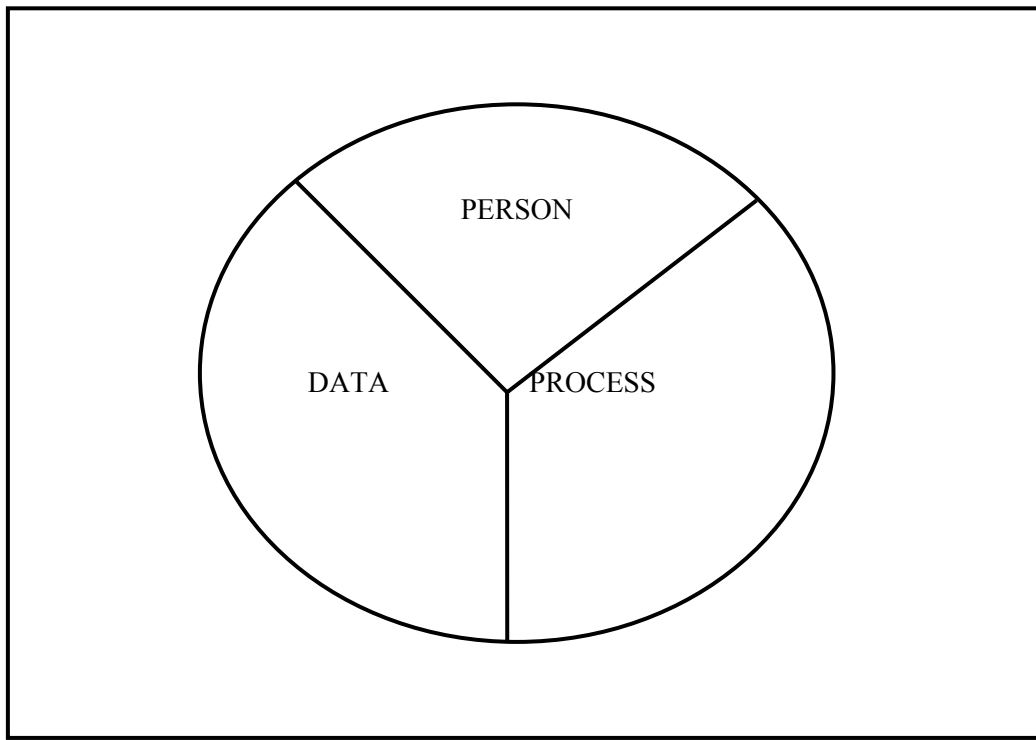


Figure E.1 - Business Transaction Model - Fundamental Elements (Graphic Illustration)

¹⁰⁰In ISO/IEC 15944-1:2002 for these three fundamental elements, the essential BOV aspects of the business transaction model, along with associated rules, definitions and terms as well as other attributes are stated in the following clauses:

- (1) Clause 6.2 "Rules governing the Person Component" (and further Annex E);
- (2) Clause 6.3 "Rules governing the Process Component" (and further Annex F); and,
- (3) Clause 6.4 "Rules governing the Data Component" (and further Annex G).

Using UML as a Formal Description Technique, yields the following UML-based representation of the Business Transaction Model and is presented as Figure E.2¹⁰¹.

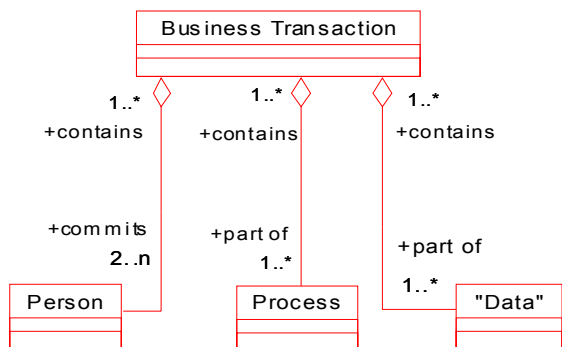


Figure E.2 – UML-based Representation of Figure 3 – Business Transaction Model – Fundamental Components

The business transaction model focuses on and addresses the essential needs of commitment exchange among autonomous parties, i.e., the ability of Persons as parties to a business transaction being able to make commitments and to do so while maximizing the use of automated methods. This is in addition to existing standards which pertain to various aspects of information exchange only.¹⁰²

As such, what sets Open-edi (or e-business) apart from information exchange in general are six (6) characteristics¹⁰³. They are:

- actions based upon following clear, predefined rules;
- commitments of the parties involved;
- commitments among the parties are automated;
- parties control and maintain their states;
- parties act autonomously; and,
- multiple simultaneous transactions can be supported.

¹⁰¹ This UML-based representation incorporates the rules governing the interworking of these three fundamental components as specified in ISO/IEC 15944-1:2002.

¹⁰² It is important that users of this Part 5 of ISO/IEC 15944 familiarize themselves with Part 1, Clause 6.3.1 titled "*Business transactions commitment exchange added to information exchange*" including the rules and definitions/terms, i.e, "Person", and "commitment" as well as its normative text.

¹⁰³ See further in ISO/IEC 15944-1:2002 Clause 5 "Characteristics of Open-edi". Each of these six (6) characteristics is described in more detail in ISO/IEC 15944-1:2002 Clause 5 "Characteristics of Open-edi".

Electronic business transactions therefore require:

- (1) a clearly understood purpose, mutually agreed upon goal(s) explicitness and unambiguity;
- (2) pre-definable set(s) of activities and/or processes, pre-definable and structured data;
- (3) commitments among Persons being established through electronic data interchange;
- (4) computational integrity and related characteristics; and,
- (5) the above being specifiable through Open-edi Description Technique(s) (OeDTs) (as the use of a Formal Description Technique(s) in support of modelling e-business), and executable through information technology systems for use in real world actualizations.

These and related requirements of electronic business transactions are specified in the form of "constraints".

"Constraint" has already been defined as:

constraint: a rule, explicitly stated, that prescribes, limits, governs or specifies any aspect of a **business transaction**.

NOTE 1 Constraints are specified as rules forming part of components of Open-edi scenarios, i.e., as scenario attributes, roles, and/or information bundles.

NOTE 2 For constraints to be registered for implementation in Open-edi, they must have unique and unambiguous identifiers.

NOTE 3 A constraint may be agreed to among parties (condition of contract) and is therefore considered an "internal constraint". Or a constraint may be imposed on parties, (e.g., laws, regulations, etc.), and is therefore considered an "external constraint". [ISO/IEC 15944-1:2002:3.11]

The Business Transaction Model has two classes of constraints; namely,

- (1) those which are "self-imposed" and agreed to as commitments among the parties themselves, i.e., "**internal constraints**"; and,
- (2) those which are imposed on the parties to a business transaction based on the nature of the good, service and/or rights exchanged, the nature of the commitment made among the parties (including ability to make commitments, the location, etc.), i.e., "**external constraints**".

They are defined as follows:

4794 **internal constraint**
4795 a **constraint** which forms part of the **commitment(s)** mutually agreed to among the parties to
4796 a **business transaction**

4797 NOTE Internal constraints are self-imposed. They provide a simplified view for modelling
4798 and re-use of scenario components of a business transaction for which there are no external
4799 constraints or restrictions to the nature of the conduct of a business transaction other than
4800 those mutually agreed to by the buyer and seller.

4801
4802 **external constraint**
4803 a **constraint** which takes precedence over **internal constraints** in a **business transaction**,
4804 i.e., is external to those agreed upon by the parties to a **business transaction**

4805 NOTE 1 Primary sources of external constraints are created by law, regulation, orders,
4806 treaties, conventions or similar instruments.

4807
4808 NOTE 2 Other sources of external constraints include those of a sectorial nature, those
4809 which pertain to a particular jurisdiction or a mutually agreed to common business
4810 conventions, (e.g., INCOTERMS, exchanges, etc.).

4811
4812 NOTE 3 External constraints can apply to the nature of the good, service and/or right
4813 provided in a business transaction.

4814
4815 NOTE 4 External constraints can demand that a party to a business transaction meet
4816 specific requirements of a particular role.

4817
4818 EXAMPLE 1 only a qualified medical doctor may issue a prescription for a controlled
4819 drug;

4820 EXAMPLE 2 only an accredited share dealer may place transactions on the New
4821 York Stock Exchange;

4822 EXAMPLE 3 hazardous wastes may only be conveyed by a licensed enterprise.

4823 NOTE 5 Where the Information Bundles (IBs), including their Semantic Components
4824 (SCs) of a business transaction form the whole of a business transaction, (e.g., for legal or
4825 audit purposes), all constraints must be recorded.

4826
4827 (For example, there may be a legal or audit requirement to maintain the complete set of
4828 recorded information pertaining to a business transaction (the Information Bundles
4829 exchanged), as a "record".)

4830
4831 NOTE 6 A minimum external constraint that is often applicable to a business transaction
4832 requires one to differentiate whether the Person, i.e., that is a party to a business transaction, is
4833 an "individual", "organization", or "public administration". (For example, privacy rights
4834 apply only to a Person as an "individual".)

4835

The class of "internal constraints" has been derived to provide a simplified view of business transactions for which there are no external constraints or restrictions to the nature and conduct of the transaction. The only constraints are those mutually agreed to by the buyer and seller for the explicitly stated goal of the business transaction, i.e., they are self-imposed. This allows one to build scenarios and scenario components for referencing, registering and re-use as generic or base scenarios without having to include potential external constraints. The rules governing specification of Open-edi scenarios and their Components require that all applicable external constraints must be stated at the time of instantiation but need not exist at the time of registration. {See further, Clause 9 below in ISO/IEC 15944-1:2002 and its Annex I}.

However, in most business transactions external constraints do apply, i.e., applicable laws and regulations. These range from taxation related regulation; health and safety or packaging and labelling requirements; ensuring that nature of the business transaction and/or the goods or services delivered do not comprise behavior of a criminal nature. Whilst laws and regulations exist within and among jurisdictions and are the primary source of "external constraints" on Business Transactions, categorization and specification of sub-classes of external constraints is outside the scope of this standard.

External constraints exist which are horizontal in nature. These are the common and generic rules for business transactions, (e.g., privacy/data protection, consumer policy, uniform commercial codes, etc.).

The imposition of these horizontal external constraints on business transactions is exemplified by the introduction of a third type of role in a business transaction, namely that of "regulator" as a third sub-type of Person as a player in a business transaction representing "public administration".

External constraints of a horizontal and common nature are constraints imposed by regulators (and enacted through public administrations) which apply regardless of the type of business or sector within which the business occurs. This categorization allows one to build scenarios and scenario components for referencing, registering and reuse of specific common sets of external constraints. These can then be combined with scenarios which focus on internal constraints for building application use scenarios.

There are also external constraints that are of a sectorial nature. In addition, some external constraints can be common to two or more sectors and supported through common standards. Sectorial constraints are found in telecommunications, transportation and delivery, financial/banking, import/export restrictions specific to a good or service, inter-or intra-state trade, and so on. Where a sector imposes specific ways of conducting business transactions within itself and with other sectors, such sector specific constraints and conditions must be identified and specified where applicable, as part of specification of scenarios and scenario components.¹⁰⁴⁾ This allows one to build scenarios and scenario components for referencing, registering and reuse of sets of sectorial external constraints such as "customs clearance", "transport of dangerous goods"¹⁰⁵⁾, etc. These two basic classes of constraints on business

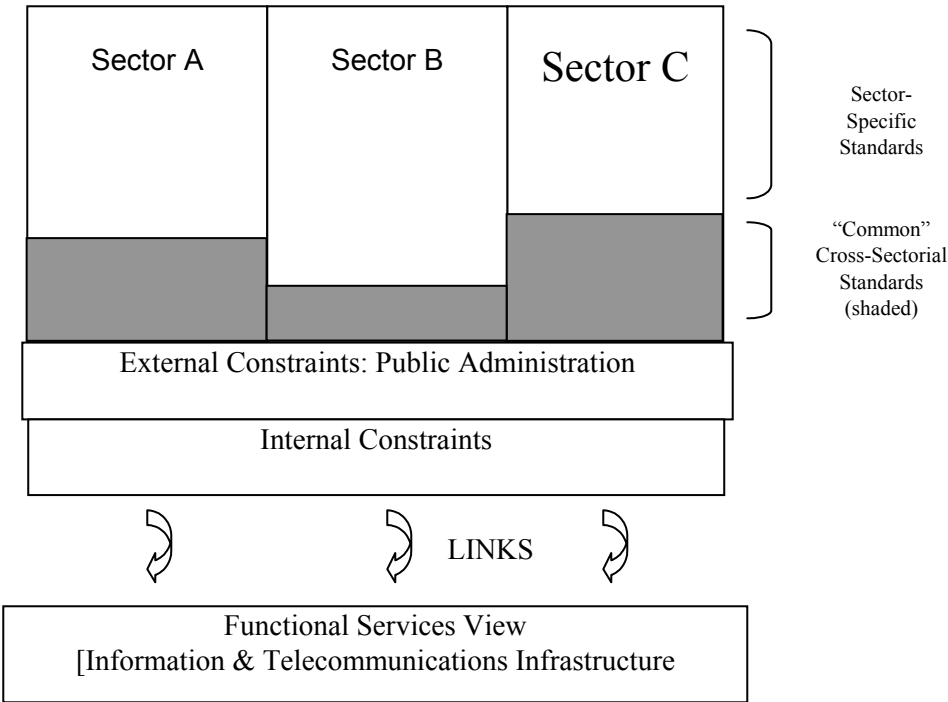
¹⁰⁴⁾ A useful characteristic of external constraints is that at the sectorial level national and international focal points and recognized authorities often already exist. The rules and common business practices in many sectorial areas are already known. Use of this standard (and related standards) will facilitate the transformation of these external constraints (business rules) into specified, registered and re-useable scenarios and scenario components.

¹⁰⁵⁾ Note: There are also requirements for establishing common rules for interchanges between

transactions are illustrated below in Figure 8: Business Transaction Model: Classes of Constraints.

These two basic classes of constraints on business transactions are illustrated here in Figure E.3.

Figure E.3 — Business Transaction Model: Classes of Constraints



as well as among sectors. These rules are normally imposed by a particular sector on the others. For example, the banking sector may impose certain rules for the exchange of financial information between itself and other sectors. Sometimes the rules are established to enhance or facilitate services of a particular sector with others. The transportation sector is a good example. It establishes business rules in conjunction with other sectors for the transport and handling of specialty goods, (e.g., radioactive materials, live animals, etc.).

ANNEX F (NORMATIVE) UNAMBIGUOUS SEMANTIC COMPONENTS
AND JURISDICTIONAL DOMAINS: STANDARD DEFAULT CONVENTION
FOR IDENTIFICATION, INTERWORKING AND REFERENCING OF
COMBINATIONS OF CODES REPRESENTING COUNTRIES, LANGUAGES,
AND CURRENCIES

Project Editors Notes:

1. *The normative text for this Annex is in development. Its focus is to provide a common default convention for specifying the interworking of two or three codes taken from the code sets for countries, languages and currencies. This is not a problem where only one of these codes needs to be/is utilized (e.g. in stand-alone applications). However in many business transactions and particularly those involving two or more jurisdictional domains especially in international trade and transport, two of these, if not all three of these code sets need to be used and interwork simultaneously.*

In addition the two and three alpha codes used for the identification of countries, languages and currencies are not unique. Further, the two alpha codes of ISO 639-1 increasingly represent less and less of the languages in use, i.e. they represent only 42% of the languages in use.

2. *In a nutshell, the issues and problems arise when in a business transaction (or any application), one utilizes two or more of these three coded sets together to state a requirement or semantic component in an unambiguous manner. The solution proposed (based on detailed investigation and consultations) can be summarized as follows:*

- (a) *currency codes are 3-alpha upper case only;*
- (b) *language codes are 2-alpha and 3-alpha lower case;*
- (c) *country codes are 3-digit numeric, 2-alpha and 3-alpha.*

3. *The 3-alpha codes for countries, languages and currencies overlap and are not mutually exclusive or unique. This causes confusion when used especially in combinations. Further, ISO 639-2 has two different 3-alpha code sets, i.e., a "2/T" and a "2/B". This is significant in that this difference in language codes includes countries such as China, France, Germany, the Netherlands and others.*

4. *The 2-alpha codes for languages and countries overlap and are not mutually exclusive or unique. This too causes confusion when used especially in combinations.*

5. *Proposed solution and default convention:*

- (1) *for currency codes, use 3-alpha UPPER CASE;*
- (2) *for country codes, use 3-digit numeric; and,*
- (3) *for language codes, use 3-alpha lower case, and the (T)erminology code set, and not the (B)ibliographic code set.*

For example, "124:eng" and "124:fra" is English and French as used in Canada. One should not use "124:fre".

[add other examples. Take from document JIN7335]

- (4) *For administrative sub-divisions, use ISO 3166-1 3-digit numeric country code followed*

4959 by the relevant ISO 3166-2 code, (e.g., 124-qc:fra = French as used in the province of
4960 Quebec as part of Canada); or "124-nu:iku" would represent the use of Inuktitut as an
4961 official language in the Territory of Nunavut" as part of Canada.
4962
4963

4964 *Notes:*
4965

- 4966 1. Further discussion is still required on the use of delimiters. For the purpose of this 2nd
4967 CD document in the context of further discussion, we have used the colon (:) as a
4968 delimiter between distinct code sets, and the hyphen (-) as the delimiter between sub-sets
4969 of a coded domain.
4970
- 4971 2. Resolution of this issue is especially relevant to the semantic values in Column 06 in the
4972 Annex C matrix.
4973

ANNEX G (INFORMATIVE) EXAMPLES OF VARIOUS ONTOLOGIES RESULTING FROM MODELLING BUSINESS SCENARIOS WITH (1) INTERNAL CONSTRAINTS ONLY; AND, (2) WITH EXTERNAL CONSTRAINTS: USE CASE - "BUYER", "SELLER", "THIRD PARTY" AND "REGULATOR"

Project Editors' Notes

1. *This Annex G applies the concept of "Business Collaboration" and the construct of "Collaboration Space" from CD ISO/IEC 15944-4 as found in its Annex F. It is understood that the examples in Annex G will be amended depending on the final content of Clause 10 (as well as relevant elements of Part 4 of this multipart standard).*
2. *Prior to the issuance of the FCD document the missing UML diagrams will be added/inserted.*
3. *This Annex G will be harmonized with the 2nd CD for Part 3 and Part documents.*

G.1 INTRODUCTION

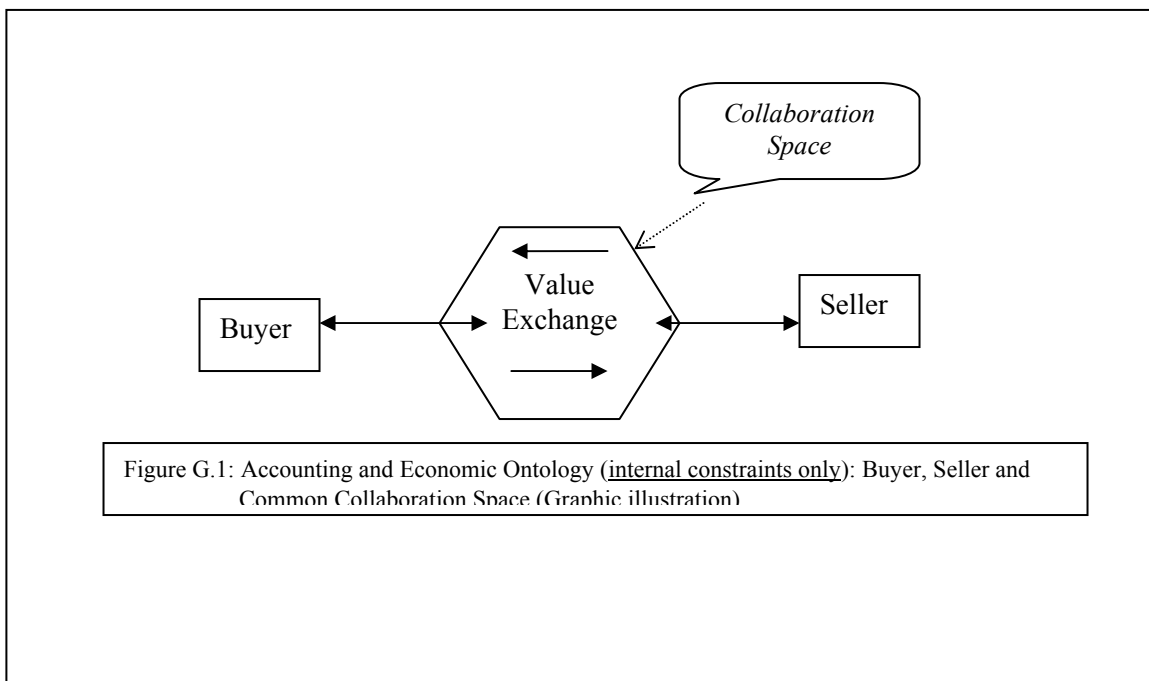
Part 1 of this multipart ISO/IEC 15944 standard introduced the use of templates to identify mandatory attributes in registering the scope of a scenario. {See its Clause 7.3 "Template for specifying scope of an Open-edi Scenario"} A template is utilized for ensuring that all the information required for the Business Operational View (BOV) of an Open-edi Scenario, its components and all attributes required to be specified (and registered for re-use) are captured in a systematic and explicit manner. {See its Clause 9 "Primitive Open-edi Scenario Template"}.

For this Part 5, use of a template is also an integral part.

The purpose of this Annex G is to provide an example in the different ontologies which may result depending on the specification of the scoping of an Open-edi scenario (1) with internal constraints only; or (2) with external constraints. In this Annex G, relevant parts of the Part 1, Clause 7.3 "Template for specifying scope of an Open-edi Scenario" are utilized plus those taken from the template in Clause 10 of this Part 5.

G.2 MODELLING BUYER, SELLER AND THIRD PARTY - INTERNAL CONSTRAINTS ONLY

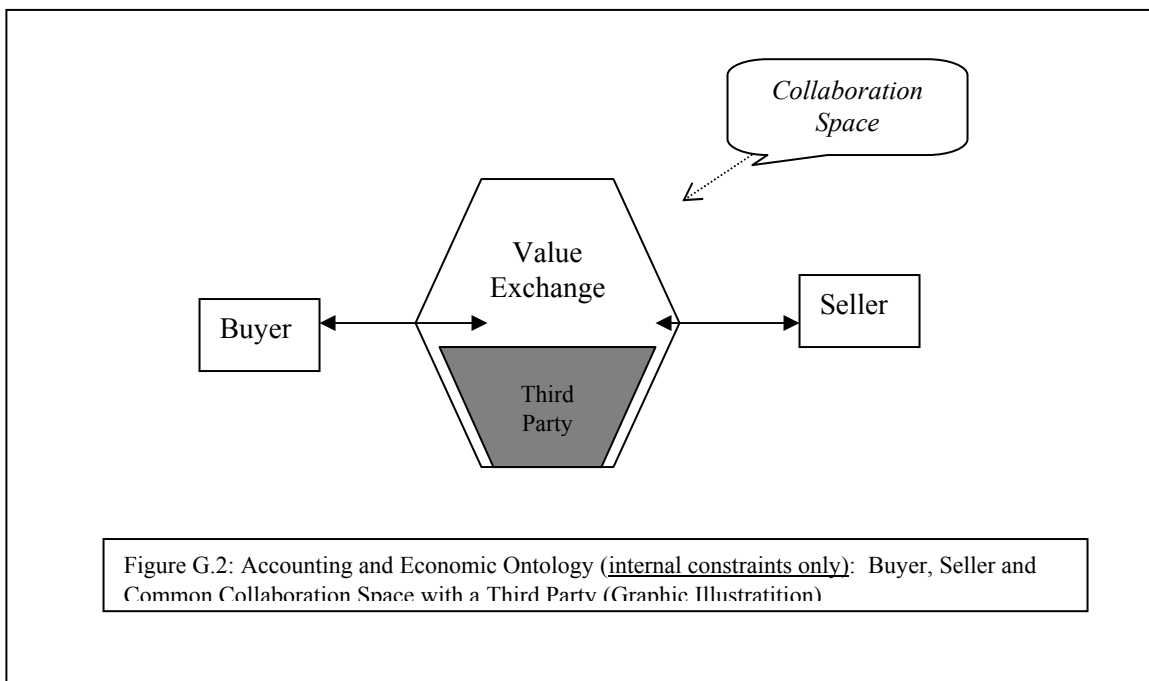
ISO/IEC 15944 Part 4 titled "Business transactions scenarios: Accounting and economic ontology", models the interactions among a "buyer" and a "seller" of a scenario as their common "collaboration space" as follows:



Further, one can build on this very primitive model and add a "third party" (defined as):

third party: a **Person** besides the two primary concerned in a **business transaction** who is an **agent** of neither and who fulfils a specified **role** or function as mutually agreed to by the two primary **Persons** or as result of **external constraints**.

From internal constraints only perspective, such a third party would be fulfilling a role on behalf of both the buyer and seller. As such this role of the third party becomes a defined and integral part of the "collaboration space" itself. Thus the inclusion of a third party here is modelled, in an illustrative manner, here in Figure G-2 as follows:



The above ontology and illustrative figure represents that required to support the requirements as specified in the following template:

IT-Interface		Human Interface Equivalents			Spare
Scope Tag ID Code	Decision Code	Name (English)	Name (French)	Name (Other)	
(1)	(2)	(3)	(4)	(5)	(6)
1000	1	Business goal of business transaction - No external constraints			
1010	2	Business goal of business transaction includes external constraints			
1110	2	Business Transaction Allows for Agents			
1111	2	Buyer Agent			
1112	2	Seller Agent			
1130	1	Business Transaction allows for Third Parties			
1131	1	By mutual agreement of buyer and seller (as internal constraints only)			
1132	2	external constraint(s) Mandated			
1150	2	External Constraints and Agents			

IT-Interface		Human Interface Equivalents			Spare
Scope Tag ID Code	Decision Code	Name (English)	Name (French)	Name (Other)	
(1)	(2)	(3)	(4)	(5)	(6)
1151	2	External constraints require a buyer to use an agent ¹⁰⁶			
1152	2	External constraints require a seller to use an agent			
1160	2	External constraints and Third Party			
1161	2	External constraints require participation of a qualified Third Party			
1162	2				
1170	2	External constraints and Regulator			
1171	2	External constraints require direct participation of a Regulator			
1172	2	External constraints allow for a Third Party to act on behalf of a Regulator			

G.3 MODELLING BUYER, SELLER AND REGULATOR

The introduction of external constraints in the modelling of any business transaction as scenarios and scenario components adds a non-accounting/economic requirement to any ontology. Using the common template provided above, the decision codes when adding "external constraints" and a "regulator" change in the template and now are:

IT-Interface		Human Interface Equivalents			Spare
Scope Tag ID Code	Decision Code	Name (English)	Name (French)	Name (Other)	
(1)	(2)	(3)	(4)	(5)	(6)
1000	2	Business goal of business transaction - No external constraints			
1010	1	Business goal of business transaction includes external constraints			
1110	1	Business Transaction Allows for Agents			
1111	2	Buyer Agent			

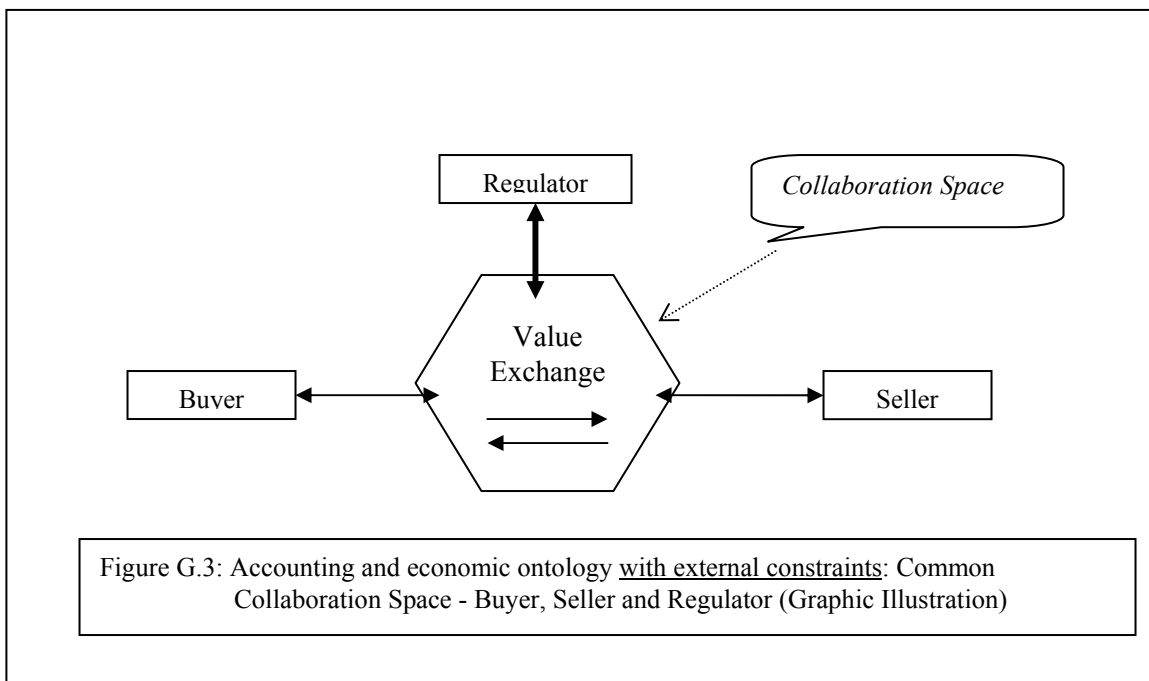
¹⁰⁶ A common example here is that of an importer as the buyer being required to use a "customs agent".

IT-Interface		Human Interface Equivalents			Spare
Scope Tag ID Code	Decision Code	Name (English)	Name (French)	Name (Other)	
(1)	(2)	(3)	(4)	(5)	(6)
1112	2	Seller Agent			
1130	2	Business Transaction allows for Third Parties			
1131	2	By mutual agreement of buyer and seller (as internal constraints only)			
1132	2	external constraint(s) Mandated			
1150	2	External Constraints and Agents			
1151	2	External constraints require a buyer to use an agent ¹⁰⁷			
1152	2	External constraints require a seller to use an agent			
1160	2	External constraints and Third Party			
1161	2	External constraints require participation of a qualified Third Party			
1162					
1170	1	External constraints and Regulator			
1171	1	External constraints require direct participation of a Regulator			
1172	2	External constraints allow for a Third Party to act on behalf of a Regulator			

Further, applying the above template, now results in the following ontology which is illustrated in Figure G.3¹⁰⁸ as:

¹⁰⁷ A common example here is that of an importer being required to use a "customs agent".

¹⁰⁸ Shaded space indicates those aspects of the "Collaboration Space" which are governed by the "regulator".



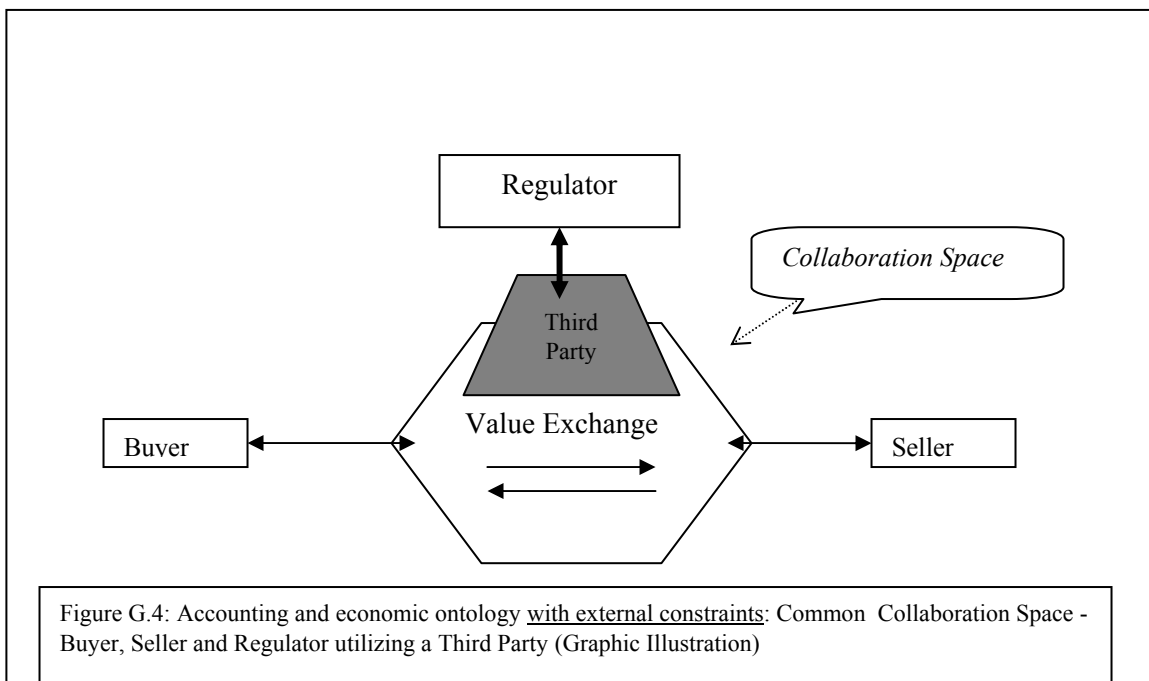
G.4 MODELLING BUYER, SELLER AND REGULATOR USING A THIRD PARTY

Should the applicable external constraint of the jurisdictional domain allow for a third party on behalf of a regulator the decision codes in the above template for all the Scope Tag ID Codes remain the same but the following will change:

- "1171" from a "1" to a "2";
- "1172" from a "2" to a "1".

Applying this new template, now results in the following ontology which is illustrated in Figure G.4¹⁰⁹ as:

¹⁰⁹ Shaded space indicates those aspects of the "Collaboration Space" which are governed by the "regulator".



Examples of where a regulator requires a third party to act on its behalf but also fulfils a role with respect to the buyer and the seller include a notary, a clearing house or a stock exchange (overseen by a jurisdictional domain), an escrow party, etc.

Project Editors' Note(s):

This Annex G will be harmonized with ISO/IEC 15944-4 CD ballot resolutions.

5084 ANNEX H (INFORMATIVE) MATRIX OF CODES REPRESENTING ADMINISTRATIVE
5085 SUBDIVISIONS OF THREE NATION STATES COMPRISING A "SINGLE
5086 JURISDICTION" FROM A PARTICULAR CONTEXT - THE NORTH
5087 AMERICAN FREE TRADE AGREEMENT (NAFTA)
5088

5089 Project Editors' Notes:
5090

- 5091 1. *The purpose of this Annex F is to use NAFTA as an example of a jurisdictional domain consisting*
5092 *of three UN member states, i.e., Canada, USA, and Mexico. Canada, Mexico and the United*
5093 *States all have federated forms of government. Consequently, these UN members each have*
5094 *second level jurisdictional domains, i.e., in ISO 3166-2 called administrative sub-divisions.*
5095 *However, Canada, the USA and Mexico have sets of sub-divisional jurisdictional domains which*
5096 *are not "peer" entities. Annex H thus serves as an illustrative example for mapping and*
5097 *categorizing categories of jurisdictional domains at the UN member sub-divisional level.*
5098
5099 *NAFTA not only covers "trade" but also "labour" and "environment". Thus NAFTA-based*
5100 *external constraints also include those of these second level jurisdictions.*
5101
5102 2. *The draft contents of Annex F are currently found in Annex C in document 32N0535 which are in*
5103 *the process of being updated based on a study completed for NIST titled "Report on Multiple*
5104 *USA FIP Standards for Codes Representing Administrative Subdivisions of the USA: Analysis*
5105 *and Recommendations".*
5106
5107 3. *An analysis is currently under way which part of work already completed in this area will be*
5108 *most useful from an ISO/IEC 15944 standards development perspective.*

**ANNEX I (INFORMATIVE) EXAMPLE OF CLASSIFICATION SYSTEM:
HARMONIZED SYSTEM NOMENCLATURE OF THE WORLD CUSTOM
ORGANIZATION (WCO)**

An example of a classification system use on a global basis is that of the "Harmonized System Nomenclature" (commonly identified and referenced as "HS") of the World Customs Organization (WCO)¹¹⁰.

This classification system applies to the movement of goods in and out of its signatory member jurisdictional domains, i.e, import and exports. The HS as a classification system utilizes codes with the ID codes being preassigned and structured in a hierarchical manner. As a coded domain, the Harmonized System (HS) of the WCO thus provides predefined ID codes for all its member entities.

For example, the IT Interface value (which likely will also serve in an actualized business transaction as the instantiated value of a semantic component of the item referenced) for "potato" (fresh or chilled) has been assigned the ID code in the HS as "0701". The human interface equivalents are many and taking into account the (official or de facto languages) of jurisdictional domains yielded the following example:

Common IT Interface	Country Code - Numeric Code & Short Name (eng) Equivalent	Human Interface: Localization and Multilingual Equivalents
HS:0701	124 CANADA	(eng): potato (fra): pomme de terre (iku): patiti
HS:0701	464 MEXICO	(esp): papa
HS:0701	724 SPAIN	(esp): patata
HS:0701	040 AUSTRIA	(deu): erdapfel
HS:0701	276 GERMANY	(deu): kartoffel
HS:0701	056 BELGIUM	(fra): pomme de terre (nld): aardappel
HS:0701	246 FINLAND	(fin): peruna (swe): potatis

The example demonstrates:

- a jurisdiction, in this case a country, having more than one language of use and thus multilingual equivalents; and,
- differences in uses of the same natural language in various countries and thus different multilingual equivalents within a natural language.

Project Editors' Note(s):

This example will be converted into a more standardized format for representing the IT-interface and HIE of a coded domain.

¹¹⁰For further information on the WCO, see <<http://www.wcoomd.org>>

5140 ANNEX J (INFORMATIVE) NON-UN MEMBER STATES LISTED IN ISO 3166-
5141 1:1997
5142

5143 Table of Contents
5144

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5149	J.2	Organization of Annex J	xx
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5151	J.3	Annex J (Informative) 3166 Non-UN Member States Listed in ISO 3166-1	xx
5152			

J.1 INTRODUCTION

One common and significant error of those modelling (electronic) business transactions is to assume that all the entities listed in ISO 3166-1:1997 (and subsequent amendments) are "countries" and thus can be considered as instances of the same object class with respect to their properties and behaviours as well as being governed by the same rule base. This assumption is false and e-business applications based on this and related assumptions will quickly run into implementation difficulties with possible negative legal implications.

In order to ensure that users of this multiple ISO/IEC 15944 standard when modelling business transactions as referenceable, registered, and re-useable business objects, do so in accordance with (primitive) jurisdictional domain requirements and to avoid mistakes of the nature identified above (and frequently made by the "dot.coms" which went out of business in 2002-2003), this informative Annex J has been prepared.

The short and commonly used title of ISO 3166-1:1997 is "country codes". The full and complete title of ISO 3166-1 is ISO 3166-1:1997 (E/F) *Codes for the representation of names of countries and their subdivisions - Part 1: Country codes/Codes pour la représentations des noms de pays et de leur subdivisions - Partie 1: Codes pays*. However, many users of ISO 3166-1 do not realize that ISO 3166-1, contains codes for "entities" which are not "countries".

At the same time, it is noted that for many users and the purpose of their use of ISO 3166-1 it is not that significant whether the entities listed in that standard are countries or not.

The Introduction to ISO 3166-1:1997 (5th edition, 1997-10-01) contains as its first and second paragraphs the following text, and we quote,

"International Standard ISO 3166 provides universally applicable coded representations of names of countries (current and non-current), dependencies, and other areas of particular geopolitical interest and their sub-divisions.

ISO 3166-1 (Country codes) establishes codes that represent the current names of countries, dependencies, and other areas of particular geopolitical interest, on the basis of lists of country names obtained from the United Nations".

As noted in Clause 0.4 above, "country" in a general sense is associated with many entities which are not "countries" in a legal sense, i.e., as nation-states which are full members in good standing of the United Nations (or have been recognized as having equivalent legal jurisdictional status such as the "Holy See").

In this context, it is also useful to quote the fifth paragraph in the Introduction to ISO 3166-1. It states:

"The three parts of ISO 3166 do not express any opinion whatsoever concerning the legal status of any country, dependency, or other area named herein, or concerning its frontiers or boundaries."

However, in the context of modelling business transactions as common reusable business patterns, scenarios and/or scenario components, all requirements must be explicitly stated and specified in

order for them to be able to be transformed into identifiable, registered, referenceable and thus reusable common objects of a business transaction, i.e., as "business objects". {See further ISO/IEC 15944-2... Part 2: Registration of scenarios and their components as business objects}.

This is of even more importance where such requirements with respect to business transactions are of the nature of "external constraints" in that of a "jurisdictional domain".

Therefore, from an e-business needs perspective, it is important to ascertain the nature of a jurisdictional domain as a source of an external constraint and in particular the jurisdictional domain is a UN member state or not.

J.2 ORGANIZATION OF ANNEX J

Annex J is organized based on the rules governing those for Annex C, i.e., insofar as they are applicable. The matrix is also sorted by the ID Code in Col. (03), which is the 3-digit numeric code of the geopolitical entity as listed in the code set of the UN Statistical Division.

The structure of Annex J, presented here in matrix form, is as follows:

Column ID	Label	Specification
	IT-Interface	
	Coded Domain ID	The Source Authority ID plus the Table ID are combined to provide the Coded Domain ID.
(01)	Source Authority	The identifier for the Source Authority. Here it is set as "15944-5".
(02)	Table ID	An identifier assigned by the Source Authority where it is the source of more than one coded domain, currently set as "x". [Note: In the FCD document for ISO/IEC 15944-5, "x" will be replaced by its appropriate Table ID number]
(03)	ID Code	The 3-digit numeric code for the geopolitical entity as assigned by the Statistical Division of the United Nations
	Jurisdictional Codes	
(04)	UN Status Code	<p>A code indicating the status of the geopolitical entity within the UN System from a jurisdictional domain perspective.</p> <p>Code 0 = Other (e.g., Antarctica)</p> <p>Code 1 = A member state of the UN (not used in the Annex X)</p> <p>Code 2 = A geopolitical entity recognized by the UN as a peer entity, i.e., a non-member state.</p> <p>Code 3 = A geopolitical entity currently considered as a potential candidate as a state to be recognized by the UN as well as a potential member of the UN.</p> <p>Code 4 = A geopolitical entity which does not have a Code 1, or Code 2, or Code 3 status for the UN and is considered to be a dependency of a UN member state.</p> <p>NOTE 1 A geopolitical entity having a Code 4 is (usually)</p>

Column ID	Label	Specification
		<p>listed in the ISO 3166-2 entry as part of the administrative subdivisions of the UN member state of which it is a part.</p> <p>NOTE 2 If a Code 4 is used, then Column 05 must contain a 3-digit numeric code</p> <p>Code 5 = A geopolitical entity which is a UN Trusteeship administered by a UN member as a jurisdictional agent.</p> <p>NOTE If a Code 5 is used then Column 05 must contain the 3-digit numeric code of the UN member state responsible.</p> <p>Code 6 = <<Open>> for other categories, if needed.</p>
(05)	UN Dependency Code	<p>The UN's 3-digit numeric code for an UN member state used to indicate which UN member state the ISO 3166-1 geopolitical entity identified in Col. (03) is deemed to be a dependency of.</p> <p>NOTE: It is outside the scope and purpose of this standard to identify and map the nature and types of categories of dependencies which may exist between a UN member state and its parts.</p>
	Human Interface Equivalents	
	ISO 3166-1 Short Name	
(21)	English	<p>The short English name of the geopolitical entity identified in Col. (03).</p> <p>NOTE: The ISO 3166-1 short names here are those provided by the Statistical Division of the UN.</p>
(22)	French	<p>The short French name of the geopolitical entity identified in Col. (03).</p> <p>NOTE: The ISO 3166-1 short names here are those provided by the Statistical Division of the UN.</p>

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PROJECT EDITOR'S NOTE:

Use of a code "9" in Column 4 is used to indicate that the UN status code for that entity has not yet been established.

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5229
5230

J.3 ANNEX J (INFORMATIVE) NON-UN MEMBER STATES LISTED IN ISO 3166-1

Annex J: Table nn Non-UN Member States Listed in ISO 3166-1						
IT-Interface		Jurisdictional Codes		Human Interface Equivalents		
Coded Domain ID				ISO 3166-1 Short Names		
Source Authority	Table ID	ID Code	UN Status Code	UN Dep. Code	English	French
(01)	(02)	(03)	(04)	(05)	(21)	(22)
15944-5	x	010	0	010 ?	Antarctica	Antarctique
15944-5	x	016	9	840	American Samoa	Samoa américaines
15944-5	x	060	9	? 826	Bermuda	Bermudes
15944-5	x	074	9	578	Bouvet Island	Bouvet, Île
15944-5	x	086	9	? 826	British Indian Ocean Territory	Océan Indien, Territoire britannique de l'
15944-5	x	092	9	826	Virgin Islands, British	Îles Vierges, britanniques
15944-5	x	136	9	826	Cayman Islands	Caïmanes, Îles
15944-5	x	158	9	156	Taiwan, Province of China	Taïwan, Province de Chine
15944-5	x	162	9	036	Christmas Island	Christmas, Île
15944-5	x	166	9	036	Cocos (Keeling) Islands	Cocos (Keeling), Îles
15944-5	x	175	9	250	Mayotte	Mayotte
15944-5	x	184	9	554	Cook Islands	Cook, Îles
15944-5	x	234	9	208	Faroe Islands	Féroé, Îles
15944-5	x	238	9	826	Falkland Islands (Malvinas)	Falkland, Îles (Malvinas)
15944-5	x	239	9	826	South Georgia and the South Sandwich Islands	Géorgie du Sud et les Îles Sandwich du Sud
15944-5	x	254	9	250	French Guiana	Guyane française
15944-5	x	258	9	250	French Polynesia	Polynésie française
15944-5	x	260	9	250	French Southern Territories	Terres australes françaises
15944-5	x	275	3	?	Palestinian Territory, Occupied	Palestinien occupé, Territoire
15944-5	x	292	9	826	Gibraltar	Gibraltar
15944-5	x	304	9	208	Greenland	Groenland
15944-5	x	312	9	250	Guadeloupe	Guadeloupe
15944-5	x	316	9	840	Guam	Guam
15944-5	x	334	9	036	Heard Island and McDonald Islands	Heard et îles McDonald, Île
15944-5	x	336	2	336	Holy See (Vatican City State)	Saint-Siège (État de la Cité du Vatican)
15944-5	x	344	9	156	Hong Kong Special Administrative Region of	Hong-Kong région administrative spéciale de

Annex J: Table nn Non-UN Member States Listed in ISO 3166-1						
IT-Interface		Jurisdictional Codes		Human Interface Equivalents		
Coded Domain ID					ISO 3166-1 Short Names	
Source Authority	Table ID	ID Code	UN Status Code	UN Dep. Code	English	French
(01)	(02)	(03)	(04)	(05)	(21)	(22)
					China	Chine
15944-5	x	446	9	156	Macau Special Administrative Region of China	Macao région administrative spéciale de Chine
15944-5	x	474	9	250	Martinique	Martinique
15944-5	x	500	9	826	Montserrat	Montserrat
15944-5	x	530	9	528	Netherlands Antilles	Antilles néerlandaises
15944-5	x	533	9	528	Aruba	Aruba
15944-5	x	540	9	250	New Caledonia	Nouvelle-Calédonie
15944-5	x	570	9	554	Niue	Nioué
15944-5	x	574	9	036	Norfolk Island	Norfolk, Île
15944-5	x	580	9	840	Northern Mariana Islands	Mariannes du Nord, Îles
15944-5	x	581	9	840	United States Minor Outlying Islands	Îles mineures éloignées des États-Unis
15944-5	x	612	9	826	Pitcairn	Pitcairn
15944-5	x	630	9	? 840	Puerto Rico	Porto Rico
15944-5	x	638	9	250	Réunion	Réunion
15944-5	x	654	9	826	Saint Helena	Sainte-Hélène
15944-5	x	660	9	826	Anguilla	Anguilla
15944-5	x	666	9	250	St. Pierre and Miquelon	Saint-Pierre-et-Miquelon
15944-5	x	732	3	?	Western Sahara ^{**111}	Sahara occidental ^{**112}
15944-5	x	744	9	578	Svalbard and Jan Mayen Islands	Svalbard et île Jan Mayen
15944-5	x	756	2	756	Switzerland	Suisse
15944-5	x	772	9	554	Tokelau	Tokelau
15944-5	x	796	9	826	Turks and Caicos Islands	Turks et Caïques, Îles
15944-5	x	850	9	840	Virgin Islands, U.S.	Îles Vierges des États-Unis
15944-5	x	876	9	? 259	Wallis and Futuna	Wallis et Futuna

^{111**}) Provisional name

^{112***}) Nom provisoire

ANNEX K (INFORMATIVE) EXAMPLES OF NEED FOR SPECIFYING GENDER OF TERMS AND NOUNS TO ENSURE UNAMBIGUITY IN USE OF AN OFFICIAL LANGUAGE

Project Editors' Note(s):

1. *Annex K is currently under development. The matrix provided here focuses on content.*
2. *A more defined and specified structured matrix as well as accompanying text is in preparation and will be submitted to JTC1/SC32/WG1 either by the Project Editors directly or as part of Canadian ballot comments.*

Word	Language	Masculine		Feminine		Notes
		Article	Semantics (eng)	Article	Semantics (eng)	
barbe	fra	le	barb	la	beard	
capital	esp	el	capital (money)	la	capital (city)	
chine	fra	le	china, rice paper	la	second hand/used trade	
diesel	fra	le	diesel fuel	la	diesel automobile	
finale	fra	le	finale (music)	la	final (sports)	
greffe	fra	le	court clerk's office	la	transplant, graft	
livre	fra	le	book	la	pound (money & weight)	
orden	esp	el	order (system of rules)	la	command	
papa	esp	el	pope	la	potato	
parte	esp	el	information	la	part	
pez	esp	el	fish	la	pitch (substance)	
platine	fra	le	platinum	la	turntable, deck, strip of metal	
pub	fra	le	pub/bar	la	ad (publicité/ advertising)	
somme	fra	le	snooze, nap	la	sum, amount	
tour	fra	le	tour, turn, trick	la	tower, rook (chess)	
vase	fra	le	vase	la	silt, mud	
vista	esp	el	custom officer	la	view	
voile	fra	le	veil	la	sail	

ANNEX L (NORMATIVE/INFORMATIVE) CODES REPRESENTING LEVELS OF INTERNATIONAL REGULATORY REGIMES (NON-EXHAUSTIVE SPECTRUM)

Project Editors' Note(s):

1. *It is likely that this Annex D and Annex L will be integrated into a single Annex*
2. *Work is under way with the assistance of internationally recognized experts in international law on the determination of "Levels" of international regimes governing international treaty bodies.*
3. *Work completed to date has identified the following levels.*

Level	Short Summary	Examples
1	Legally-binding compliance with stated goals and norms of treaty through reforming domestic policy and laws.	International Covenant on Economic, Social and Cultural Rights (1966)
2	Global Standards Compliance on an urgent international concern via treaty body	International Labour Standards (of the International Labour Organization)
3	"Highest practical degree of uniformity"; strict, binding treaty compliance on an international concern.	World Health Organization (WHO), International Maritime Organization (IMO)
4	Treaty Body created to enforce specific international law: Parties mandatory assistance and cooperation towards an international body.	International Civil Aviation Organization (ICAO)
5	"Quasi-constitutional" binding compliance with stated objectives of treaty towards policy integration; rule of law dispute settlement via treaty body.	International Criminal Court; General Agreement on Trade and Tariffs (now via WTO); TRIPS Agreement (Intellectual Property Regimes Stronger than Berne Convention); Regional Trade Law, (e.g., NAFTA, European Union).
? Supranational Regulatory Governance	Single regulatory entity with strong quasi-federal elements; integration in both economic and non-economic areas	European Community, European Parliament, European Commission, European Central Bank, European Court of Justice

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ANNEX N (INFORMATIVE) - EXAMPLES OF MULTIPLE HUMAN INTERFACE EQUIVALENTS (HIEs) FOR A SINGLE IT-INTERFACE IDENTIFIER

The purpose of Annex N is to provide some examples taken from other ISO standards which are already implementing an approach of having single IT Interface identifier with multiple human interface equivalents (HIEs).

The first example is taken from ISO 19135:2005 (E) titled “*Geographic information – Procedures for registration of items of geographic information*”. It is taken from Clause 7 “*Some principles of registration*” and within this Clause 7 that of Clause 7.2 “*Identification of register items*”. The text and figure which follow is a direct quote from ISO 19135, Clause 7.2.1 and Figure 6 in this standard.

7.2 Identification of register items

7.2.1 Introduction

All items shall include both an identifier that supports the requirement for an information process efficient denotation and a name that supports the requirement for a human-accessible denotation (Figure 6).

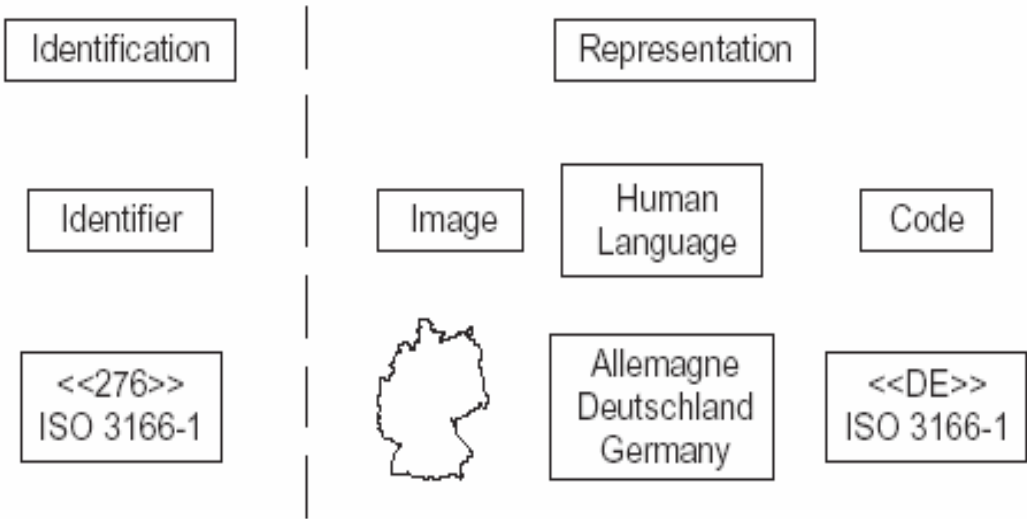


Figure 6 — Example of the distinction between identifiers used in an information technology interface and representations used in a user interface

Four aspects should be highlighted here. The first is that Clause 7.2.1 is normative text.

The second is that the first sentence in Clause 7.2.1 is of the nature of a rule which is mandatory. From a BOV perspective and in the multipart ISO/IEC 15944-1 standard it

would be presented as

Rule nnn

All items shall include both an identifier that supports the requirements for an information process efficient denotation and a name that supports the requirement for a human-accessible denotation (Figure 6)

ISO 19135 defines identifier as “linguistically independent sequence of characters capable of uniquely and permanently identifying that with which it is associated” (Clause 4.1.5). As such this definition has similar properties “identifier (in business transaction” of ISO/IEC 15944-1 as well as of “identifier (in Metadata Registry” of ISO/IEC 11179-3.

Thirdly, ISO 19135 requires that the “identifier” support the requirements for an information process efficient denotation, i.e. be of an IT-enabled nature.

Fourthly and finally it is noted that the IT-Interface identifier is a composite identifier consisting of

- (1) the identifier for the coded domain utilized, in this case “ISO 3166-1”; and,
- (2) the ID code of the entity in this coded domain, in this case “276” which is the 3-digit numeric identifier.

Associated with this single IT-Interface identifier are three types of human interface equivalents, namely an “image”, one linguistic in nature, i.e. human language, and the third in the form of a code. The example provide three linguistic HIEs including

- “Deutschland” – which is the (short) official name of the country in the language of that country
- “Allemagne” – which is the name of the country by which it has been so designated in the French language
- “Germany” – which is the name of the country by which it has been so designated in the English language.

Note: Many more linguistics HIEs exist.







In e-business, the “image” HIE is usually presented as a photograph, picture, schematic drawing, etc. of a good and so presented in a catalogue with the Catalogue Number (or date) serving as the coded domain identifier and the ID code being the article or part number in the catalogue.

The second example is taken from ISO/IEC:2004(E/F) “Information technology – Codes for the Representation of the Human Sexes”/ «Technologies de l’information –Codes pour la représentation des sexes humains»¹¹³. It consists of copies of two tables taken

¹¹³ ISO/IEC JTC1 at its November, 2004 Berlin Plenary adopted a resolution to make ISO/IEC 5218 a freely available standard. For those interested in XML, the last section of Annex A is “A.6 Representations of Table “ISO/IEC05218:02” using XML”/ A.6 Représentation en XML du

from “Annex A (Informative) – Codes for the representation of Human Sexes with cultural adaptability/ Annexe A (Informative) – Codes pour la représentation des sexes humains avec adaptabilité culturelle”

The first table provides an example of HIEs of a linguistic nature from a global or world-wide perspective. The column containing the Bliss symbols demonstrate that human accessibility requirements can also be supported.

Table/Tableau 01 - Human Interface Equivalents (Linguistic) for "Codes for the representation of human sexes: ISO and/or UN Languages"/ Équivalents interface humaine (linguistiques): «codes de représentation des sexes humains: Langue selon l'ISO et/ou l'ONU»					
IT Interface / Interface TI		Human Interface Equivalents (Linguistic)/ Équivalents interface humaine (linguistiques)			
Table ID/ Tableau	ID Code/ Code	ISO UN-ONU English / anglais	ISO UN-ONU French / français	ISO UN-ONU Spanish / espagnol	Symbole / BLISS Symbol ¹¹⁴
ISO/IEC 05128:01	0	not known	inconnu	desconocido	— 
ISO/IEC 05128:01	1	male	masculin	masculino	 
ISO/IEC 05128:01	2	female	féminin	femenino	 
ISO/IEC 05128:01	9	not applicable	sans objet	no aplica	— 

The second example, that of Table 2 below provide an example of HIEs from an official language(s) perspective of UN member states as jurisdictional domain. Those listed in Table 2 represent P-member bodies of JTC1/SC32 who provided the HIEs in their official language(s). In addition, Table 2 demonstrates the ability to be able to represent any language (based on ISO/IEC 10646).

Tableau « ISO/CEI05218:02 »

Table/Tableau 02: Human Interface Equivalents (Linguistic) for "Codes for the representation of human sexes": Examples of countries and their official language(s) / Équivalents interface humaine (linguistiques) des « codes de représentation des sexes humains » : Exemples de pays et de leur(s) langue(s) officielle(s)						
IT Interface / Interface TI		Human Interface Equivalents (Linguistic)/ Équivalents interface humaine (linguistiques)				
Table ID/ Tableau	ID Code/ Code	Australia Australie	Austria Autriche	Belgium Belgique		Brazil Brésil
		036:eng	040:deu	056:fra	056:nld	076:por
ISO/IEC 05218:02	0	not known	unbekannt	inconnu	niet bekend	desconhecido
ISO/IEC 05218:02	1	male	männlich	masculin	man	masculino
ISO/IEC 05218:02	2	female	weiblich	féminin	vrouw	feminino
ISO/IEC 05218:02	9	not applicable	nicht zutreffend	sans objet	niet van toepassing	nenhuma resposta

Table ID / Tableau	IDCode/ Code	Canada		China Chine	Denmark Danemark	
		124:eng	124:fra	156:zho	208:dan	
ISO/IEC 05218:02	0	not known	inconnu	不明	ukennt	
ISO/IEC 05218:02	1	male	masculin	男	man	
ISO/IEC 05218:02	2	female	féminin	女	kvinne	
ISO/IEC 05218:02	9	not applicable	sans objet	不适用	gjelder ikke	

Table ID/ Tableau	ID Code/ Code	Finland Finlande		France	Germany Allemagne	Italy Italie
		246:fin	246:swe	250:fra	276:deu	380:ita
ISO/IEC 05218:02	0	tuntematon	okänd	inconnu	unbekannt	non sconosciuto
ISO/IEC 05218:02	1	mies	man	masculin	männlich	maschio
ISO/IEC 05218:02	2	nainen	kvinna	féminin	weiblich	femmina
ISO/IEC 05218:02	9	ei sovellu	inte lämplig	sans objet	nicht zutreffend	non applicabile

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Table ID/ Tableau	ID Code/ Code	Japan Japon	Korea Corée	Netherlands Pays-Bas	Norway Norvège	Russian Federation Fédération de Russie
		392 :jpn	410 :kor	528 :nld	578 :nor	643 :rus
ISO/IEC 05218:02	0	不明	알수없음	niet bekend	uvisst	неизвестный
ISO/IEC 05218:02	1	男	남	man	mann	мужской
ISO/IEC 05218:02	2	女	여	vrouw	kvinne	женский
ISO/IEC 05218:02	9	適用不能	적용불가	niet van toepassing	gjelder ikke	не применяется

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Table ID/ Tableau	ID Code/ Code	Sweden Suède	Switzerland Suisse		
		752:swe	756:deu	756:ita	756:fra
ISO/IEC 05218:02	0	okänd	unbekannt	sconosciuto	inconnu
ISO/IEC 05218:02	1	man	männlich	maschio	masculin
ISO/IEC 05218:02	2	kvinna	weiblich	femminile	féminin
ISO/IEC 05218:02	9	inte lämplig	nicht zutreffend	non applicabile	sans objet

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ANNEX Y (INFORMATIVE) - COMPLETE TABLE OF CONTENTS FOR ISO/IEC 15944-1:2002

Project Editors' Notes:

1. This Part 5 is based on and makes multiple references to Part 1. It is therefore deemed useful to include the complete Table of Contents of ISO/IEC 1594-1:2002 as a (temporary) Annex to this Part 5.
2. The published version of ISO/IEC 15944-1:2--2 does not contain a complete, i.e., detailed, contents (even though the document submitted by the Project Editor to the ITTF did.
3. It is noted that at its Tallin, Estonia meeting (October, 2004), SC32/WG1 passed the following resolution to address this deficiency through a Technical Corrigendum to ISO/IEC 15944-1 {See document SC32/WG1 N0279}. The resolution reads as follows:

"Resolution WG1/19: Technical corrigendum of 15944-1

SC32/WG1 approves the technical corrigendum to ISO/IEC 15944-1:2002 with respect to the complete Table of Contents (WG1 Document N280) and requests its secretariat to take appropriate action".

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ANNEX X (INFORMATIVE) REFERENCING EXPLANATORY REPORTS (RER)

Project Editors' Notes

The incoming 5th edition of the JTC1 Directives {see JIN7212} has a new Annex N which requires a "Reference Explanatory Report" (RER) to be provided for each "Referenced Specification (RS) to be provided.

It will be useful to keep these "RERs" and include them in an "Informative Annex".

Here are some of the RERs for the RSs contained in this CD ballot document.

RER #01:	
RS Title:	Charter of the United Nations (as signed 1945, and Amended 1965, 1968, and 1973).
RS Rationale:	This RS serves as the foundation document for the existence and establishment of jurisdictional domains, i.e., through UN members as nation-states. Jurisdictional domains are the primary sources of external constraints on (electronic) business transactions.
RS Market Acceptance:	The RS has full market acceptance.
RS Transformation into an IS:	This RS can not be transformed into an IS. The Source Authority for the IS exists at a higher level than the ISO/IEC. The ISO itself is a creature of the UN System.
RS Referencing:	This RS is publicly and freely available and maintained by the United Nations as the Source Authority and in the six official languages of the UN, i.e., Arabic, Chinese, English, French, Russian, and Spanish. See http://www.un.org.aboutun/charter/index.html .

RER #02:	
RS Title:	Vienna Convention of the Law of Treaties (1969 1155 U.N.T.S. 331, in force 1980).
RS Rationale:	This RS serves as a foundation document for the identification and mapping of categories of jurisdictional domains. It establishes the rules governing the establishment of treaties as international agreements among the negotiating States. It also includes the rules governing depositories, notification, correction and registration of treaties.
RS Market Acceptance:	This RS has full market acceptance.
RS Transformation into an IS:	This RS can not be transformed into an IS. The ISO itself is a creature of the UN System.
RS Referencing:	This RS is publicly and freely available and maintained by the United Nations as the Source Authority at http://www.unorg.ch/archives/vienna/vien_69.htm

5393

RER #03:	
RS Title:	Harmonized Commodity Description and Coding System (Harmonized System or HS System), 1983 and subsequent amendments.
RS Rationale:	The HS system is one of the most widely used coded domains in business transactions worldwide. This RS, for which the Source Authority is the World Customs Organization (WCO), is the multiple goods nomenclature which serves as the basis for customs tariffs as well as for the compilation of trade statistics, to coding of goods for transport purposes worldwide, etc.
RS Market Acceptance:	This RS has full market acceptance. About 170 countries and economies use the HS System (covering 98% of world trade).
RS Transformation into an IS:	There is no added value in transforming this RS into an RS.
RS Referencing:	This RS and related documentation is available via its Source Authority, the World Customs Organization (WCO) via < www.wcoomed.org > and the HS Convention itself at < http://www.wcoomed.org/ie/En/Topics_Issues/topics_issues.html >.

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RER #04:	
RS Title:	International Commercial Terms (INCOTERMS®) 2000*
RS Rationale:	Incoterms are the standard trade definitions most commonly used in international business transactions, i.e., sales contracts. There are currently thirteen Incoterms. The Source Authority for this coded domain is the International Chamber of Commerce < http://www.iccwbo.org >
RS Market Acceptance:	Incoterms are used worldwide in all industry sectors, by private sector organizations and public sector administrations.
RS Transformation into an IS:	There is no added value in transforming this RS into an IS. It has been in use since 1936. Authorized translations exist in 31 languages and are available from ICC national committees and is widely accepted.
RS Referencing:	Incoterms" is an ICC trademark and the text of Incoterms in whole or in part is subject to ICC's copyright. Related ICC publications, in printed or in electronic form, are also subject to copyright. ICC copyright policy is described in full on the new website. < http://www.iccwbo.org/index_incoterms.asp >. The identification of each of the Incoterms and a short explanation, i.e., "Preamble", is available at < http://www.iccwbo.org/incoterms/preambles.asp >.
*	"Competent Authority" means one governmental authority designated by a Party to be responsible within such geographical area as the Party may think fit, for receiving the notification of a transborder movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification, as provided in Article 6. Most contracts made after 1 January, 2000 will refer to the latest edition of

	Incoterms, which came into force on that date. The correct reference is to "Incoterms 2000". Unless the parties decide otherwise, earlier versions of Incoterms - like Incoterms 1990 - are still binding if incorporated in contracts that are unfulfilled and date from before 1 January, 2000.

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RER #05:	
RS Title:	International Patent Classification (IPC)
RS Rationale:	
RS Market Acceptance:	
RS Transformation into an IS:	
RS Referencing:	

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Candidate/stakeholder text copied from ISO/IEC 15944-1 some of which is not yet utilized in the 2ndCD text but may be in Annex E

Project Editors' Note

The text which follows is "stakeholder text" which depending on resolution of CD ballot comments may be useful to include "as is" or with added text in the FCD ballot document as part of a Clause or and Annex

Secondly, ISO/IEC 15944-1 states in Clause 6.1.6 "Business transaction model: Classes of Constraints":

In addition to its three fundamental elements, the Business Transaction Model requires "classes of constraints". The Business Operational View derived from Open-edi shows that constraints are applied to business transactions.

It is up to Persons, who are the primary parties to a business transaction, to decide and agree on whether a particular role or function in a business transaction can be delegated to an agent or involve a third party. {See further ISO/IEC 15944-1, Clause 6.2.5 "Person and delegation to "Agent" and/or "third party"}.

The Open-edi reference model identified two basic classes of constraints; namely "internal constraints" and "external constraints".

External constraints exist which are horizontal in nature. These are the common and generic rules for business transactions, (e.g., privacy/data protection, consumer policy, uniform commercial codes, etc.).

The imposition of these horizontal external constraints on business transactions is exemplified by the introduction of a third type of role in a business transaction, namely that of "regulator" as a third sub-type of Person as a player in a business transaction representing "public administration".

External constraints of a horizontal and common nature are constraints imposed by regulators (and enacted through public administration) which apply regardless of the type of business or sector within which the business occurs. This categorization allows one to build scenarios and scenario components for referencing, registering and reuse of specific common sets of external constraints. These can then be combined with scenarios which focus on internal constraints for building application use scenarios.

There are also external constraints that are of a sectorial nature, some external constraints can be common to two or more sectors and supported through common standards. Sectorial constraints are found in telecommunications, transportation and delivery, financial/banking, import/export restrictions specific to a good or service, inter- or intra-state trade, and so on. Where a sector imposes specific ways of conducting business transactions within itself and with other sectors, such sector specific constraints and conditions must be identified and specified where applicable, as part of specification of

5450 *scenarios and scenario components. This allows one to build scenarios and scenario*
5451 *components for referencing, registering and reuse of sets of sectorial external constraints*
5452 *such as "customs clearance", "transport of dangerous goods", etc. These two basic classes*
5453 *of constraints on business transactions are illustrated below in Figure 8 "Business*
5454 *Transaction Model: Classes of Constraints".*
5455

5456 The purpose of this Part 5 of ISO/IEC 15944 is thus directed at being able to identify and reference
5457 laws and regulations impacting scenarios and scenario components as external constraints. The
5458 primary source of such external constraints are jurisdictional domains.
5459

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5461

5462 Note: There are also requirements for establishing common rules for interchange between as well as among
5463 sectors. These rules are normally imposed by a particular sector on the others. For example, the banking sector
5464 may impose certain rules for the exchange of financial information between itself and other sectors. Sometimes
5465 the rules are established to enhance or facilitate services of a particular sector with others. The transportation
5466 sector is a good example. It establishes business rules, as sets of external constraints, in conjunction with other
5467 sectors for the transport and handling of speciality goods, (e.g., radioactive materials, live animals, etc.).