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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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ISO/IEC JTC1/SC32/WG1 N0282

<b>Document Type:</b>	Text for CD Ballot or Comment
<b>Document Title:</b>	2 <sup>nd</sup> CD Ballot Document of ISO/IEC 15944-5 Information technology - Business agreement semantic descriptive techniques - Part 5: Identification and mapping of various categories of jurisdictional domains as sources of external constraints
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## ***Project Editor's Notes***

17  
18  
19 1. *This document is being issued as a 2<sup>nd</sup> CD ballot document even though some clauses*  
20 *require more work. This has been indicated by the Project Editors. It is anticipated that*  
21 *these clauses will be completed during the 2nd CD ballot comment period and will also*  
22 *benefit from 2<sup>nd</sup> CD ballot comments. It is anticipated that as a result of,*

- 23  
24 (1) *resolution of 2<sup>nd</sup> CD ballot comments; and,*  
25 (2) *additional comments received from SC32 P,O & L members as well as individual*  
26 *experts,*

27  
28 *that all these and other input will be integrated into the development of the FCD ballot*  
29 *document.*

30  
31 2. *Completion of technical specification for this Part 5 in the form of rules, definitions,*  
32 *coded domains, templates, figures (and their UML-based equivalents), etc. of sub-clauses*  
33 *of Clauses 6, 7, 8, 9, 10 is being undertaken in consultation with competent legal*  
34 *authorities and internationally recognized legal experts in relevant areas of international*  
35 *law.*

36  
37 3. *Time limits on the submission for this 2<sup>nd</sup> CD ballot document did not provide sufficient*  
38 *time to be able to integrate and support all the clauses, rules, definitions, templates, etc.*  
39 *of the ISO/IEC FCD15944-2 FCD ballot document, i.e. ISO/IEC JTC/SC32 document*  
40 *32N1218.*

41  
42 4. *This CD ballot document incorporates the results of the review, discussions and decisions*  
43 *taken by SC32/WG1 based on the comments received in the CD ballot of 15944-11. These*  
44 *are found in document JTC1/SC36/WG1 N272R “Editing instructions for CD 15944-5*  
45 *(2004-11-11). All ballot comments have been addressed in this 2<sup>nd</sup> CD. Also as a result of*  
46 *these “Editing Instructions for CD-15944-5”, three new clauses or sub-clauses have been*  
47 *added in the 2nd CD ballot document.*

48  
49 ➤ *1.3 Scope- Aspects not Currently Addressed*

50  
51 (This is in response to Canadian comment #09 and similar to the approach taken  
52 by ISO/IEC 111179-3:2003)

53  
54 ➤ *6.2.8 Legally Recognized Languages (LRLs)*

55  
56 (This is in response to Norway ballot comments on Annex C)

57  
58 ➤ *under existing 6.6.2 Person Component*

59 *6.6.2.1 General (existing text with minor editing changes)*

60 *6.6.2.2 Persona as Legally Recognized Names (new text)*

61  
62 (This is in response to UK ballot comment #05)

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➤ *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.jtc1.org](http://www.jtc1.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 2<sup>nd</sup> 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 2<sup>nd</sup> 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.*

108 ISO/IEC JTC1/SC 32 N \_\_\_\_\_

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110 Date: 2005-01-04

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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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ISO/IEC 2<sup>nd</sup> CD 15944-5

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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

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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*:

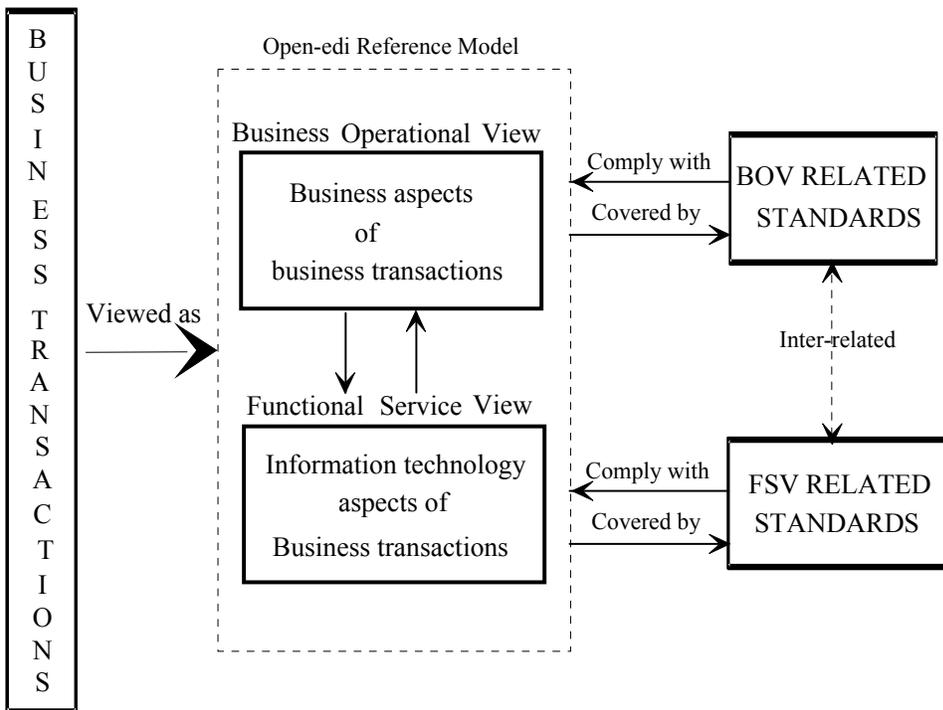
- Part 1: Operational aspects of Open-edi for implementation
- Part 2: Registration of scenarios and their components as business objects
- Part 3: Open-edi description techniques (OeDT)
- Part 4: Business transaction scenarios - Accounting and economic ontology
- Part 5: Identification and mapping of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

356 **0 INTRODUCTION**  
 357  
 358 0.1 PURPOSE AND OVERVIEW  
 359

360 **0.1.1 ISO/IEC 14662 "Open-edi Reference Model"**  
 361

362 The ISO/IEC 14662 Open-edi Reference Model<sup>1</sup> provides the conceptual architecture necessary  
 363 for carrying out electronic business transactions. That architecture describes the need to have two  
 364 separate and related views of the business transaction. The first is the Business Operational View  
 365 (BOV). The second is the Functional Service View (FSV). Figure 1 from ISO/IEC 14662  
 366 illustrates the Open-edi environment. {For definitions of the terms in Figure 1, see Clause 3}  
 367



368  
 369  
 370 Figure 1 - Open-edi environment  
 371

<sup>1</sup>ISO/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"}

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

373

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

383

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

389

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

393

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

399

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

402

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

408

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

415

416 **0.1.2 ISO/IEC 15944-1 "Business Agreement Semantic Descriptive Techniques"**  
417

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

423

424 ➤ commercial frameworks and associated requirements;

425

426 ➤ legal frameworks and associated requirements;

427

428 ➤ public policy requirements particularly those of a generic nature such as consumer  
429 protection, privacy, accommodation of handicapped/disabled;

430

431 ➤ requirements arising from the need to support cultural adaptability. This includes meeting  
432 localization and multilingual requirements, (e.g., as may be required by a particular  
433 jurisdictional domain or desired to provide a good, service and/or right in a particular  
434 market. Here one needs the ability to distinguish, the specification of scenarios, scenario  
435 components, and their semantics, in the context of making commitments, between:

436

437 (1) the use of unique, unambiguous and linguistically neutral identifiers (often as  
438 composite identifiers) at the information technology (IT) interface level among IT  
439 systems of participation parties on the one hand; and, on the other,

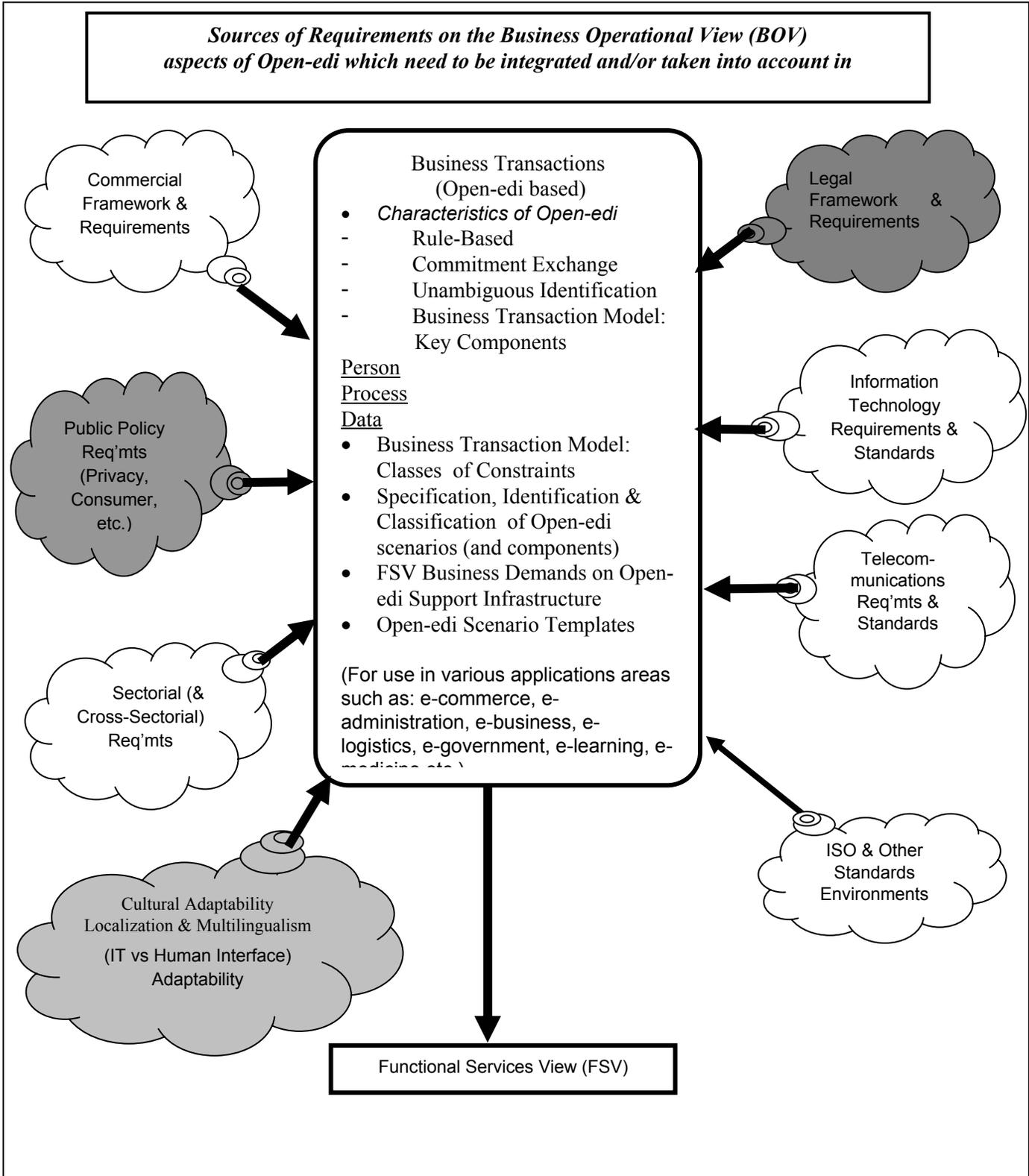
440

441 (2) their multiple human interface equivalent expressions in a representation form  
442 appropriate to the Persons involved in the making of the resulting commitments.

443

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

448 Figure 2 — Integrated View — Business Operational Requirements:  
 449 External Constraints Focus



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## 0.2 USE OF "PERSON", "ORGANIZATION" AND "PARTY" IN THE CONTEXT OF BUSINESS TRANSACTION AND COMMITMENT EXCHANGE<sup>2</sup>

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)<sup>3</sup> 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".*

---

<sup>2</sup>The 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).

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

505

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

510

511 In modelling business transactions, jurisdictional domains prescribe their external constraints in  
512 the role of "regulator" and execute them as "public administration". {See further below Clause  
513 5.4.5}

514

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

521

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

525

526 The reader of this standard should understand that:

527

528 ➤ the use of Person with a capital "P" represents Person as a defined term, i.e., as the entity  
529 within an Open-edi party that carries the legal responsibility for making commitment(s);

530

531 ➤ "individual", "organization", and "public administration" are defined terms representing  
532 the three common subtypes of "Person"; and,

533

534 ➤ the words "person(s)" and/or "party(ies)" are used in their generic contexts independent of  
535 roles of "Person" as defined in the ISO/IEC 14662 and ISO/IEC 15944-1 standards. A  
536 "party" to a business transaction has the properties and behaviours of a "Person".

537

### 538 0.3 IMPORTANCE AND ROLE OF TERMS AND DEFINITIONS

539

#### 540 Project Editor's Note

541

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

548

549 The ISO/IEC Directives Part 2 provide for "Terms and definitions" as a "Technical normative  
550 element," necessary for the understanding of certain terms used in the document. A primary  
551 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

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

556

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

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

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

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

578

#### 579 0.4 IMPORTANCE OF THE TWO CLASSES OF CONSTRAINTS OF THE BUSINESS 580 TRANSACTION MODEL (BTM)

581

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

583

584 (1) those which are "self-imposed" and agreed to as commitments among the parties  
585 themselves, i.e., "internal constraints"; and,

586

587 (2) those which are imposed on the parties to a business transaction based on the nature of the  
588 good, service and/or rights exchanged, the nature of the commitment made among the parties  
589 (including ability to make commitments, the location, etc.), i.e., "external constraints".

590

591 **The focus of this Part 5 of ISO/IEC 15944 is on external constraints. Jurisdictional domains**  
592 **are the primary source of external constraints.**<sup>4</sup>

---

<sup>4</sup>For 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.

593

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

598

599

600 0.5 USE OF "JURISDICTIONAL DOMAIN", AND "JURISDICTION" (AND  
601 "COUNTRY") IN THE CONTEXT OF BUSINESS TRANSACTIONS AND  
602 COMMITMENT EXCHANGE  
603

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

611

612 ➤ the use of "jurisdictional domain" represents its use as a defined term; and,

613

614 ➤ the use of "jurisdiction(s)" and/or "country(ies)" represents their use in their generic  
615 contexts.

616

617

618 0.6 USE OF "IDENTIFIER" AS "IDENTIFIER (IN BUSINESS TRANSACTIONS)"<sup>5</sup>  
619

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

625

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

632

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

634

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

---

<sup>5</sup>This 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)".<sup>6</sup>

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]

---

<sup>6</sup>Identifiers 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).

664 **1 SCOPE**

665

666 1.1 STATEMENT OF SCOPE

667

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

671

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

677

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

681

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

684

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

686

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

689

690

691 1.2 EXCLUSIONS

692

693 **1.2.1 Mutual Recognition of Jurisdictional Domain by Other Jurisdictional Domains**

694

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

697

698

699 **1.2.2 Formation of Jurisdictional Domain**

700

701 A jurisdictional domain can and does create other jurisdictional domains within it<sup>7</sup>.

702

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

705

706

707 **1.2.3 "Overlap" of and/or Conflict Among Jurisdictional Domains as Sources of External**

---

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

708

## Constraints

709

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

714

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

719

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

724

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

729

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

733

734

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

735

736  
737 This Part 5 includes clauses which focus on external constraints on business transactions which  
738 pertain to the use of a "natural language" and/or a "special language" for the human interface  
739 equivalents of the business semantics of the set of commitments comprising a business  
740 transaction modelled through scenarios and scenario components. A primary source of such  
741 external constraints is jurisdictional domains.

742

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

745

- 746 ➤ "artificial languages"
- 747 ➤ "programming languages"<sup>8</sup>
- 748 ➤ "hypertext languages"
- 749 ➤ "indexing languages"<sup>9</sup>

---

<sup>8</sup>As 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.

<sup>9</sup>There 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

750 ➤ "mark-up languages"<sup>10</sup>

751

752

### 753 1.3 SCOPE - ASPECTS NOT CURRENTLY ADDRESSED

754

#### 755 Project Editors' Notes

756

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

761

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

763

764 a) differences in equality of status of official languages within a jurisdictional domains<sup>11</sup>;

765 b) the identification and mapping of legally recognized languages for a specific purpose or  
766 within a particular jurisdictional domain;

767 c) the identification and registration of schemas involving the control and management of  
768 legally recognized personas and associated unique identifiers for the unambiguous  
769 identification of the role qualification of a Person in a specified context

770 d) the more detailed requirements of common public policy requirements of jurisdictional  
771 domains including consumer protection, privacy protection, individual accessibility and  
772 human rights;

773 e) the more detailed requirements of records retention and other related information  
774 management requirements pertaining to commitment exchange among autonomous  
775 parties and subject to external constraints;

776 f) other?

777

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

780

781

### 782 1.4 IT SYSTEMS ENVIRONMENT NEUTRALITY

783

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

---

Part 5.

<sup>10</sup>This 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.).

<sup>11</sup> 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.

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

790

## 791 **2 NORMATIVE REFERENCES**

792

### 793 Project Editor's Notes

794

795 1. *The list of normative references presented below is a candidate list. It will be amended as*  
796 *required. Standards which end up not being used in the text at the FCD stage will be*  
797 *deleted.*

798

799 2. *This draft 2<sup>nd</sup> CD includes normative references of the nature of international legal*  
800 *conventions which "govern" jurisdictions as "Referenced Specifications", (e.g., those of*  
801 *the UN such as the Vienna Convention and others).*

802

803 3. *ISO Directives allow for normative referencing of non-ISO/IEC "documents" as*  
804 *"Referenced Specifications" (RS). {See further, ISO/IEC JTC1 N 4046 "The Normative*  
805 *Referencing of Specifications other than International Standards in JTC1 International*  
806 *Standards - Guidelines for JTC1 SCs" (1996-03-13). *These have been amended as per*  
807 *JTC1/SC32 Santa Fe (2003) Plenary Resolution 30. {See 32N0978}**

808

809 4. *The Normative References are divided into two parts; namely:*

810

811 2.1 *ISO/IEC*

812 2.2 *Referenced Specifications (or other appropriate title as per ITTF requirements).*

813

814

815 2.1 ISO/IEC<sup>12</sup>

816

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

822

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

825

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

---

<sup>12</sup>For 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: Langages 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  
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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  
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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-edi Reference Model/Technologies de  
968 l'information - Modèle de référence EDI-ouvert

969  
 970 ISO/IEC TR 15285:1998 (E) Information technology -- An operational model for characters and  
 971 glyphs  
 972  
 973 ISO/IEC 15944-1:2002 (E) Information Technology - Business Agreement Semantic Descriptive  
 974 Techniques - Part 1: Operational Aspects of Open-edi for Implementation  
 975  
 976 ISO/IEC 2nd CD 15944-2 (E) Information Technology - Business Agreement Semantic  
 977 Descriptive Techniques - Part 2: Registration of Scenarios and their Components as Business  
 978 Objects  
 979  
 980 ISO 19108:2000 (E) Geographic information - Temporal schema  
 981  
 982 ISO 19115:2003 (E) Geographic information – Metadata  
 983  
 984 ISO 19135:2005 (E) Geographic information – Procedures for registration of itmes of geographic  
 985 information  
 986  
 987 ISO/IEC 19501-1:2002 (E) Information technology - Unified Modelling Language (UML) - Part  
 988 1: Specification  
 989  
 990

991 2.2 REFERENCED SPECIFICATIONS

992  
 993 Project Editors' Note(s):

- 994  
 995 1. *The Clause 2.2 will not be exhaustive. It will contain only those referenced specifications*  
 996 *which are actually used in this standard.*  
 997  
 998 2. *For each referenced specification noted here, a "referencing explanatory report (RER)*  
 999 *which will be included in Annex X (Informative.*  
 1000  
 1001 3. *[to be completed as part of 2<sup>nd</sup> CD ballot resolution and prior to FCD stage]*  
 1002

1003 [currently in alphabetical order by English title]  
 1004

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)

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### 3 DEFINITIONS

#### Project Editors' Temporary Notes on Terms/Definitions

1. *All the definition which are found in the 1<sup>st</sup> CD Ballot document, i.e. SC32 N1080, for which no ballot comments were received, i.e. accepted, have been carried forward into this 2<sup>nd</sup> CD. As such they are deemed to be accepted and stable.*
2. *Addition and changes to this 2<sup>nd</sup> 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 2<sup>nd</sup> CD ballot resolution phase and as part of the preparation of this*

1031 *standard for FCD ballot, Annex A will be provided and the "missing" ISO French*  
1032 *equivalent terms and definitions provided. This development of ISO French language*  
1033 *equivalents will also serve as an "ISO 9000" quality control check into the FCD stage of*  
1034 *the development of this standard.*

1035  
1036 4. *The development of this 2<sup>nd</sup> CD ballot document is harmonized with the development of*  
1037 *the other Parts of the ISO/IEC 15944, namely:*

1038  
1039 ➤ *the FCD ballot document for Part 2 Information Technology - Business*  
1040 *Agreement Semantic Descriptive Techniques - Part 2: Registration of Scenarios*  
1041 *and their Components as Business Objects. Here the Clause 3 sub-clause of this*  
1042 *FCD ballot document has been identified.*

1043  
1044 ➤ *the most current version available (as of 31 December, 2004) of the Part 3*  
1045 *Information Technology - Business Agreement Semantic Descriptive Techniques -*  
1046 *Part 3: Open-edi Descriptive Techniques*

1047  
1048 ➤ *the most current version available (as of 31 December, 2004) of the Part 4*  
1049 *Information technology - Business Agreement Semantic Descriptive Techniques -*  
1050 *Part 4: Business Transactions and Scenarios – Accounting and Economic*  
1051 *Ontology*

1052  
1053  
1054 4. *Further, there are some definitions/terms in Clauses 5+ which have not yet been*  
1055 *integrated into Clause 3. This will be done following the 2nd CD ballot resolution stage*  
1056 *and preparation of the FCD document.*

1057

1058

1059

### 1060 **3.001**

#### 1061 **address**

1062 a set of **data elements** that specifies a **location** to which a recorded information item(s), a  
1063 **business object(s)**, a material object(s) and/or a person(s) can be sent to or received from.

1064

1065 NOTE 1: A location can be specified as either a physical or electronic address.

1066

1067 NOTE 2: In the identification, referencing and retrieving of registered business objects, it is  
1068 necessary to state whether the pertinent recorded information is available in both physical and  
1069 virtual forms.

1070

1071 NOTE 3: In the context of Open-edi, a “recorded information item” is modelled and registered as  
1072 an Open-edi Scenario, Information Bundle (IB) Semantic Components (SC), or any combination  
1073 thereof, i.e. as sets of recorded information.

1074

1075 [ISO/IEC 15955-2:200n (3.1)]

1076

### 1077 **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-edi**  
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)]

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### **3.009**

#### **Business Operational View (BOV)**

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

[ISO/IEC 14662:2004 (3.1.3)]

### **3.010**

#### **business transaction**

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

[ISO/IEC 14662:2004 (3.1.4)]

### **3.011**

#### **buyer**

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

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

### **3.012**

#### **character**

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

NOTE Characters may be categorized as follows:

#### TYPES AND EXAMPLES

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

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

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

### **3.013**

#### **character set**

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

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

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

### **3.014**

#### **characteristic**

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

NOTE: Characteristics are used for describing concepts.

1172 [ISO 1087-1:2000 (3.2.4)]

1173

1174 **3.015**

1175 **classification system**

1176

1177 *[to be inserted prior to FCD stage based on ISO TC46 standards]*

1178

1179

1180 **3.016**

1181 **code**

1182 **data** representation in different forms according to a pre-established set of **rules**.

1183

1184 NOTE In this standard the "pre-established set of rules" are determined and enacted by a Source  
1185 Authority and must be explicitly stated.

1186 [ISO 639-2:1998 (3.1)]

1187

1188 **3.017**

1189 **code (in coded domain)**

1190 an identifier, i.e. an **ID code**, assigned to an **entity** as member of a **coded domain** according to  
1191 the pre-established set of rules governing that coded domain.

1192

1193 NOTE 1 [to be added, if required]

1194

1195 NOTE 2 [to be added, if required]

1196 [ISO/IEC 15944-5]

1197

1198 **3.018**

1199 **coded domain**

1200 a domain for which (1) the boundaries are defined and explicitly stated as a **rulebase** of a **coded**  
1201 **domain Source Authority**; and, (2) each **entity** which qualifies as a member of that domain is  
1202 identified through the assignment of a unique **ID code** in accordance with the applicable  
1203 **Registration Schema** of that **Source Authority**.

1204

1205 NOTE 1 The rules governing the assignment of an ID code to members of a coded domain reside  
1206 with its Source Authority and forms part of the Coded Domain Registration Schema of the Source  
1207 Authority.

1208

1209 NOTE 2 Source Authorities which are jurisdictional domains are the primary source of coded  
1210 domains.

1211

1212 NOTE 3 A coded domain is a data set for which the content of the data element values are  
1213 predetermined and defined according to the rule base of its Source Authority and as such have  
1214 predefined semantics.

1215

1216 NOTE 4 Associated with a code in a coded domain can be:

1217 - one or more equivalent codes;

1218 - one or more equivalent representations especially those in the form of human interface

1219 equivalent (linguistic) expressions.

1220

1221 NOTE 5 In a coded domain the rules for assignment and structuring of the ID codes must be  
1222 specified.

1223

1224 NOTE 6 Where an entity as member of a coded domain is allowed to have, i.e., assigned, more  
1225 than one ID code, i.e., as equivalent ID codes (possibly including names), one of these must be  
1226 specified as the pivot ID code.

1227

1228 NOTE 7 A coded domain in turn can consist of two or more coded domains, i.e., through the  
1229 application of the inheritance principle of object classes.

1230

1231 NOTE 8 A coded domain may contain ID code which pertain to predefined conditions other than  
1232 qualification of membership of entities in the coded domain. Further, the rules governing a coded  
1233 domain may or may not provide for user extensions.

1234

1235 EXAMPLE Common examples include: (1) "0" (or "00", etc.) = Others, Not Known; (2) "9" or  
1236 ("99", etc.) = Not Applicable.

1237

1238 NOTE 9 In object methodology, entities which are members of a coded domain are referred to as  
1239 instances of a class.

1240

1241 NOTE 10 In UML modelling notation, an ID code is viewed as an instance of an object class.

1242 [ISO/IEC 115944-2:200n (3.12)]

1243

### 1244 **3.019**

#### 1245 **coded Domain Source Authority**

1246 a **Person**, usually an **organization**, which sets the **rules** governing a **coded domain**

1247 NOTE 1 For widely used coded domains the coded domain Source Authority is often a  
1248 jurisdictional domain.

1249 NOTE 2 Specific sectors, (e.g., banking, transport, geomatics, agriculture, etc.), may have  
1250 particular coded domain Source Authority(ies) whose coded domains are used in  
1251 many other sectors.

1252 NOTE 3 A coded domain Source Authority usually also functions as a Registration Authority  
1253 but can use an agent, i.e., another Person, to execute the registration function on  
1254 its behalf.

1255 [ISO/IEC 15944-2:200n (3.13)]

1256

### 1257 **3.020**

#### 1258 **commitment**

1259 the making or accepting of a right, obligation, liability or responsibility by a **Person** that is  
1260 capable of enforcement in the jurisdiction in which the **commitment** is made.

1261 [ISO/IEC 15944-1:2002 (3.9)]

1262

1263 **3.021**  
1264 **composite identifier**  
1265 an **identifier (in a business transaction)** functioning as a single unique identifier consisting of  
1266 one or more other identifiers, and/or one or more other **data elements**, whose interworking are  
1267 **rule-based**.

1268  
1269 NOTE 1 Most widely used composite identifiers consist of the combinations of:

- 1270  
1271 - the ID of the overall identification/numbering schema, (e.g., ISO/IEC 6532, ISO/IEC  
1272 7812, ISO/IEC 7506, UPC/EAN, ITU-R E.164, etc.), which is often assumed;  
1273 - the ID of the issuing organization (often based on a block numeric numbering schema);  
1274 and,  
1275 - the ID of the entities forming part of members of the coded domain of each issuing  
1276 organization.

1277  
1278 NOTE 2 Identifiers (in business transactions) are for the most part composite identifiers.  
1279 [ISO/IEC 15944-2:200n (3.15)]

1280  
1281 **3.022**

1282 **composite type**  
1283 a data type that has a data structure composed of the data structures of one or more data types and  
1284 that has its own set of permissible operations.

1285  
1286 EXAMPLE A data type "complex number" may be composed of two "real number" data types.

1287  
1288 NOTE The operations of a composite type may manipulate its occurrences as a unit or may  
1289 manipulate portions of these occurrences.

1290 [ISO/IEC 2382-17:1999 (17.05.10)]

1291

1292 **3.023**

1293 **computational integrity**  
1294 the expression of a **standard** in a form that ensures precise description of behaviour and  
1295 semantics in a manner that allows for automated processing to occur, and the managed evolution  
1296 of such standards in a way that enables dynamic introduction by the next generation of  
1297 information systems.

1298  
1299 NOTE Open-edi standards have been designed to be able to support computational integrity  
1300 requirements especially from a registration and re-use of business objects perspectives.

1301 [ISO/IEC 15944-2:200n (3.16)]

1302

1303 **3.024**

1304 **computer program**  
1305 means **data** representing instructions or statements that, when executed in a **computer system**,  
1306 causes the computer to perform a function.

1307

1308 **3.025**

1309 **computer service**

1310 a service which includes data processing and the storage or retrieval of **data**.

1311

### 1312 **3.026**

#### 1313 **computer system**

1314 means a device that, or a group of interconnected or related devices one or more of which,

1315

1316 (a) contains **computer programs** or other **data**, and

1317 (b) pursuant to **computer programs**,

1318

1319 (i) performs logic and control, and

1320 (ii) may perform any other function.

1321

### 1322 **3.027**

#### 1323 **constraint**

1324 a **rule**, explicitly stated, that prescribes, limits, governs or specifies any aspect of a **business transaction**.

1326

1327 NOTE 1 Constraints are specified as rules forming part of components of Open-edi scenarios,  
1328 i.e., as scenario attributes, roles, and/or information bundles.

1329

1330 NOTE 2 For constraints to be registered for implementation in Open-edi, they must have unique  
1331 and unambiguous identifiers.

1332

1333 NOTE 3 A constraint may be agreed to among parties (condition of contract) and is therefore  
1334 considered an "internal constraint". Or a constraint may be imposed on parties, (e.g., laws,  
1335 regulations, etc.), and is therefore considered an "external constraint".

1336 [ISO/IEC 15944-1:2002 (3.11)]

1337

### 1338 **3.028**

#### 1339 **controlled vocabulary (CV)**

1340 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.

1342

1343 NOTE 1 In a controlled vocabulary, there is a one-to-one relationship of definition and term.

1344

1345 EXAMPLE The contents "Clause 3 Definitions" in ISO/IEC standards are examples of  
1346 controlled vocabularies with the entities being identified and referenced through their ID code,  
1347 i.e., via their clause numbers.

1348

1349 NOTE 2 In a multilingual controlled vocabulary, the definition/term pairs in the languages  
1350 utilized are deemed to be equivalent, i.e. with respect to their semantics.

1351

1352 NOTE 3 The rule base governing a controlled vocabulary may include a predefined concept  
1353 system

1354

1355 [ISO/IEC 15944-5:200n]

1356

1357 **3.029**  
1358 **consumer**  
1359 a **buyer** who is an **individual** to whom consumer protection requirements are applied as a set of  
1360 **external constraints** on a **business transaction**.

1361  
1362 NOTE 1 Consumer protection is a set of explicitly defined rights and obligations applicable as  
1363 external constraints on a business transaction.

1364  
1365 NOTE 2 The assumption is that a consumer protection applies only where a buyer in a business  
1366 transaction is an individual. If this is not the case in a particular jurisdiction, such external  
1367 constraints should be specified as part of scenario components as applicable.

1368  
1369 NOTE 3 It is recognized that external constraints on a buyer of the nature of consumer protection  
1370 may be peculiar to a specified jurisdiction.  
1371 [ISO/IEC 15944-1:2002 (3.12)]

1372  
1373 **3.030**  
1374 **data**  
1375 a reinterpretable representation of information in a formalized manner suitable for  
1376 communication, interpretation, or processing.

1377  
1378 NOTE Data can be processed by humans or by automatic means.  
1379 [ISO/IEC 2382-1:1998 (01.01.02)]

1380  
1381 **3.031**  
1382 **data (in a business transaction)**  
1383 representations of **recorded information** that are being prepared or have been prepared in a form  
1384 suitable for use in a **computer system**.  
1385 [ISO/IEC 15944-1:2002 (3.14)]

1386  
1387 **3.032**  
1388 **data element**  
1389 a unit of data for which the **definition, identification,** representation and permissible values are  
1390 specified by means of a set of **attributes**.  
1391 [adapted from ISO/IEC 11179-3:2003 (3.3.36)]

1392  
1393 **3.033**  
1394 **data element (in organization of data)**  
1395 a unit of **data** that is considered in context to be indivisible.

1396  
1397 EXAMPLE The data element "age of a person" with values consisting of all combinations of 3  
1398 decimal digits.

1399  
1400 NOTE Differs from the entry 17.06.02 in ISO/IEC 2382-17.  
1401 [ISO/IEC 2382-04:1998 (04.07.01)]

1402  
1403 **3.034**

1404 **dataset**

1405 identifiable collection of **data**.

1406

1407 NOTE A dataset may be a smaller grouping of data which, though limited by some constraint  
1408 such as spatial extent or feature type, is located physically within a larger dataset. Theoretically, a  
1409 dataset may be as small as a single feature or feature attribute contained within a larger dataset. A  
1410 hardcopy map or chart may be considered a dataset.

1411 [ISO 19115:2003 (4.2)]

1412

1413 **3.035**

1414 **dataset series**

1415 collection of **datasets** sharing the same product specification.

1416 [ISO 19115:2003 (4.3)]

1417

1418 **3.036**

1419 **Decision Making Application (DMA)**

1420 the model of that part of an **Open-edi system** that makes decisions corresponding to the **role(s)**  
1421 that the **Open-edi Party** plays as well as the originating, receiving and managing data values  
1422 contained in the instantiated **information bundles** which is not required to be visible to the other  
1423 **Open-edi Parties**.

1424 [ISO/IEC 14662:2004 (4.2.1)]

1425

1426 **3.037**

1427 **de facto language**

1428 a **natural language** used in a **jurisdictional domain** which has the properties and behaviours of  
1429 an **official language** in that **jurisdictional domain** without having formally been declared as  
1430 such by that **jurisdictional domain**.

1431

1432 NOTE 1 A de facto language of a jurisdictional domain is often established through long  
1433 term use and custom.

1434

1435 NOTE 2 Unless explicitly stated otherwise and for the purposes of modelling a business  
1436 transaction through scenario(s), scenario attributes and/or scenario components,  
1437 a de facto language of a jurisdictional domain is assumed to have the same  
1438 properties and behaviours of an official language.

1439

1440 **3.038**

1441 **definition**

1442 representation of a concept by a descriptive statement which serves to differentiate it from related  
1443 concepts.

1444 [ISO/IEC 1087-1:2000 (3.3.1)]

1445

1446 **3.039**

1447 **dictionary**

1448 list of words or category of words from a **language** arranged alphabetically or systematically and  
1449 explained in that **language** or translated into one or more other **languages**.

1450 [ISO 5217 (2.2.1.16)]

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### **3.040**

#### **distinguishing identifier**

**data** that unambiguously distinguishes an **entity** in the authentication process.  
[ISO/IEC 10181-2:1996]

### **3.041**

#### **Electronic Data Interchange (EDI)**

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

NOTE This definition includes all categories of electronic business transactions.  
[ISO/IEC 14662:2004 (3.1.5)]

### **3.042**

#### **entity**

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

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

NOTE An entity exists whether data about it are available or not.  
[ISO/IEC 2382-17:1999 (17.02.05)]

### **3.043**

#### **entity authentication**

the corroboration that the **entity** is the one claimed.  
[ISO/IEC 9798-1:1997 (3.3.11); ISO/IEC 15944-1:2002 (3.21)]

### **3.044**

#### **exchange code set**

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

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

### **3.045**

#### **external constraint**

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

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

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

1498  
1499 NOTE 3 External constraints can apply to the nature of the good, service and/or right provided in  
1500 a business transaction.

1501  
1502 NOTE 4 External constraints can demand that a party to a business transaction meet specific  
1503 requirements of a particular role.

1504  
1505 EXAMPLE 1 Only a qualified medical doctor may issue a prescription for a controlled drug.

1506  
1507 EXAMPLE 2 Only an accredited share dealer may place transactions on the New York Stock  
1508 Exchange.

1509  
1510 EXAMPLE 3 Hazardous wastes may only be conveyed by a licensed enterprise.

1511  
1512 NOTE 5 Where the information bundles (IBs), including their Semantic Components (SCs) of a  
1513 business transaction are also to form the whole of a business transaction, (e.g., for legal or audit  
1514 purposes), all constraints must be recorded.

1515  
1516 EXAMPLE There may be a legal or audit requirement to maintain the complete set of recorded  
1517 information pertaining to a business transaction, i.e., as the information bundles exchanged, as a  
1518 "record".

1519  
1520 NOTE 6 A minimum external constraint applicable to a business transaction often requires one to  
1521 differentiate whether the Person, i.e., that is a party to a business transaction, is an "individual",  
1522 "organization", or "public administration". For example, privacy rights apply only to a Person as  
1523 an "individual".

1524 [ISO/IEC 15944-1:2002 (3.23)]

1525

### 1526 **3.046**

#### 1527 **Formal Description Technique (FDT)**

1528 a specification method based on a description language using rigorous and unambiguous rules  
1529 both with respect to developing expressions in the language (formal syntax) and interpreting the  
1530 meaning of these expressions (formal semantics).

1531 [ISO/IEC 14662:2004 (3.1.6)]

1532

### 1533 **3.047**

#### 1534 **glyph**

1535 a recognizable abstract graphic symbol which is independent of any specific design

1536 [ISO/IEC 9541-1:1991; ISO/IEC TR 15285:1998 (3.5)]

1537

### 1538 **3.048**

#### 1539 **Human Interface Equivalent (HIE)**

1540 a representation of the **unambiguous** and IT-enabled semantics of an **IT interface equivalent** (in  
1541 a **business transaction**), often the **ID code** of a **coded domain** (or a **composite identifier**), in a  
1542 formalized manner suitable for communication to and understanding by humans.

1543

1544 NOTE 1 Human interface equivalents can be linguistic or non-linguistic in nature but their

1545 semantics remains the same although their representations may vary.

1546

1547 NOTE 2 In most cases there will be multiple human interface equivalent representations as  
1548 required to meet localization requirements, i.e. those of a linguistic nature, jurisdictional nature,  
1549 and/or sectorial nature.

1550

1551 NOTE 3 Human interface equivalents include representations in various forms or formats, (e.g.,  
1552 in addition to written text those of an audio, symbol (and icon) nature, glyphs, image, etc.)  
1553 [ISO/IEC 15944-5:200n (3.29)]

1554

### 1555 **3.049**

#### 1556 **IB Identifier**

1557 a unique, linguistically neutral, unambiguous referenceable **identifier** for an **Information Bundle**  
1558 **(IB)**

1559

### 1560 **3.050**

#### 1561 **ID code**

1562 an identifier assigned by the **Source Authority** to a member of a **coded domain**. **ID codes** must  
1563 be unique within their **Coded Domain Registration Schema**.

1564

1565 NOTE 1 Associated with an ID code in a coded domain can be:

- 1566 - one or more equivalent codes;
- 1567 - one or more equivalent representations especially those in the form of human equivalent  
1568 (linguistic) expressions.

1569

1570 NOTE 2 Where an entity as a member of a coded domain is allowed to have more than one ID  
1571 code, i.e., as equivalent codes (possibly including names), one of these must be specified as the  
1572 pivot ID code.

1573

1574 EXAMPLE Common examples include: (1) the use of an ID code "0" (or "00", etc.), for "Other,  
1575 Not Known; (2) the use of an ID code "9" (or "99") for Not Applicable; (3) the pre-reservation of  
1576 a series or set of ID codes for use for "user extensions".

1577

1578 NOTE 3 A coded domain may contain ID codes pertaining to entities which are not members as  
1579 peer entities, i.e., have the same properties and behaviours, such as ID codes which pertain to  
1580 predefined conditions other than member entities. If this is the case, the rules governing such  
1581 exceptions must be predefined and explicitly stated.

1582

1583 NOTE 4 An ID Code often has the properties of a semantic identifier and can be utilized as such.

1584

1585 NOTE 5 In UML modelling notation, an ID code is viewed as an instance of an object class.

1586 [ISO/IEC 15944-2:200n (3.31)]

1587

### 1588 **3.051**

#### 1589 **identification**

1590 a rule-based process, explicitly stated, involving the use of one or more attributes, i.e., data  
1591 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

1639 re-use of scenario components of a business transaction for which there are no external  
1640 constraints or restrictions to the nature of the conduct of a business transaction other than those  
1641 mutually agreed to by the buyer and seller.  
1642 [ISO/IEC 15944-1:2002 (3.33)]

1643

### 1644 **3.059**

#### 1645 **IT-enablement**

1646 the transformation of a current **standard** utilized in **business transactions**, (e.g., code tables),  
1647 from a manual to computational perspective so as to be able to support **commitment** exchange  
1648 and **computational integrity**.

1649 [ISO/IEC 15944-5:200n (3.nnn)]

1650

### 1651 **3.060**

#### 1652 **IT interface equivalent**

1653 a computer processable identification of the unambiguous semantics of a **scenario**, **scenario**  
1654 **attribute** and/or **scenario component(s)** pertaining to a **commitment** exchange in a **business**  
1655 **transaction** which supports **computational integrity**.

1656

1657 NOTE 1 IT interface equivalents have the properties of identifiers (in business transaction) and  
1658 are utilized to support semantic interoperability in commitment exchange.

1659

1660 NOTE 2 An IT interface equivalent at times is a composite identifier.

1661

1662 NOTE 3 An IT interface equivalent as a composite identifier can consist of the identifier of a  
1663 coded domain plus an ID Code of that coded domain.

1664

1665 NOTE 4 An IT interface equivalent is at times utilized as a semantic identifier.

1666

1667 NOTE 5 An IT interface equivalent may have associated with it one or more human interface  
1668 equivalents (HIEs).

1669

1670 NOTE 6 An IT Interface Value is independent of its encoding in programming languages or  
1671 APIs.

1672 [ISO/IEC 15944-2:200n (3.37)]

1673

### 1674 **3.061**

#### 1675 **jurisdictional domain**

1676 a jurisdiction, recognized in law as a distinct legal and/or regulatory framework, which is a source  
1677 of **external constraints** on **Persons**, their behaviour and the making of **commitments** among  
1678 **Persons** including any aspect of a **business transaction**.

1679

1680 NOTE 1 The pivot jurisdictional domain is a United Nations (UN) recognized member state.  
1681 From a legal and sovereignty perspective they are considered "peer" entities. Each UN member  
1682 state, (a.k.a. country) may have sub-administrative divisions as recognized jurisdictional domains,  
1683 (e.g., provinces, territories, cantons, länder, etc.), as decided by that UN member state.

1684

1685 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.

1733

1734 **3.065**

1735 **legally recognized name (LRN)**

1736 a **persona** associated with a role of a **Person** recognized as having legal status and so recognized  
1737 in a **jurisdictional domain** as accepted or assigned in compliance with the **rules** applicable of  
1738 that **jurisdictional domain**, i.e. as governing the **coded domain** of which the LRN is a member.

1739

1740 NOTE 1: A LRN may be of a general nature and thus be available for general use in commitment  
1741 exchange or may arise from the application of a particular law, regulation, program or service of a  
1742 jurisdictional domain and thus will have a specified use in commitment exchange.

1743

1744 NOTE 2: The process of establishment of a LRN is usually accompanied by the assignment of a  
1745 unique identifier

1746

1747 NOTE 3: A LRN is usually a registry entry in a register established by the jurisdictional domain  
1748 (usually by a specified public administration within that jurisdictional domain) for the purpose of  
1749 applying the applicable rules and registering and recording LRNs (and possible accompanying  
1750 unique identifiers accordingly).

1751

1752 NOTE 4: A Person may have more than one LRN (and associated LRN identifier).

1753

1754 **3.066**

1755 **list**

1756 an ordered set of data elements.

1757 [ISO/IEC 2382-4:1999 (04.08.01)]

1758

1759 **3.067**

1760 **localization**

1761 pertaining to or concerned with anything that is not global and is bound through specified sets of  
1762 **constraints** of:

1763 (a) a linguistic nature including natural and special languages and associated multilingual  
1764 requirements;

1765 (b) jurisdictional nature, i.e., legal, regulatory, geopolitical, etc.;

1766 (c) a sectorial nature, i.e., industry sector, scientific, professional, etc.;

1767 (d) a human rights nature, i.e., privacy, disabled/handicapped persons, etc.,

1768 (e) consumer behaviour requirements; and/or

1769 (f) safety or health requirements.

1770

1771

1772 **3.068**

1773 **location**

1774 a place, either physical or electronic, that can be defined as an **address**.

1775 [ISO/IEC 15944-2:200n (3.41)]

1776

1777 **3.069**

1778 **medium**

1779 physical material which serves as a functional unit, in or on which information or data is normally  
1780 recorded, in which information or data can be retained and carried, from which information or

1781 data can be retrieved, and which is non-volatile in nature.

1782

1783 NOTE 1 This definition is independent of the material nature on which the information is  
1784 recorded and/or technology utilized to record the information, (e.g., paper, photographic,  
1785 (chemical), magnetic, optical, ICs (integrated circuits), as well as other categories no longer in  
1786 common use such as vellum, parchment (and other animal skins), plastics, (e.g., bakelite or vinyl),  
1787 textiles, (e.g., linen, canvas), metals, etc.).

1788

1789 NOTE 2 The inclusion of the "non-volatile in nature" attribute is to cover latency and records  
1790 retention requirements.

1791

1792 NOTE 3 This definition of "medium" is independent of:

1793

- 1794 i) form or format of recorded information;
- 1795 ii) physical dimension and/or size; and,
- 1796 iii) any container or housing that is physically separate from material being housed and  
1797 without which the medium can remain a functional unit.

1798

1799 NOTE 4 This definition of "medium" also captures and integrates the following key properties:

1800

- 1801 i) the property of medium as a material in or on which information or data can be recorded  
1802 and retrieved;
- 1803 ii) the property of storage;
- 1804 iii) the property of physical carrier;
- 1805 iv) the property of physical manifestation, i.e., material;
- 1806 v) the property of a functional unit; and,
- 1807 vi) the property of (some degree of) stability of the material in or on which the information  
1808 or data is recorded.

1809 [ISO/IEC 15944-1:2002 (3.34)]

1810

### 1811 **3.070**

#### 1812 **metadata**

1813 data about data elements, including their data descriptions, and data about data ownership, access  
1814 paths, access rights and data volatility.

1815 [ISO/IEC 2382-17:1999 (17.06.05)]

1816

### 1817 **3.071**

#### 1818 **metadata entity**

1819 set of metadata elements describing the same aspect of data.

1820

1821 NOTE 1 May contain one or more metadata entities

1822

1823 NOTE 2 Equivalent to a class in UML terminology

1824 [ISO 19115:2003 (4.7)]

1825

### 1826 **3.072**

#### 1827 **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

1875 information involving commitment(s).

1876

1877 NOTE 1 Unless official language requirements state otherwise, Persons are free to choose  
1878 their mutually acceptable natural language and/or special language for communications as  
1879 well as exchange of commitments.

1880

1881 NOTE 2 An official language(s) can be mandated for formal communications as well as  
1882 provision of goods and services to Persons subject to that jurisdictional domain and for  
1883 use in the legal and other conflict resolution system(s) of that jurisdictional domain, etc.

1884

1885 NOTE 3 Where applicable, use of an official language may be required in the exercise of  
1886 rights and obligations of individuals in that jurisdictional domain.

1887

1888 NOTE 4 Where an official language of a jurisdictional domain has a controlled  
1889 vocabulary of the nature of a terminology, it may well have the characteristics of a special  
1890 language. In such cases, the terminology to be used must be specified.

1891

1892 NOTE 5 For an official language, the writing system(s) to be used shall be specified,  
1893 where the spoken use of a natural language has more than one writing system.

1894

1895 EXAMPLE The spoken language of use of an official language may at times have more  
1896 than one writing system. For example, two writing systems exist for the Inuktitut  
1897 language, namely, one Latin-1 based (Roman), the other is syllabic-based. Another  
1898 example is that of Norway which has two official writing systems both Latin-1 based  
1899 namely “Bokmål (Dano-Norwegian) and Nynorsk (New Norwegian).

1900

1901 NOTE 6 A jurisdictional domain may have more than one official language but these  
1902 may or may not have equal status.

1903

1904 EXAMPLE Canada has two official languages, Switzerland has three, while the Union of  
1905 South Africa has eleven official languages.

1906

1907 NOTE 7 The BOV requirement of the use of a specified language will place that  
1908 requirement on any FSV supporting service.

1909

1910 EXAMPLE A BOV requirement of Arabic, Chinese, Russian, Japanese, Korean, etc., as  
1911 an official language requires the FSV support service to be able to handle the associated  
1912 character sets

1913

### 1914 **3.080**

#### 1915 **Open-edi**

1916 **electronic data interchange** among multiple autonomous **Persons** to accomplish an explicit  
1917 shared business goal according to Open-edi standards.

1918 [ISO/IEC 14662:2004 (3.1.9)]

1919

### 1920 **3.081**

#### 1921 **Open-edi Descriptive Techniques (OeDT)**

1922 a specification method such as a **Formal Description Technique**, another methodology having  
1923 the characteristics of a **Formal Description Technique**, or a combination of such techniques as  
1924 needed to formally specify **BOV** concepts, in a computer processable form.  
1925 [ISO/IEC 14662:1997 (4.1.1)]

1926

### 1927 **3.082**

#### 1928 **Open-edi Party (OeP)**

1929 a **Person** that participates in **Open-edi**.

1930

1931 NOTE Often in this ISO/IEC 15944-5 standard referred to generically as "party" or "parties" for  
1932 any entity modelled as a Person as playing a role in Open-edi scenarios.

1933 [ISO/IEC 14662:2004 (3.1.11)]

1934

### 1935 **3.083**

#### 1936 **Open-edi scenario**

1937 a formal specification of a class of **business transactions** having the same business goal.

1938 [ISO/IEC 14662:2004 (3.1.12)]

1939

### 1940 **3.084**

#### 1941 **Open-edi Support Infrastructure (OeSI)**

1942 a model of the set of functional capabilities for **Open-edi systems** which, when taken together  
1943 with the **Decision Making Applications**, allows **Open-edi Parties** to participate in Open-edi  
1944 transactions.

1945 [ISO/IEC 14662:2004 (4.2.1)]

1946

### 1947 **3.085**

#### 1948 **Open-edi system**

1949 an **information technology system** which enables an **Open-edi Party** to participate in Open-edi  
1950 transactions.

1951 [ISO/IEC 14662:2004 (4.2.1)]

1952

### 1953 **3.086**

#### 1954 **organization**

1955 a unique framework of authority within which a person or persons act, or are designated to act,  
1956 towards some purpose.

1957

1958 NOTE The kinds of organizations covered by this International Standard include the following  
1959 examples:

1960

1961 EXAMPLE 1 An organization incorporated under law.

1962

1963 EXAMPLE 2 An unincorporated organization or activity providing goods and/or services  
1964 including:

1965

1966 1) partnerships;

1967 2) social or other non-profit organizations or similar bodies in which ownership or control is  
1968 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**

2108 **recognized individual name (RIN)**

2109 a **persona** of an **individual** having the properties of a **legally recognized name (LRN)**

2110

2111 NOTE 1: On the whole, a persona presented by an individual should have a basis in law (or  
2112 recognized jurisdictional domain) in order to be considered as the basis for a recognized  
2113 individual name (RIN)

2114

2115 NOTE 2: An individual may have more than one RIN and more than one RIN at the same time.

2116

2117 NOTE 3: The establishment of a RIN is usually accompanied by the assignment of a unique  
2118 identifier, i.e. by the jurisdictional domain (or public administration) which recognizes the  
2119 persona as a RIN.

2120

### 2121 **3.102**

#### 2122 **recorded information**

2123 any information that is recorded on or in a **medium** irrespective of form, recording medium or  
2124 technology utilized, and in a manner allowing for storage and retrieval.

2125

2126 NOTE 1 This is a generic definition and is independent of any ontology, (e.g., those of "facts"  
2127 versus "data" versus "information" versus "intelligence" versus "knowledge", etc.).

2128

2129 NOTE 2 Through the use of the term "information," all attributes of this term are inherited in this  
2130 definition.

2131

2132 NOTE 3 This definition covers:

2133

2134 (i) any form of recorded information, means of recording, and any medium on which  
2135 information can be recorded; and,

2136 (ii) all types of recorded information including all data types, instructions or software,  
2137 databases, etc.

2138 [ISO/IEC 15944-1:2002 (3.56)]

2139

### 2140 **3.103**

#### 2141 **registration**

2142 a **rule-based process**, explicitly stated, involving the use of one or more data elements, whose  
2143 value (or combination of values) are used to identify uniquely the results of assigning a **registry**  
2144 **entry**

2145

### 2146 **3.104**

#### 2147 **Registration Authority (RA)**

2148 a **Person** responsible for the maintenance of one or more **Registration Schemas** including the  
2149 assignment of a unique identifier for each recognized **entity** in a **Registration Schema**.

2150 [ISO/IEC 15944-1:2002 (3.57)]

2151

### 2152 **3.105**

#### 2153 **Registration Authority Identifier (RAI)**

2154 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 Equivalent(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 Equivalent (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/infoe/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 **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 **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 EXAMPLE A business letter printed on paper or displayed on a screen.

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

2331

### 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 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)]

**4 SYMBOLS AND ABBREVIATIONS**

<b>Acronym</b>	<b>Description</b>
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

<b>Acronym</b>	<b>Description</b>

2374 **5 FUNDAMENTAL PRINCIPLES AND ASSUMPTIONS**

2375

2376 5.1 INTRODUCTION

2377

2378 The Open-edi Reference Model identifies two basic classes of constraints; namely "internal  
2379 constraints" and "external constraints". This Part 5 focuses on "external constraints". In doing so  
2380 it builds on Part 1 of this multipart standard which provides the fundamental principles and  
2381 assumptions.

2382

2383 As stated in Clause 6.1.6 of ISO/IEC 15944-1:

2384

2385 *The class of "internal constraints" has been derived to provide a simplified view of*  
2386 *business transactions for which there are no external constraints or restrictions to the*  
2387 *nature and conduct of the transaction. The only constraints are those mutually agreed to*  
2388 *by the buyer and seller for the explicitly stated goal of the business transaction, i.e., they*  
2389 *are self-imposed. This allows one to build scenarios and scenario components for*  
2390 *referencing, registering and re-use as generic or base scenarios without having to include*  
2391 *potential external constraints. The rules governing specification of Open-edi scenarios*  
2392 *and their Components require that all applicable external constraints must be stated at*  
2393 *the time of instantiation but need not exist at the time of registration.*

2394

2395 *However, in most business transactions external constraints do apply, i.e., applicable*  
2396 *laws and regulations. These range from taxation related regulation; health and safety or*  
2397 *packaging and labelling requirements; ensuring that nature of the business transaction*  
2398 *and/or the goods or services delivered do not comprise behaviour of a criminal nature.*

2399

2400 Part 1, Clause 6.5.3 "External Constraints" states:

2401

2402 *"The majority of business transactions will be subject to constraints applied by outside*  
2403 *parties such as regulators, i.e., external constraints. These external constraints may vary*  
2404 *according to the nature of the business transaction, the role being played by one of the*  
2405 *parties or the nature of the information being sent. Sources of such external constraints*  
2406 *include:*

2407

- 2408 (a) national law;
- 2409 (b) national regulation;
- 2410 (c) trade body regulation;
- 2411 (d) codes of practice;
- 2412 (e) treaties;
- 2413 (f) international agreements;
- 2414 (g) memorandum of understanding;
- 2415 (h) international conventions;
- 2416 (i) international protocols;
- 2417 (j) international law".

2418

2419

2420 Clause 6.1.3 continues by providing various examples of external constraints.

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## 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:

- 2468 - content of the information flows in the form of precise and computer-processable  
2469 meaning, i.e. the semantics of data; and,  
2470 - the order and behaviour of the information flows themselves.

2471

2472 NOTE 4 Rules must be clear and explicit enough to be understood by all parties to a  
2473 business transaction. Rules also must be capable of being able to be specified using a  
2474 using a Formal Description Technique(s) (FDTs).

2475

2476 EXAMPLE A current and widely used FDT is "Unified Modelling Language (UML)".

2477

2478 NOTE 5 Specification of rules in an Open-edi business transaction should be compliant  
2479 with the requirements of ISO/IEC 15944-3 "Open-edi Description Techniques (OeDT)".

2480

2481 Another principle which this Part 5 supports and is based on, is that of key and distinguishing  
2482 aspect of a business transaction is that it involves the exchange and making of "commitments"  
2483 among the autonomous Persons which are parties to a business transaction.

2484

2485 Commitment is defined as:

2486

2487 ***commitment***

2488 *the making or accepting of a right, obligation, liability or responsibility by a **Person** that*  
2489 *is capable of enforcement in the jurisdiction in which the commitment is made.*

2490 [ISO/IEC 15944-1:2002 (3.9)]

2491

2492 **Rule nnn:**

2493 **In order for a commitment to be capable of enforcement, it shall have an identified and**  
2494 **referenced jurisdictional domain.**

2495

2496 It is a common practice for parties to a business transaction to mutually agree on the jurisdictional  
2497 domain in which the business transaction takes place, (e.g., as part of the planning or negotiation  
2498 process). Financial aspects, (e.g., "tax havens"), minimum external constraints, (e.g., "flags of  
2499 convenience"), etc., are but some factors in the parties deciding on the jurisdictional domain in  
2500 which a business transaction is deemed to take place. As such, the referenced jurisdictional  
2501 domain also determines the nature and degree to which commitments made among the parties can  
2502 be enforced.

2503

2504 **Rule nnn:**

2505 **Unless a particular external constraint governing the commitment made requires that it be**  
2506 **made in a specific jurisdictional domain, Persons are free to choose the jurisdictional**  
2507 **domain in which the business transaction is (deemed) to take place**

2508

2509 In the making of commitments, parties are generally free to choose the jurisdictional domain in  
2510 which the business transaction takes place. Parties in making contracts do negotiate and agree on  
2511 the jurisdiction whose laws are to govern the contract. However, depending on the nature of the  
2512 goods, services or rights being provided, applicable external constraints may specify and require

2513 the transaction to be enacted in a specified jurisdictional domain<sup>13</sup>.

2514

2515 **Rule nnn:**

2516 **Within a particular jurisdictional domain, it may be required to reference a specific act or**  
2517 **regulation as well as require the participation (in some form) of a regulator.**

2518

2519 In addition, to business transactions of certain natures being subject to external constraints and the  
2520 commitments among the parties taking place in a particular jurisdictional domain

2521

2522

## 2523 **5.2.2 The Role of "Regulator" Representing "External Constraints"**

2524

2525 ISO/IEC 15944-1, Clause 6.2.6 titled "*Person and external constraints: the "regulator"*"  
2526 introduced the role of "**regulator**" of a Person as in a business transaction. "Regulator" is one of  
2527 the three (primitive) sub-types of roles of Person in a business transaction. The other two are  
2528 "buyer" and "seller".<sup>14</sup> However, it is the role of regulator which comes into play when any of the  
2529 parties modelled in a business transaction and/or the good, service and/or right forming the goal  
2530 of the business transaction is governed by an external constraint.

2531

2532 **Rule nnn**

2533 **For any business transaction (or part thereof) which involves external constraint(s), the role**  
2534 **of regulator(s) shall be included and modelled as part of the scenario and scenario**  
2535 **components.**

2536

2537 "Regulator" is one of the three (primitive) sub-types of roles of Person in a business transaction.  
2538 The other two are "buyer" and "seller".<sup>15</sup> However, it is the role of regulator is which comes into  
2539 play when any of the parties modelled in a business transaction and/or the good, service and/or  
2540 right forming the goal of the business transaction is governed by an external constraint.

2541

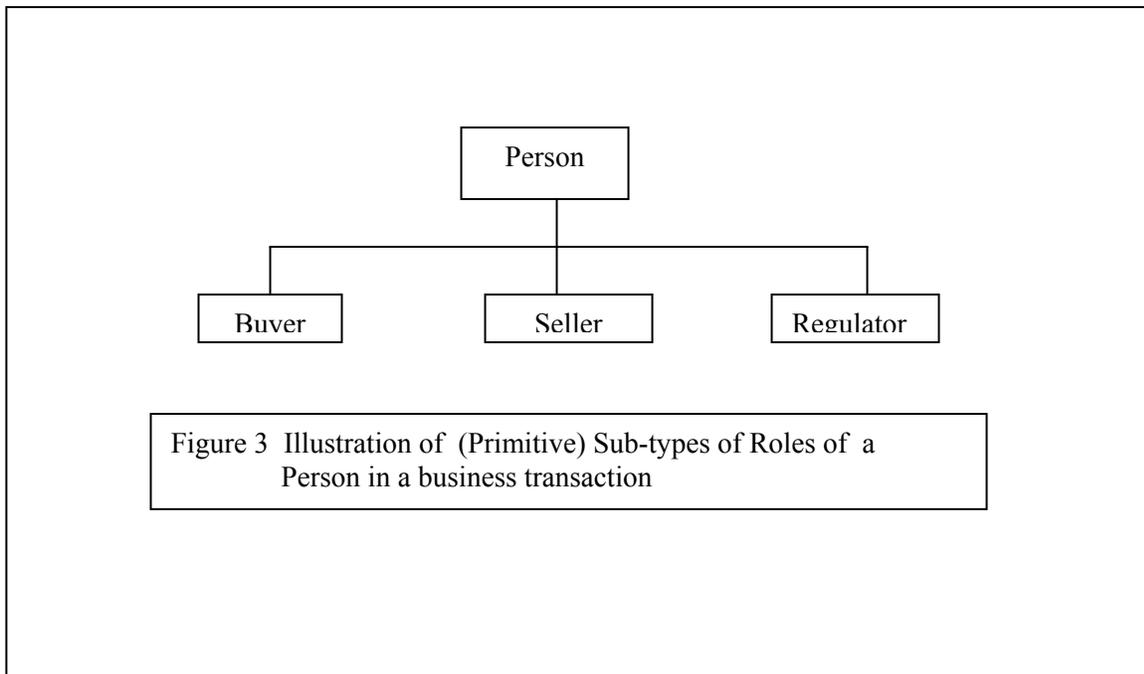
2542 The relationship is illustrated in Figure 3.

---

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

<sup>14</sup>See 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""

<sup>15</sup>See 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""



2543

2544

2545

### 2546 5.3 JURISDICTIONAL DOMAIN AS A SOURCE OF EXTERNAL CONSTRAINTS

2547

#### 2548 **Rule nnn:**

2549 **The primary source of a regulator having the authority to prescribe external constraints is**  
 2550 **that of the nature of a jurisdictional domain.**

2551

2552 The most frequent and prominent type of regulator having the authority to prescribe external  
 2553 constraints on business transactions, i.e., as a primitive, is that of the nature of a jurisdictional  
 2554 domain".

2555

#### 2556 Project Editors' Note:

2557

2558 *During the further development of Part 5 attention will be given to the identification of sources of*  
 2559 *external constraints other than jurisdictional domains. The results will be reflected in the FCD*  
 2560 *text for Clause 5.2.*

2561

2562 A jurisdictional domain is defined as:

2563

#### 2564 ***jurisdictional domain***

2565

2566 *a jurisdiction, recognized in law as a distinct legal and/or regulatory framework, which is*  
 2567 *a source of external constraints on Persons, their behaviour and the making of*  
 2568 *commitments among Persons including any aspect of a business transaction.*

2569

2570 *NOTE 1 The pivot jurisdictional domain is a United Nations (UN) recognized (or*  
 2571 *candidate) member state. Each UN member state, (a.k.a. country) may have sub-*  
 2572 *administrative divisions as recognized jurisdictional domains, (e.g., provinces, territories,*

2573 *cantons, länder, etc.), as decided by that UN member state.*

2574

2575 *NOTE 2 Several levels and categories of jurisdictional domains may exist within a*  
2576 *jurisdictional domain.*

2577

2578 *NOTE 3 Jurisdictional domains can combine to form new jurisdictional domains, (e.g.,*  
2579 *through bilateral, multilateral and/or international agreements).*

2580

2581 *EXAMPLE Included here, for example, are the European Union (EU), NAFTA, WTO,*  
2582 *WCO, ICAO, WHO, Red Cross, the ISO, the IEC, the ITU, etc.*

2583

2584 *NOTE 4 A jurisdictional domain may impact aspects of the commitment(s) made as part*  
2585 *of a business transaction including those pertaining to the making, selling, transfer of*  
2586 *goods, services and/or rights (and resulting liabilities) and associated information. This*  
2587 *is independent of whether such interchange of commitments are conducted on a for-profit*  
2588 *or not-for-profit basis and/or include monetary values.*

2589

2590

#### 2591 5.4 JURISDICTIONAL DOMAINS AS "PERSONS" AND "PUBLIC 2592 ADMINISTRATIONS"

2593

##### 2594 **Rule nnn:**

2595 **A jurisdictional domain has the properties and behaviours of a Person.**

2596

2597

2598 In business transaction modelling, a jurisdictional domain has the properties and behaviours of a  
2599 Person. This means that where required it may be modelled as a role player, i.e. as a regulator,  
2600 and thus, a source or recipient of Information Bundles, a source of the (prescribed) contents of a  
2601 Semantic Component, etc. in an Open-edi scenario.

2602

##### 2603 **Rule nnn:**

2604 **As a sub-type of Person, a jurisdictional domain has the properties and behaviours of a**  
2605 **public administration.**

2606

2607 Where in business transaction modelling it is necessary to differentiate among the three common  
2608 sub-types of Person, namely "individual", "organization" and "public administration", a  
2609 jurisdictional domain shall be modelled as a "public administration".

2610

2611 Figure 7 provides an integrated view of jurisdictional domain from the perspectives of (1)  
2612 constraints and its two sub-types; and, (2) Person and its three sub-types.

2613

##### 2614 *[[Project Editors' Note*

2615 *This figure is under construction. It will likely be similar in nature to Figure 18 in Part1. Several*  
2616 *views are possible. They will be presented to SC32/WG1 for discussion and feedback before*  
2617 *being included in this document]*

2618

2619

2620 Figure 7 - Integrated View of (1) two classes of constraints and (2) three sub-types of Person.

2621

2622

2623 **Rule nnn:**

2624 **A jurisdictional domain may consist of two or more other jurisdictional domains.**

2625

2626 The definition of "public administration" is essentially that of the combination or "binding", of the  
2627 definitions of "regulator" and "organization". Organizations are free to combine and form any  
2628 "unique framework of authority" as they see fit and thus form an (new) organization. Similarly,  
2629 two or more jurisdictional domains are free, according to the principles and rules which govern  
2630 them, to join into the formation of a new jurisdictional domain(s), i.e., "framework(s) of  
2631 authority". A very prevalent example here are UN member states forming new jurisdictional  
2632 domains for which the framework of authority within which these Persons act, or are designated  
2633 to act, towards some purpose is established via a treaty.

2634

2635

2636 5.5 UN MEMBER STATES AS "PIVOT" JURISDICTIONAL DOMAINS (PJD)

2637

2638 **Rule nnn:**

2639 **The most primitive jurisdictional domain is a member state of the United Nations.**

2640

2641 In order for an entity to be a Person, it must have the property of being "recognized by law". In  
2642 order for a jurisdictional domain to have "the authority to prescribe external constraints", it must  
2643 have a source for authority which is recognized (in law).

2644

2645 In the context of the Business Transaction Model (BTM), and from a world-wide perspective, the  
2646 most primitive form of jurisdictional domain is deemed to be a member state of the United  
2647 Nations.

2648

2649 Principles governing membership status are stated in "Chapter II, Membership" of the Charter of  
2650 the United Nations. The rules governing admission of membership in the United Nations are  
2651 those of the Security Council which recommends addition of new members to the General  
2652 Assembly. The UN also has rules for the suspension of rights and privileges of its membership as  
2653 well as expulsions. Annex C (Normative) "Codes Representing UN Member States and Their  
2654 Official Languages" presents a coded domain including UN member states as well as the date at  
2655 which they obtained this status.

2656

2657 **Rule nnn:**

2658 **UN recognized member states are deemed to be the pivot jurisdictional domains as sources  
2659 of external constraints.**

2660

2661 Multiple categories and combinations of jurisdictional domains exist. For the purpose of  
2662 identification and mapping of categories of jurisdictional domains, these are considered to be  
2663 either:

2664

2665 (1) a jurisdictional domain consisting of a single UN recognized member state;

2666 (2) various sub-levels and types of jurisdictional domains within and/or created by a UN

- 2667 member state. (In many cases these are not homogeneous in nature);  
2668 (3) various combinations of UN member states (as per Vienna Convention on the Law of  
2669 Treaties); and/or,  
2670 (4) various combinations of jurisdictional domains as sub-types of UN member states  
2671 concerned and permitted by the same. (For example, several provinces of Canada and  
2672 states of the United States forming a common jurisdictional domain).

2673

2674 **Rule nnn:**

2675 **A jurisdictional domain as a UN member state is free to create various sub-levels, i.e., more**  
2676 **granular, jurisdictional domains of a geopolitical nature.**

2677

2678 The most common example here is that of UN member states creating geopolitical based sub-  
2679 divisions as distinct jurisdictional domains, (e.g., provinces, länder, territories, states, etc.)<sup>16</sup> Not  
2680 all these may have the same power to prescribe external constraints. Often one or more of these  
2681 sub-divisions has a legal status different from the others. A sub-division of a UN member state as  
2682 a jurisdictional domain may in turn also create new sub-divisions of its jurisdictional domain as  
2683 jurisdictional domains, (e.g., municipalities, counties, parishes, townships, etc.).

2684

2685 **Rule nnn:**

2686 **A jurisdictional domain as a UN member state is free to join with other peer members in**  
2687 **establishing new jurisdictional domains.**

2688

2689 The most common example here is that of UN member states forming new jurisdictional domains  
2690 in accordance with the rules of the Vienna Convention on the Law of Treaties. The combination  
2691 of the application of these rules and the registering of the treaty with the United Nations results in  
2692 the establishment of a new recognized jurisdictional domain. It also results in all the signatory  
2693 jurisdictional domains being identified. The title of UN treaty which governs the jurisdictional  
2694 domain often also serves as the title of the jurisdictional domain so created.

2695

2696 **Rule nnn:**

2697 **Jurisdictional domains which are of a geopolitical nature but not UN member states are**  
2698 **free to form new jurisdictional domains according to the rules which apply to the formation**  
2699 **of such a new jurisdictional domain. If so, the legal instrument underlying this new**  
2700 **jurisdictional domain shall be referenced.**

2701

2702

2703

2704 5.6 JURISDICTIONAL DOMAINS AS "PEERS"

2705

2706 **Rule nnn:**

2707 **For the purposes of specifying (and modelling) external constraints for which the sources**  
2708 **are jurisdictional domains, such jurisdictional domains are considered to be "peers" unless**  
2709 **stated otherwise.**

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<sup>16</sup>The 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".

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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. hace 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 not<sup>17</sup>.

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

---

<sup>17</sup> 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.

2769 **6.0 PRINCIPAL REQUIREMENTS OF JURISDICTIONAL DOMAINS**

2770

2771 6.1 INTRODUCTION

2772

2773 Project Editors' Note(s):

2774

2775 1. *The 2<sup>nd</sup> CD text of Clause 6.1 will be amended based on revision to the text of sub-*  
2776 *clauses of Clause 6.*

2777

2778 2. *Are there other "primitive" common external constraints requirements on commitment*  
2779 *exchange of a "horizontal" nature arising from jurisdictional domains which need to be*  
2780 *included in Part 5 in addition to language, public policy (e.g., re "individuals" with*  
2781 *respect to "consumer protection", "privacy protection", "individual accessibility"),*  
2782 *identification, records retention or information management ?*

2783

2784 This standard focuses on the identification of the principal common requirements of jurisdictional  
2785 domains as the primary sources of external constraints.

2786

2787 6.2 JURISDICTIONAL DOMAINS AND OFFICIAL LANGUAGES

2788

2789 **6.2.1 Introduction - Choice of Use of Language (in a Business Transaction)**

2790

2791 Choice of use of language is important in order to ensure unambiguity in the semantics of the  
2792 recorded information exchanged among autonomous Persons in a business transaction  
2793 particularly with respect to the commitments made.

2794

2795 **Rule nnn:**

2796 **Choice of use of language(s) is governed by three primary factors:**

2797

- 2798 **(1) seller, i.e., supplier choice;**
- 2799 **(2) buyer, i.e., user, demands; and/or;**
- 2800 **(3) requirements of a jurisdictional domain.**

2801

2802 Choice of language(s) is governed by the primary factors; namely:

2803

- 2804 (1) seller, i.e., supplier choice

2805

2806 It is up to sellers in providing a good, service and/or right to decide which natural language(s)  
2807 they wish to utilize in the provision of such a good, service and/or right, i.e., depending on the  
2808 nature of the good, service, and/or right being offered by a seller and the (primary) markets  
2809 targeted by the seller.

2810

2811 As such, sellers are free to decide the use of language(s) in which they wish to offer their goods,  
2812 services and/or right. Here from a supplier perspective decision on choice of language use is  
2813 driven by the nature of the markets to which such offerings are targeted.

2814

- 2815 (2) buyer, i.e., user, demands

2816

2817 Buyers are free to decide which language to use in obtaining a good, service and/or right. Choice  
2818 of language of a buyer is generally restricted to those languages in which the buyer is capable of  
2819 using to making commitments. At times a buyer may obtain the services of an "agent" to bridge  
2820 differences in use of language between the seller and buyer in a business transaction. [Note:  
2821 Where the "buyer" is an "individual", requirements of a consumer protection nature may dictate  
2822 choice of language. If so, these are to be considered an external constraint of a jurisdictional  
2823 domain].

2824

2825 Here combinations of seller choice and buyer demands can be modelled and specified as internal  
2826 constraints<sup>18</sup> with respect to choice of language(s) can be predefined, a negotiable.

2827 Here combinations of seller choice and buyer demands can be modelled and specified as internal  
2828 constraints<sup>19</sup> with respect to choice of language(s) can be predefined and be negotiable.

2829

2830 (3) requirements of jurisdictional domain

2831

2832 Depending on the nature of the good, service and/or right forming the goal of the business  
2833 transaction, requirements of a jurisdictional domain can specify the language to be used. Further  
2834 the location chosen by the buyer and seller in which a business transaction takes place or is  
2835 deemed to take place The jurisdiction domain of the location where a business transaction takes  
2836 place or is deemed to take place<sup>20</sup> may also specify the language to be utilized. {See further  
2837 Clause 6.2+}

2838

2839 **Rule nnn:**

2840

2841 **In business transactions which are modelled and registered as scenarios and scenario**  
2842 **components which involve internal constraints only, the parties involved are free to choose**  
2843 **and decide among themselves the natural language(s) to be used for the recorded**  
2844 **information in a business transaction.**

2845

2846 ***Guideline nnn-n:***

2847 ***In modelling business transactions which involve internal constraints only, it is advisable that***  
2848 ***the parties concerned choose a combination of (1) a natural language and (2) its use in a***  
2849 ***designated jurisdictional domain, i.e., as identified in Annex C.***

2850

2851 On the whole, parties to a business transaction are free to choose and decide among themselves  
2852 the language(s) to be used for the recorded information, i.e., in the form of form of scenarios,  
2853 scenario attributes, information bundles and semantic components. This can be a natural  
2854 language or a special language, (e.g., as may be appropriate in a specific industry sector, technical  
2855 area, scientific discipline, etc.). As such, choice of language is an internal constraint".

---

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

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

<sup>20</sup> 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.

2856

2857 The existing ISO definition for "**language**", "**natural language**" and "**special language**" (see  
2858 Clause 3) are applicable to Part 5.

2859

2860 Many sectors have through custom and usage developed a special language. Use of such a  
2861 special language minimizes ambiguity in the semantics of the recorded information utilized to  
2862 make commitments among the parties concerned. A key hallmark of a special language is that it  
2863 has a recognized distinct controlled vocabulary (or special dictionary) which specifies terms used  
2864 and defines their meaning.

2865

2866 Examples include "specialized agencies" of the UN system as (a jurisdictional domain) utilizing  
2867 special language(s) and controlled vocabulary(ies) to ensure required unambiguity in semantics  
2868 from a worldwide perspective and context, (e.g., the ILO, ICAO, IMO, WHO, IMF, etc.<sup>21</sup> {See  
2869 further, Clause 6.2.7 below}

2870

2871 *Project Editors' Note*

2872

2873 *Added draft text and some examples to be provided as part of the FCD version.*

2874

## 2875 **6.2.2 Jurisdictional Domain as an External Constraint on Choice of Language(s)**

2876

2877 Internal constraints are self-imposed rules, i.e. those which parties to a business transaction  
2878 negotiate and agree to among themselves. This includes the choice of language in which the  
2879 commitments are made and the business transaction actualized. As such one can model business  
2880 scenarios and scenario components, identify, register and re-use them in whatever language one  
2881 chooses.

2882

2883 Any combination of:

2884

- 2885 ➤ seller, i.e., supplier, choice and requirements of jurisdictional domains;
- 2886 ➤ buyer, i.e., user, requirements and jurisdictional domain; and/or,
- 2887 ➤ supplier choices, buyer demands and requirements of jurisdictional domains

2888

2889 requires the incorporation and ability to support the demands of external constraints with respect  
2890 to use of language in the modelling, specification, registration and re-use of scenarios, scenario  
2891 attributes and scenario components, i.e., roles, Information Bundles (IBs) and their Semantic  
2892 Components (SCs).

2893

2894 **Rule nnn:**

2895

2896 **In business transactions which are modelled (and registered) as scenarios and scenario**  
2897 **components which involve external constraints, one shall specify the official language(s) to**  
2898 **be supported based on the requirements of the jurisdictional domain(s) which is the**  
2899 **source(s) for these external constraints.**

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<sup>21</sup>Specific examples are in the process of being prepared.

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**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"<sup>22</sup>**

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).*

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

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*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 languages<sup>23</sup>

---

<sup>23</sup>For 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.

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**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 status<sup>24</sup>.**

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".

---

<sup>24</sup> 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.

3029 The definition for "de facto language" is:

3030

3031 ***de facto language***

3032 *a natural language used in a jurisdictional domain which has the properties and*  
3033 *behaviours of an official language in that jurisdictional domain without having formally*  
3034 *been declared as such by that jurisdictional domain.*

3035

3036 *NOTE 1 A de facto language of a jurisdictional domain is often established through long*  
3037 *term use and custom.*

3038

3039 *NOTE 2 Unless explicitly stated otherwise and for the purposes of modelling a business*  
3040 *transaction through scenario(s), scenario attributes and/or scenario components, a de*  
3041 *facto language of a jurisdictional domain is assumed to have the same properties and*  
3042 *behaviours of an official language.*

3043

3044 **Rule nnn:**

3045 **A jurisdictional domain either may have one or more official languages and, if not, may**  
3046 **have only one “de facto language”.**

3047

3048 A de facto language of a jurisdictional domain achieves its “legal status” through long time use  
3049 and custom. This is not an uncommon feature, in jurisdictional domains whose legal system is  
3050 that of a “common law” nature. However, a jurisdictional domain can not have more than one de  
3051 facto language since such a condition would require it to legally recognize the two (or more) de  
3052 facto languages as having equal status. Such recognition in law of equal status of two (or more)  
3053 defacto languages in that jurisdictional domain would make the same as having the status of  
3054 “official languages”. Annex C is constructed based on this rule.

3055

3056 *Project Editors’ Notes*

3057

3058 1. *The following text and definition pertaining to “national language” was accepted as*  
3059 *“normative text” without comment in the 1<sup>st</sup> CD ballot document. It therefore is required*  
3060 *to be carried forward into this 2<sup>nd</sup> CD ballot document , the FCD and eventual FDIS*  
3061 *ballot documents.*

3062 2. *However, response to comments on Annex C by Norway on the 1<sup>st</sup> CD ballot document*  
3063 *and work within Canada pertaining to linguistic requirements and right of Aboriginal*  
3064 *peoples led to the development of the concept/definition of “legally recognized*  
3065 *language(LRL) as the 3<sup>rd</sup> sub-type of language from an external constraints perspective*  
3066 *and incorporated as such in this 2<sup>nd</sup> CD.*

3067 3. *Consequently, the Project Editors ask “Is the following text and definition of “national*  
3068 *language” useful or should it be deleted?*

3069 4. *Currently, we have three sub-types of language from an external constraints perspective,*  
3070 *namely “official language”, “de facto language”, and “legally recognized language”.*  
3071 *The example given here, i.e. that of Raeto-Romance (“roh”) may well be covered by*  
3072 *“legally recognized language” insofar it has legal status in in or more jurisdictional*  
3073 *domains.*

3074

3075 Sometimes, the concept "national language"<sup>25</sup> is used. It is not the same as "official language".

3076

3077 The definition of "national language" is:

3078

3079 Sometimes, the concept "national language"<sup>26</sup> is used. It is not the same as "official language".

3080

3081 The definition of "national language" is:

3082

3083 ***national language***

3084 *a language used by a community of people within a jurisdictional domain or among*

3085 *several jurisdictional domains.*

3086

3087 *EXAMPLE In Switzerland, Raeto-Romance (ISO 639-2/T code "roh") is a national*

3088 *language, but not an official language, i.e., it is not used in public administration.*

3089

3090

3091

3092 **6.2.4 Gender and Official Languages**

3093

3094 **Rule nnn:**

3095 **In order to be able to specify the gender of a name or term used for a business object, the**

3096 **set of "Codes Representing Gender in Natural Languages" shall be used in the modelling of**

3097 **a business transaction and registration of any related business object.**

3098

3099 **Rule nnn:**

3100 **Where the official language (or de facto language) of a jurisdictional domain has no gender**

3101 **this shall be stated.**

3102

3103 Many natural languages have "gender" as part of their grammar while others do not (e.g. English

3104 does not). Knowing the gender of nouns as words, terms, "names", etc., is often needed to ensure

3105 unambiguity in interoperability of semantics among different languages from both IT interface

3106 and human interface perspectives. At times, specification of gender of the term or noun is

3107 important to ensure unambiguity in semantics of the semantic component(s) and information

3108 bundle(s) interchanged among parties in making commitments in a business transaction. (See

3109 further Annex K for some examples).

3110

3111 Further, in natural languages where gender is an essential part of the language, the gender of the

3112 noun governs both the meaning and the representation of the associated/relevant words in the

3113 noun phrase. The gender of the noun also may impact the representation of the associated verb

3114 phrases. Therefore, gender of the noun is important in the use of official languages.

---

<sup>25</sup> 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.

<sup>26</sup> 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.

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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".

<b>ISO/IEC 15944-5:nn Codes Representing Gender in Natural Languages</b>					
<b>IT Interface</b>			<b>Human Interface Equivalent: Linguistic - Written Form</b>		
<b>Coded Domain ID</b>	<b>Table ID</b>	<b>ID Code</b>	<b>ISO English</b>	<b>ISO French</b>	<b>ISO Spanish</b>
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

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*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**

3149 From an IT interface as well as an IT interoperability perspective, one needs, in business  
3150 transactions, unique, unambiguous and linguistically-neutral identifiers for scenarios and scenario  
3151 components. These required properties and behaviours of an identifier for use in (electronic)  
3152 business transactions were addressed in ISO/IEC 15944-1:2002. The resulting definitions for an  
3153 identifier (in a business transaction) apply also in this part. For the purposes of this part, they are  
3154 "eb-identifiers".

3155  
3156

3157 Project Editors' Note(s):

3158

3159 1. *To be completed prior to FCD ballot version..*

3160

3161 From a jurisdictional domain perspective, it is important that persons making the commitments in  
3162 a business transaction are able to have a complete understanding of the semantic(s) of a eb-  
3163 identifier. That is, where and when required, "human interface equivalent" (HIE) may need to be  
3164 made available.

3165

3166 "Human interface equivalent" (HIE) is defined as:

3167

3168 ***Human Interface Equivalent (HIE):** a representation of the **unambiguous** and **IT-***  
3169 ***enabled semantics of an **IT interface equivalent** (in a **business transaction**), often the **ID*****  
3170 ***code of a coded domain** (or a **composite identifier**), in a formalized manner suitable for*  
3171 *communication to and understanding by humans.*

3172

3173 NOTE 1 Human interface equivalents can be linguistic or non-linguistic in nature.

3174

3175 NOTE 2 In most cases there will be multiple human interface equivalent representations as  
3176 required to meet localization requirements, i.e. those of a linguistic nature, jurisdictional nature,  
3177 and/or sectorial nature.

3178

3179 NOTE 3 Human interface equivalents include representations in various forms or formats, (e.g.,  
3180 in addition to written text those of an audio, symbol (and icon) nature, glyphs, image, etc.)

3181

3182 **Rule nnn:**

3183

3184 **Where a jurisdictional domain has more than one official language, human interface**  
3185 **equivalents (HIEs) are required in each official language in order to ensure unambiguity in**  
3186 **the semantics of the commitments made.**

3187

3188 **Rule nnn:**

3189 **It is up to a jurisdictional domain to establish HIEs in its official language(s) where these**  
3190 **are part of the specification and implementation of external constraints.**

3191

3192

## 3193 **6.2.6 UN Member States and Their Official (or de facto) Languages**

3194

3195 A key attribute of a jurisdictional domain is that it predefines and specifies the language (s) in

3196 which it acts and communicates in any matter of a legal nature but also with respect to any  
3197 commitments it makes, services it provides, rights it grants, etc. with any Person within its  
3198 domain, i.e. as its official language(s). This is especially so for UN member states. Where a UN  
3199 member state does not have an official language(s), it has a de facto language.

3200

3201 A key aspect of a business transaction, which sets it apart from any information exchanges in  
3202 general, is that it involves the making of commitments among the parties involved. A commitment  
3203 in turn is that it must be capable of enforcement in a jurisdictional domain. Any such enforcement  
3204 action will need to take place in the official language(s) of the jurisdictional domain in which it is  
3205 being enforced.

3206

3207 As such, it is important to know what the official language(s) are (or de facto language is) of a  
3208 jurisdictional domain in order to which apply as external constraints when modelling and  
3209 instantiating a modelled business transaction, i.e. as an Open-edi scenario or any scenario  
3210 component. This information is provided in “*Annex C (Normative) ; Codes Representing UN*  
3211 *Member States and their Official (or de facto) Language(s)*”

3212

3213 *Project Editors' Note(s):*

3214

3215

3216 1. *The current version of Annex C as part of this 2<sup>nd</sup> CD already incorporates the ballot*  
3217 *comments received on the 1<sup>st</sup> CD document..*

3218

3219

3220

## 3221 **6.2.7 International Organizations and Official Languages**

3222

3223 *Project Editors Notes*

3224

3225 *1. No P-member comments were received on this clause and its sub-clauses on the 1<sup>st</sup> CD ballot*  
3226 *document. Consequently, Clause 6.2.7 and its sub-clauses should be progressed to 2<sup>nd</sup> CD, FCD*  
3227 *and FDIS*

3228

3229 *2. The Project Editors in responding to other 1<sup>st</sup> CD ballot document comments as well as*  
3230 *working on other parts of this 2<sup>nd</sup> CD document found it more efficient to eliminate the sub-*  
3231 *clauses for Clause 6.2.7 and make it a single clause instead.*

3232

3233

3234 International organizations often have the status of a jurisdictional domain, particularly those in  
3235 the public sector. A primary example are those international organizations established as a result  
3236 of treaties among UN member states. UN member states by being treaty members, i.e. signatories,  
3237 to the document establishing an international organization bind themselves, i.e. commit  
3238 themselves, to the principles and rules of the international organization including the use of the  
3239 official language(s) of the international organization taking precedence over the official languages  
3240 of the jurisdictional domains who are signatories to that treaty. Even international organizations  
3241 in the private sector can have this characteristic (e.g. the International Chamber of Commerce  
3242 (ICC) and its INCOTERMS.

3243 The most common example of international "public administration" are the UN "specialized  
3244 agencies". Each of these has one or more official languages. They at times also specify one (or  
3245 more of these) as their daily "working" languages. Another example are entities of the nature of  
3246 the World Trade Organization (WTO), the World Customs Organization (WCO), etc. and other  
3247 non-UN system organization that functions as a jurisdictional domain.

3248

3249 **Rule nnn**

3250

3251 **The official language of a treaty-based international organization recognized as having**  
3252 **primary competence in a specific sector can override the official language requirements of**  
3253 **the jurisdictional domains of UN member states.**

3254

3255 UN member states as signatories to an internationally recognized treaty and thus having the force  
3256 of law from a global, i.e. worldwide, application perspective commit themselves, as signatory  
3257 parties, to have the principles and rules of such a treaty-based international organization as taking  
3258 precedence over the principles and rules governing their own jurisdictional domains.

3259

3260 For example, in the sector of civil aviation, the International Civil Aviation Organization  
3261 (ICAO)<sup>27</sup> has been designated and recognized as the world-wide Source Authority ( including  
3262 being the "coded domain Source Authority" for many coded domains. The one "official  
3263 language" of ICAO is "ICAO English"<sup>28</sup>. This means that all the definitions and terms for use in  
3264 communications, navigation and surveillance (CNS) for civil aviation world-wide, particularly for  
3265 any international flights among all jurisdictional domains shall be conducted in "ICAO English".

3266

3267

3268

3269 **Rule nnn:**

3270 **In modelling a business transaction (or parts thereof) and registering them as re-useable**  
3271 **business objects involving internal constraints these should be modelled in a manner which**  
3272 **supports the language(s) of the source authorities referenced and utilized in such referenced**  
3273 **specifications.**

3274

3275 An example here is the International Chamber of Commerce (ICC) is a private sector  
3276 organization. The ICC is the Source Authority for the "International Commercial Terms"  
3277 (INCOTERMS). INCOTERMS are widely used in domestic and international business  
3278 transactions. These INCOTERMS have been made available in over 30 languages

3279

3280 **6.2.8 Legally Recognized Languages (LRLs)<sup>29</sup>**

---

<sup>27</sup> See further the ICAO website at < [www.icao.org](http://www.icao.org) > .

<sup>28</sup> "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

<sup>29</sup> This 1<sup>st</sup> 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.

3281  
3282 The official language(s) (or de facto language(s)) of a UN member state (or a sub-division  
3283 thereof) serves as a common external constraint on the modelling and instantiations of business  
3284 transactions within that jurisdictional domain as a whole. However, within a jurisdictional  
3285 domain, there may exist acts, regulations, legal instruments, etc., which contain requirements or  
3286 rights of a linguistic nature, i.e., for languages other than those already identified as an official  
3287 language(s) in that jurisdictional domain. These are languages which have legal recognition in a  
3288 specific context, for a specific purpose and/or for a specified geographic territory within a  
3289 jurisdictional domain<sup>30</sup>. Linguistic requirements of this nature can be categorized as legally  
3290 recognized languages (LRL) defined as:

3291  
3292 **legally recognized language (LRL):** a **natural language** which has status (other than an **official**  
3293 **language** or **de facto language**) in a **jurisdictional domain** as stated in an act, regulation, or  
3294 other legal instrument, which grants a community of people (or its **individuals**) the right to use  
3295 that language in the context stipulated by the legal instrument(s).

3296  
3297 NOTE The LRL can be specified through either:

- 3298  
3299 ➤ the identification of a language by the name utilized; or,  
3300 ➤ the identification of a people and thus their language(s).

3301  
3302 EXAMPLE In addition to acts and regulations, legal instruments include self-  
3303 government agreements, land claim settlements, court decisions, jurisprudence, etc.

3304  
3305 One area which has seen a rapid rise in the introduction of LRLs is with respect to recognition of  
3306 rights of Aboriginal peoples, rights of a "minority" in a specific jurisdictional domain, etc.

## 3307 3308 6.3 JURISDICTIONAL DOMAINS AND PUBLIC POLICY REQUIREMENTS

### 3309 3310 6.3.1 Introduction

3311  
3312 Increasingly jurisdictional domains require those providing a good, service and/or right in making  
3313 such offers, and those executing resulting (electronic) business transactions, to comply with  
3314 generic horizontal requirements of the nature of rights pertaining to natural persons in their role as  
3315 individuals. Clause 0.2 and Figure 3 in ISO/IEC 15944-1:2002 identified these as "public policy"  
3316 requirements "particularly" those of a generic nature such as consumer protection, privacy, etc."

3317  
3318 In addition, Clause 6.2.8 in ISO/IEC 15944-1:2002 titled "Person and external constraints:  
3319 constraints: consumer and vendor" already introduced "consumer protection" as a minimum  
3320 external constraint which needs to be taken into account in modelling business transactions doing  
3321 so in a limited, i.e., primitive manner.

3322  
3323 There are other external constraints of a horizontal generic "public policy" nature which need to

---

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

3324 be taken into account in modelling business transactions. These include privacy, special needs,  
3325 etc. As per Clause 6.1.6 "Business transaction model: Classes of constraints" (in ISO/IEC 15944-  
3326 1:2002), these form part of the category of "External Constraints: Public Administration" (as  
3327 identified in Figure 8 in Part 1).

3328

3329 This Clause 6.3 focuses on some of the most basic categories of public policy as minimum  
3330 external constraints that need to be taken into account in modelling (electronic) business  
3331 transactions which involve, i.e., pertain to, "individuals" as "buyers". Those already identified  
3332 include:

3333

- 3334 ➤ consumer protection;
- 3335 ➤ privacy;
- 3336 ➤ accessibility; and,
- 3337 ➤ human rights.

3338

3339 As such one distinct category of external constraints for which the source is a jurisdictional  
3340 domain is that of "public policy" which is defined as:

3341

3342 ***public policy:***

3343

3344 *a category of **external constraints** of a **jurisdictional domain** specified in the form of a*  
3345 *right of an **individual** or a requirement of an **organization** and/or **public administration***  
3346 *with respect to an **individual** pertaining to any exchange of **commitments** among the*  
3347 *parties concerned involving a good, service and/or right including information*  
3348 *management and interchange requirements.*

3349

3350 *NOTE 1 Public policy requirements may apply to any one, all or combinations of the*  
3351 *fundamental activities comprising a business transaction, i.e., planning, identification,*  
3352 *negotiation, actualization and post-actualization. {See further Clause 6.3 "Rules*  
3353 *governing the process component" in ISO/IEC 15944-1:2002}.*

3354

3355 *NOTE 2 It is up to each jurisdictional domain to determine and specify where or not a*  
3356 *natural person in the role of "individual" or "organization Person" is deemed to be*  
3357 *competent to make a commitment of whatever nature or declared to be "incompetent",*  
3358 *i.e., declared to be incapable to make a commitment.*

3359

3360 *NOTE 3 It is up to each jurisdictional domain to determine whether or not the age of an*  
3361 *individual qualifies a public policy requirement, (e.g., those which specifically apply to an*  
3362 *individual under the age of thirteen (13) as a "child", those which require an individual to*  
3363 *have attained the age of adulthood, (e.g., 18 years or 21 years of age) of an individual to*  
3364 *be able to make commitments of a certain nature.*

3365

3366 *NOTE 4 Jurisdictional domains may have consumer protection or privacy requirements which*  
3367 *apply specifically individuals who are considered to be "children", "minors", etc.(e.g.*  
3368 *those who have not reached their 18<sup>th</sup> or 21<sup>st</sup> birthday according to the rules of the*  
3369 *applicable jurisdictional domain).*

3370

3371

3372 The three sub-clauses which follow on the minimal external constraints of this nature so in a  
3373 primitive, i.e., limited manner. It is outside the scope of this part of this multipart standard to  
3374 address and specify external constraints on a business transaction of the nature of "consumer  
3375 protection", "privacy", "accessibility", etc., in detail. The sole purpose of this clause is to ensure  
3376 that when one uses this standard to model business transactions or parts of business transactions  
3377 as reusable business objects in the form of scenarios and scenario components, one is able to  
3378 identify under "external constraints" in the template provided in Clause 10 requirements of a  
3379 "public policy" nature.

3380

3381

3382 Project Editors' Note(s):

3383

3384 *Following resolution of 2<sup>nd</sup> CD ballot comments, the Clause 10 "template" will be prepared as*  
3385 *part of the preparation of the FCD document. The contents of this template will support Clause*  
3386 *6.3 requirements. Its purpose and structure will be the same as the templates found in Clause 7.3*  
3387 *and Clause 9 in ISO/IEC 15944-1:2002.*

3388

3389

### 3390 **6.3.2 Person and External Constraints: Consumer Protection**<sup>31</sup>

3391

3392 In modelling (electronic) business transactions, a common minimum external constraint that  
3393 needs to be taken into account is that commonly known as "consumer protection".

3394

3395 **Rule nnn:**

3396 **From a minimal external constraints perspective, a common set of constraints of a**  
3397 **jurisdictional domain on a business transaction, where the buyer is an individual, are those**  
3398 **of a consumer protection nature**<sup>32</sup>.

3399

3400 In ISO/IEC 15944-1:2002, "**consumer**" and "**vendor**" has already been defined {For text see  
3401 above Clause 3.nnn and 3.nnn respectively}.

3402

3403 Based on these definitions, "consumer protection" is defined as:

3404

3405 ***consumer protection:** a set of external constraints of a jurisdictional domain as rights*  
3406 *of a consumer and thus as obligations (and possible liabilities) of a vendor in a business*  
3407 *transaction which apply to the good, service and/or right forming the object of the*  
3408 *business transaction (including associated information management and interchange*  
3409 *requirements including applicable (sets of) recorded information).*

3410

3411 *NOTE 1 Jurisdictional domains may restrict the application of their consumer protection*  
3412 *requirements as applicable only to individuals engaged in a business transaction of a*

---

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

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

3413 *commercial activity undertaken for personal, family or household purposes, i.e., they do*  
3414 *not apply to natural persons in their role as "organization" or "organization Person".*

3415  
3416 *NOTE 2 Jurisdictional domains may have particular consumer protection requirements*  
3417 *which apply specifically to individuals who are considered to be a "child" or a "minor",*  
3418 *(e.g., those individuals who have not reached their thirteenth (13) birthday).*

3419  
3420 *NOTE 3 Some jurisdictional domains may have consumer protection requirements which*  
3421 *are particular to the nature of the good, service and/or right being part of the goal of a*  
3422 *business transaction.*

3423  
3424 **Rule nnnn**

3425  
3426 **Where the buyer is an individual, the seller shall ascertain that the individual has the age**  
3427 **qualification required by the jurisdictional domain to be able to be involved in and make**  
3428 **commitments pertaining to the good, service and/or right being offered in the proposed**  
3429 **business transaction**

3430  
3431 **Guideline nnnG1**

3432  
3433 **Sellers shall take the required precautions to ensure that they do not communicate**  
3434 **inappropriate information, engage in monetary transactions or the making of any**  
3435 **commitments with children (without the verifiable consent of their parents or guardians)**

3436  
3437 This rule and guideline captures common consumer protection requirements pertaining sales in  
3438 general as well of particular goods or services to children and minors.

3439  
3440 **Rule nnn**

3441  
3442 **Seller shall ensure that where they intend to sell a good, service and/or right to a buyer as**  
3443 **an individual that consumer protection requirements of the applicable jurisdictional**  
3444 **domain of the buyer are supported.**

3445  
3446 These consumer protection requirements include the provision of "complete" information, the use  
3447 of language of the individual, terms of contract formation and fulfilment, privacy of the on-line  
3448 information, security of the personal information and payment, procedures for redress, stop to  
3449 unsolicited e-mail, etc.

3450  
3451 **6.3.3 Privacy Protection**

3452  
3453 In modelling (electronic) business transactions, a common minimum external constraint that  
3454 needs to be taken into account is that commonly known as "privacy" requirements (or in some  
3455 jurisdictional domains as "data protection"). In this standard, the term "privacy protection" is  
3456 used to identify this category of public policy requirements.

3457  
3458 **Rule nnn:**

3459 **From a minimal external constraints perspective, a common set of constraints of a**

3460 **jurisdictional domain on a business transaction where the buyer is an individual are those**  
3461 **of a privacy protection nature.**

3462

3463 In this standard "privacy protection" is defined as:

3464

3465 ***privacy protection:** a set of external constraints of a jurisdictional domain pertaining*  
3466 *to (a set of) recorded information on or about an identifiable individual, i.e., personal*  
3467 *information, with respect to the creation, collection, management, retention, access and*  
3468 *use and/or distribution of such recorded information about that individual including its*  
3469 *accuracy, timeliness, and relevancy.*

3470

3471 *NOTE 1 Recorded information collected or created for a specific purpose on an*  
3472 *identifiable individual, i.e., the explicitly shared goal of the business transaction involving*  
3473 *an individual, shall not be utilized for another purpose without the explicit and informed*  
3474 *consent of the individual to whom the recorded information pertains.*

3475

3476 *NOTE 2 Privacy requirements include the right of an individual to be able to view the*  
3477 *recorded information about him/her and to request corrections to the same in order to*  
3478 *ensure that such recorded information is accurate and up-to-date.*

3479

3480 *NOTE 3 Where jurisdictional domains have legal requirements which override privacy*  
3481 *protection requirements these must be specified, (e.g., national security, investigations by*  
3482 *law enforcement agencies, etc.).*

3483

3484 It is noted that from a supplier perspective, privacy protection requirements can be summarized as  
3485 maintaining recorded information about an identifiable individual which is as timely, accurate,  
3486 and relevant as possible, is utilized only for its original purpose and not for any other purpose  
3487 (unless consented to by the individual concerned), and that any such recorded information which  
3488 does not meet these requirements is expunged, unless there are other external constraints of a  
3489 jurisdictional domain nature which override such privacy protection requirements, (e.g., law  
3490 enforcement, national security, etc.). Key privacy principles include (1) accountability, (2)  
3491 identified purpose, (3) informed consent, (4) limiting collection, (5) limiting use, disclosure and  
3492 retention, (6) accuracy, (7) safeguards, (8) openness of privacy policy, (9) individual access to  
3493 their personal information, (10) challenging compliance, (11) transborder data flow controls, and  
3494 likely others.

3495

3496

3497 **Guideline nnG1:**

3498 **Where a jurisdictional domain differentiates in criteria of privacy protection with respect to**  
3499 **a natural person in its role as an "individual" or an "organization Person", this needs to be**  
3500 **specified.**

3501

3502 **Guideline nnG1:**

3503 **Where a jurisdictional domain has privacy protection requirements as a set of external**  
3504 **constraints which are applicable to a specific sector (public versus private, per industry**  
3505 **sector, etc.), or type of business transaction, this needs to be specified.**

3506

3507

### 3508 **6.3.4 Individual Accessibility**

3509

3510 A third increasingly common minimum external constraint of a public policy nature that needs to  
3511 be taken into account in modelling (electronic) business transactions through re-useable business  
3512 objects, are those which are categorized as accessibility requirements in the form of either (1)  
3513 rights of individuals in their use of information technologies at the human interface; and/or (2)  
3514 those providing goods or service in general or in particular to ensure that the provisioning of the  
3515 same does not discriminate against or provides for participation by “non-typical” users, i.e. those  
3516 persons with an impairment or disability of some kinds, who require some form of adaptive  
3517 semantics and technologies to participate in a business transaction, i.e. “individual accessibility”.  
3518 Here "accessibility" pertains to ensuring that goods or services being provided in (electronic)  
3519 business transactions that, in the making of the commitments of the parties, the IT systems  
3520 utilized are capable of supporting people with impairments or disabilities.

3521

3522 Jurisdictional domains often specify human accessibility requirements as being (1) of a generic  
3523 nature and applicable irrespective of the goals of a business transaction and the commitments  
3524 being entered into among the participating parties , (e.g., as part of basic human rights, as part of  
3525 its constitution, etc.); and/or (2) as applicable to a particular sector, (e.g., e-government,  
3526 education, etc.). Particular human accessibility requirements also exist at the UN member state’s  
3527 sub-division level, (e.g., a state, province, länder, etc.), at the regional level, (e.g., the European  
3528 Union)<sup>33</sup>.

3529

3530 Here disabilities can be of either a functional or cognitive nature.

3531

3532 "Individual accessibility" is defined as:

3533

3534 ***individual accessibility:*** a set of ***external constraints*** of a ***jurisdictional domain*** as  
3535 ***rights of an individual*** with disabilities to be able to utilize IT systems at the human, i.e.,  
3536 ***user, interface and the concomitant obligation of a seller to provide such adaptive***  
3537 ***technologies.***

3538

3539 *NOTE [to be added, if required]*

3540

3541 Examples of disabilities in the form of functional and cognitive limitations include:

3542

- 3543 ➤ people who are blind;
- 3544 ➤ people with low vision;
- 3545 ➤ people with colour blindness;
- 3546 ➤ people who are hard of hearing or deaf, i.e., are hearing impaired;
- 3547 ➤ people with physical disabilities;
- 3548 ➤ people with language or cognitive disabilities.

3549

3550 It is noted that language and cognitive disabilities are very difficult to specify and thus model as

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

3551 human interface requirements<sup>34</sup>, but often it is possible to do so. They include mental retardation,  
3552 lack of short term memory, dyslexia, dyscalculia, dysgraphia, auditory and perceptual disabilities,  
3553 cognitive disorganization, and visual perceptual disabilities.<sup>35</sup>

3554

3555 Nevertheless, unless a human disability(ies) of an individual is of the nature where the  
3556 jurisdictional domain considers or declares the individual to be "incompetent", i.e., not able to  
3557 make a commitment as a party to a business transaction, from an external constraints perspective,  
3558 there is a need to be able to support human accessibility requirements.

3559

3560 As such in the development of human interface equivalents (HIEs) for an ID code or a semantic  
3561 identifier, these also include those HIEs of a nature to ensure individual accessibility<sup>36</sup>.

3562

3563

### 3564 **6.3.5 Human Rights**

3565

3566 The three primitive public policy requirements identified above have as a common thread that  
3567 they apply to Persons in their role as an individual engaged as a "buyer" (or "consumer") in a  
3568 business transaction. There are other public policy requirements which may need to be supported  
3569 of a "human rights" nature in modelling a business transaction. Here in the context of "cultural  
3570 adaptability" as the third strategic direction of ISO/IEC JTC1 for its standards development<sup>37</sup>,  
3571 other public policy requirements which may need to be incorporated into the specification and re-  
3572 use of business objects include:

3573

3574 ➤ the UN "Universal Declaration of Human Rights" (1948);

3575

3576 ➤ the UN "Universal Declaration of Rights of Persons belonging to National or Ethnic,  
3577 Religious and Linguistic Minorities";

3578

3579 ➤ the UN "Universal Declaration of Cultural Diversity" (Paris, November, 2001); and,

3580

3581 ➤ others.

3582

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<sup>34</sup>Here 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 Annex A (Informative) — Codes de représentation des sexes humains supportant l'adaptabilité culturelle (linguistique)".

<sup>35</sup>See 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.

<sup>36</sup> Table 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.

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

3583

3584

#### 3585 6.4 JURISDICTIONAL DOMAINS AND IDENTIFICATION SYSTEMS

3586

3587 It is a common requirement for a jurisdictional domain to require that a specific identification  
3588 system to be utilized with respect to the identification of the good(s), service(s), and/or right(s)  
3589 forming an explicitly shared goal of the business transaction being modelled.

3590

3591 **Rule nnn:**

3592

3593 **When an external constraint of a jurisdictional domain requires use of a specific**  
3594 **identification system with respect to a Person identity (rPi) and/or with respect to a good,**  
3595 **service and/or right, pertaining to the business transaction being modelled as scenarios and**  
3596 **scenario components as re-useable business objects, such modelling shall be done in a**  
3597 **manner which supports the requirement of the identification system referenced.**

3598

3599 *Project Editors' Note(s):*

3600

3601 *Added draft text being completed by the Project Editors, based in large part on Annex C and D of*  
3602 *Part I providing the examples. It also includes rules governing "composite identifiers".*

3603

3604

#### 3605 6.5 JURISDICTIONAL DOMAINS AND CLASSIFICATION SYSTEMS

3606

3607 A key characteristic of jurisdictional domains is that:

3608

3609 (1) where they are geopolitical nature and issue laws, regulations, codes, etc., the  
3610 implementation of such external constraints includes of a particular perspective on the real  
3611 world and from that perspective develop predefined and structured a classification system  
3612 which is to be utilized whenever that particular external constraint applies to the business  
3613 transaction;

3614

3615 (2) where they are of focused and established with respect to goods, services and/or right, by  
3616 subject or discipline, etc., they, almost invariable, have a classification system for the  
3617 domain which they govern and their rulebase applies to.

3618

3619 **Rule nnn:**

3620 **Where an external constraint of a jurisdictional domain requires the use of a specific**  
3621 **classification system form part of the business transaction being modelled or as an**  
3622 **identifiable and registered scenario component, i.e., as a re-useable business object, this**  
3623 **shall be done in a manner which supports the requirements of the classification system**  
3624 **being referenced.**

3625

3626 **Rule nnn:**

3627 **Where a classification system uses identifiers for distinct entry and associated semantics in**  
3628 **that classification system such identifiers (or "composite identifiers") shall be utilized and**  
3629 **their structure in modelling a scenario or scenario component.**

3630

3631 In a classification system, the identifier for each distinct entry is often of the nature of a  
3632 "composite" identifier representing a block-numeric coding approach, a hierarchical approach,  
3633 etc. The use of such composite identifiers is very prevalent where the source authority as a  
3634 jurisdictional domain (or private sector organization) has more than one official (or working)  
3635 language. Here the (composite) identifier of a classification system (considered in e-business to  
3636 be a Registration Schema) forms part of the IT interface equivalent with which are associated  
3637 HIEs in multiple languages.

3638

3639 The same real world entity can and is "classified" and assigned different identifiers in various  
3640 classification systems. The ID of a real world entity in one classification system may well be not  
3641 appropriate for use in another context.

3642

3643 Project Editors' Note(s):

3644

3645 1. *Additional text, examples here are in progress of being developed. A common "entity" is*  
3646 *being utilized, i.e. "potato" from import/export, agriculture, disease control, etc., and*  
3647 *other external constraint requirements and perspectives. {See further Annex I and the*  
3648 *"Harmonized System" which is the classification system of the WCO}*

3649

3650 2. *Another example is that of "PCBs" from an environmental health requirements*  
3651 *perspective.*

3652

3653 3. *Link of classification systems to ISO thesauri standards also to be noted.*

3654

3655

3656

3657 6.6 JURISDICTIONAL DOMAINS AND "PREDEFINED" SCENARIOS AND  
3658 SCENARIO COMPONENTS

3659

### 3660 **6.6.1 Introduction**

3661

3662 Clauses 6.2 through 6.5 identify principle requirements of jurisdictional domains. They identify  
3663 some of the more common, i.e. primitive, types of requirements which jurisdictional domains  
3664 impose on (electronic) business transactions depending on the nature of the parties involved, and  
3665 the goal of the business transaction in terms of the good, services and/or right being exchanged.

3666

3667 On the whole, external constraints are specified in writing particularly where their source is a  
3668 jurisdictional domain. Jurisdictional domains as the primary source of external constraints  
3669 prescribe, limit, govern or specify any aspect of a business transaction including:

3670

- 3671 ➤ any aspect of the Person Component;
- 3672 ➤ any aspect of the Process Component; and/or,
- 3673 ➤ any aspect of the Data Component

3674

3675 and modelling the same as re-useable business objects in scenarios, scenario components and/or  
3676 or scenario attributes.

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## 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"<sup>38</sup> (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 personae<sup>39</sup>, 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**

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<sup>38</sup>On "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.

<sup>39</sup>While "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).

3708 **Person, a Person sub-type, any role qualification, etc., with respect to a business transaction**  
3709 **of a particular nature shall be specified unambiguously and in a manner so as to be able to**  
3710 **be modelled using an OeDT.**

3711  
3712 The application and implementation of this rule will result in scenarios and scenario components  
3713 for which use and semantics is predefined.

3714  
3715 **Rule nnn:**

3716 **Any external constraint of a jurisdictional domain which governs or qualifies the nature**  
3717 **and source of a Person Identity (rPi) with respect to a business transaction of a particular**  
3718 **nature shall be specified unambiguously and in a manner so as to be able to be modelled**  
3719 **using an OeDT.**

3720  
3721

#### 3722 **6.6.2.2 Persona as Legally Recognized Names (LRLs)**

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3724 It is a common requirement in business transactions for the parties involved to utilize a persona  
3725 which is recognized as having a legal status of some kind. Further, external constraints of a  
3726 jurisdictional domain often specify and require the use of a specified persona of a Person which  
3727 has a legal status of some kind and is recognized as such by all parties concerned, i.e, is a  
3728 "legally recognized name" (LRN), defined as follows:

3729  
3730

3731 **legally recognized name (LRN)**

3732 a **persona** associated with a role of a **Person** recognized as having legal status and so recognized  
3733 in a **jurisdictional domain** as accepted or assigned in compliance with the **rules** applicable of  
3734 that **jurisdictional domain**, i.e. as governing the **coded domain** of which the LRN is a member.

3735

3736 NOTE 1: A LRN may be of a general nature and thus be available for general use in commitment  
3737 exchange or may arise from the application of a particular law, regulation, program or service of a  
3738 jurisdictional domain and thus will have a specified use in commitment exchange.

3739

3740 NOTE 2: The process of establishment of a LRN is usually accompanied by the assignment of a  
3741 unique identifier

3742

3743 NOTE 3: A LRN is usually a registry entry in a register established by the jurisdictional domain  
3744 (usually by a specified public administration within that jurisdictional domain) for the purpose of  
3745 applying the applicable rules and registering and recording LRNs (and possible accompanying  
3746 unique identifiers accordingly).

3747

3748 NOTE 4: A Person may have more than one LRN (and associated LRN identifier).

3749

3750 **Rule nnn:**

3751 **A LRN may have both a long, i.e., complete, persona, or a short, i.e., truncated, persona.**

3752

3753 The rules of a specific act or regulation of a jurisdictional domain governing the registration of a LRN  
3754 often place little or no restriction on the number of characters, i.e., length, for that persona of a Person.  
3755 (These at times are referred to as the long form and short form). However, IT-systems may require or set

3756 limits on the length of the persona of a Person it is able to support<sup>40</sup>. Such short forms are commonly  
3757 referred to as a "truncated name". Where this is the case, rules exist for truncation of names in the  
3758 applicable act or regulation. International standards with truncated names also have rules for truncation.  
3759 A prime and most relevant example here is ISO/IEC 7501-3 which has detailed rules and examples for  
3760 the truncation of names of individuals<sup>41</sup>.

3761

3762 Project Editors Note:

3763

3764 *Do we need a definition for the concept of a "truncated recognized name", or "truncated LRN"? If so, a*  
3765 *draft definition could be:*

3766

3767 ***truncated recognized name:*** a truncation of a ***legally recognized name*** based on a  
3768 *predefined set of rules, i.e., a rulebase, for establishing a maximum length.*

3769

3770 *NOTE 1 Truncated recognized name(s) may be required for use in IT systems, the issuance of*  
3771 *identity tokens, (e.g., machine readable travel documents or cards), electronic data interchange,*  
3772 *etc.*

3773

3774 *NOTE 2A truncated recognized name serves as a type of persona.*

3775

3776 *NOTE 3A truncated recognized name may be deemed to be a legally recognized name (LRN) of*  
3777 *that Person.*

3778

3779

3780 **Rule nnn:**

3781 **The formation of a LRN of an incorporated organization, i.e., a legal person, is governed**  
3782 **by the rules of the jurisdictional domain in which it is incorporated, registered and**  
3783 **recognized as such.**

3784

3785 ***Guideline nnnG1:***

3786 ***When a jurisdictional domain agrees to establish a legal person, it usually assigns a unique***  
3787 ***identifier, i.e., ID Code, for that entity as a mandatory element of such an identification***  
3788 ***process as part of the Registration Schema (RS) of it being the Registration Authority (RA).***

3789

3790 ***Guideline nnnG2:***

3791 ***Where the jurisdictional domain has more than one official language, an incorporated***  
3792 ***organization may have equivalent LRN in each official language, i.e., as HIEs associated***  
3793 ***with its identifier.***

3794

3795 On the whole, the name of an incorporated entity, i.e., legal person, is unique within the

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<sup>40</sup> 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.

<sup>41</sup> 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.

3796 jurisdictional domain within which it is registered and officially recognized. Corporate names  
3797 can consist of characters, numbers or may be combinations of the same. Another type of LRN  
3798 of an organization can be a trademark which at times is also utilized as a persona of the  
3799 trademark holder.

3800

3801 **Rule nnn:**

3802 **The establishment and representation of name(s) of a public administration, i.e., its**  
3803 **personae, is determined by the jurisdictional domain of which it is part.**

3804

3805 ***Guideline nnnG1:***

3806 ***A public administration of a jurisdictional domain may or may not have a unique identifier of***  
3807 ***the nature of an ID Code within its Registration Schema (RS).***

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3809

3810 ***Guideline nnnG2:***

3811 ***If the jurisdictional domain has more than one official language, the public administration***  
3812 ***may have equivalent LRNs in each official language.***

3813

3814 ***Guideline nnnG3:***

3815 ***A public administration may have both a long, i.e., complete, formal LRN as well as a short***  
3816 ***form LRN.***

3817

3818 For example, ISO 3166-1 provides an example of both the "official name" and the "short form"  
3819 of countries.

3820

3821

3822 **Rule nnn:**

3823 **The personae of an individual shall include at least one LRN in order to confirm the**  
3824 **existence of that individual as a "natural person", i.e., the birth certificate name (or a**  
3825 **similar name)<sup>42</sup>.**

3826

3827 **Rule nnn:**

3828 **The establishment and representation of an individual, i.e., its personae, is determined by**  
3829 **the role and context of that individual within a jurisdictional domain, i.e., as controlled by**  
3830 **a regulator and the associated public administration.**

3831

3832 ***Guideline nnnG1:***

3833 ***Each public administration, acting on behalf of a regulator, may and does have different***  
3834 ***rules as to which personae it will accept as being a legally recognized name for an individual***  
3835 ***and registered as such in the specific context and associated rulebase which it administers.***

3836

3837 ***Guideline nnnG2:***

3838 ***An individual, may and likely will have multiple and at times quite different LRN and***  
3839 ***associated different unique identifiers.***

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<sup>42</sup>While 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.

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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"<sup>43</sup>.

#### 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:*

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<sup>43</sup> 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.

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- *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<sup>44</sup>, 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 domain<sup>45</sup>.

<b>ISO/IEC 15944-4:nn Codes Representing Specification of Records Retention Responsibility</b>				
<b>IT Interface</b>			<b>Human Interface Equivalent: Linguistic - Written Form</b>	
<b>Coded Domain ID</b>	<b>Table ID</b>	<b>ID Code</b>	<b>ISO English</b>	<b>ISO French</b>
15944-5	nn	00	other	autre <sup>46</sup>
15944-5	nn	01	seller is responsible	
15944-5	nn	02	buyer is responsible	
15944-5	nn	03	seller and buyer are both	

<sup>44</sup>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".

<sup>45</sup>This is a draft only and requires further work.

<sup>46</sup>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

3912

3913 *Project Editors' Note:*

3914

3915 *Draft text is in preparation to provide examples for each of the ID codes. On the whole, the*  
3916 *greater and specific the external constraint governing the nature of the good, service or right*  
3917 *being transacted the more extensive and specific the records retention requirements, (e.g., a*  
3918 *business transaction involving radioactive isotopes (for medical purposes) requires records*  
3919 *retention of a much more detail nature than that for aspirin).*

3920

3921 The reverse of records retention is "disposition". Disposition is an authorized action to remove,  
3922 i.e., alienate, a set of recorded information, from under the control of a Person and thereby  
3923 extinguishing ownership and accountability. There are basically a limited number of disposal  
3924 actions. These are identified in the following coded domain.

3925

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 <sup>47</sup>
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

3927

3928

3929 Project Editors' Note - Retention Triggers:

3930

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*

---

<sup>47</sup>The 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

3956

3957

3958 6.7 <<OPEN>>

3959

3960

3961

3962 7 RULES GOVERNING THE IDENTIFICATION OF CATEGORIES OF  
3963 JURISDICTIONAL DOMAINS

3964

3965 *Project Editors' Notes:*

3966

3967 1. *At the time of preparation of this 2<sup>nd</sup> CD document expected (detailed) text was not yet*  
3968 *received in final, i.e. redistributable, form.*

3969

3970 2. *However, the overall approach can still be presented. The text which already follows*  
3971 *captures the essential aspects.*

3972

3973

3974 7.1 INTRODUCTION

3975

3976 **Rule nnn:**

3977 **The basic rules for the identification of categories of jurisdictional domains are governed by**  
3978 **the Charter of the United Nations and more specifically by the Vienna Convention on the**  
3979 **Law of Treaties**<sup>48</sup>

3980

3981

3982 7.2 AS SINGLE ENTITIES - UN MEMBER STATES

3983

3984 This clause focuses on a scenario and scenario components incorporating external constraints at  
3985 the UN member state level, i.e., incorporating external constraints only of a single jurisdictional  
3986 domain, (e.g., Japan, USA, UK, China, Korea, etc.).

3987

3988 **Rule nnn:**

3989 **UN member states as peer jurisdictional domains are to be referenced by their 3-digit**  
3990 **numeric code as stated by the UN statistical system and provided in Annex C (Normative)**  
3991 **of this standard**<sup>49</sup>.

---

<sup>48</sup>See 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....>>

<sup>49</sup> (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

3992 As such, one can model business transactions as Open-edi scenarios and scenario components,  
3993 and then register, and reference them as business objects for use in a specified UN member  
3994 state<sup>50</sup>. Quite often, the external constraints of a specific e-business protocol in one  
3995 jurisdictional domain has much in common with those of other jurisdictional domains. As such,  
3996 buyers or sellers as well as e-business service providers are free to use a scenario and scenario  
3997 components developed as re-useable business objects in one jurisdictional domain as the base  
3998 for the development of scenarios and scenario components in another jurisdictional domain.

3999  
4000

### 4001 **7.3 Jurisdictional Domains Resulting from International Agreements**

4002

#### 4003 Project Editors' Notes:

4004

4005 1. Existing sub-clauses 7.3, 7.4, 7.5 and 7.6 basically pertain to various basic, i.e., primitive,  
4006 categories whereby "peer" jurisdictional domains, jointly agree to establish a new common  
4007 jurisdictional domain.

4008

4009 2. These sub-clauses have therefore been integrated into a single multipart sub-clause with an  
4010 Introduction.

4011

4012 3. Within Canada, some contributions to Clause 7.3 are expected.

4013

4014 4. P-member bodies are invited to make contributions to Clause 7.3 prior to it reaching FCD stage.

4015

4016

#### 4017 **7.3.1 Introduction**

4018

4019 UN member states as Person are free to establish binding agreements among themselves known as  
4020 "treaties". The UN defines "treaty" as follows:

4021

4022 **treaty:** *an international agreement concluded between UN member states in written form and*  
4023 *governed by international law.*

4024

4025 *NOTE A treaty can be embodied in a single instrument or in tow or more related instruments*  
4026 *and whatever its particular designation.*

4027

4028 [adapted from the Vienna Convention on the Law of Treaties, 1(a)]

4029

#### 4029 **Rule nnn:**

4030 **Treaties when entered into force shall be transmitted to the Secretariat of the United Nations for**  
4031 **registration or filing or recording as the case may be and for publication.**

4032

---

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.

<sup>50</sup>For 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.

4033 Project Editors' Note:

4034

4035 1. *A promised contribution from legal experts summarizing the UN registration process for*  
4036 *"treaties" (based on the Vienna Convention of the Law of Treaties" is overdue.*

4037

4038 2. *It is expected to become available prior to 2nd CD ballot resolution meeting, i.e., in time for use*  
4039 *and consideration at the next meeting of SC32/WG1 (as soon as the ballot closes in this 2nd CD).*

4040

4041 3. *It remains to be decided whether what parts of this contribution should be part of Clause 7 and*  
4042 *which should be part of an Annex.*

4043

4044 4. *Each "treaty" (or equivalent) registered with the UN Secretariat is assigned a unique identifier,*  
4045 *i.e, ID Code, in accordance with the rules governing this Registration Schema (RS) of the UN.*  
4046 *An expected contribution here is also "overdue". When received the essential normative*  
4047 *elements will be added to Clause 7.3 and the remaining text will be placed in an annex.*

4048

4049 In addition, to international treaties registered as treaties with the UN, jurisdictional domains be they UN  
4050 member states or administrative sub-divisions of UN member states can make (legally binding)  
4051 commitments among themselves in the form of a new "framework of authority" many categories of which  
4052 have the properties and behaviours of jurisdictional domain.

4053

4054 These can be of the nature of an "Exchange of Letters", "Memorandum of Understanding (MOU)",  
4055 bilateral, trilateral, and multilateral agreements (including protocols and conventions).

4056

### 4057 **7.3.2 Bilateral Agreements**

4058

4059 Project Editors' Note:

4060

4061 1. *A contribution is expected from legal experts for a draft definition of a "bilateral agreement"*  
4062 *which integrates international law, e-business and IT perspectives. It is expected to be ready for*  
4063 *review by SC32/WG1 members prior to the next SC32/WG1 meeting.*

4064

4065 2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of*  
4066 *the 2nd CD Editing meeting will be incorporated.*

4067

4068

4069 Basically, a "bilateral agreement" is a "between" and not "among" relationship of jurisdictional domains  
4070 who consider themselves to be "peers". Bilateral agreements can exist among any level or category of  
4071 sets of jurisdictional domain who consider themselves as being "peers" including:

4072

4073 ➤ among UN member states;

4074

4075 ➤ among administrative sub-divisions within a UN member state, (e.g., among provinces,  
4076 territories, states, länder, cantons, etc.), as jurisdictional domains within a UN member state;

4077

4078 ➤ among administrative sub-divisions of two different UN member states. [Examples here include  
4079 agreements between Canadian provinces and American states];

4080

4081 ➤ among two international organizations recognized as jurisdictional domains. Bilateral  
4082 agreements among peer jurisdictional domains may well serve as sources of external constraints  
4083 on business transactions include those referred to a s"Exchange of Letters", "Memorandum of

4084 Understanding (MOU)", etc.

4085

4086

### 4087 **7.3.3 Trilateral Agreements**

4088

4089 Project Editors' Note:

4090

4091 1. *A contribution is expected from legal experts for a draft definition of a "trilateral agreement"*  
4092 *which integrates international law, e-business and IT perspectives. It is expected to be ready for*  
4093 *review by SC32/WG1 members prior to the next SC32/WG1 meeting.*

4094

4095 2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of*  
4096 *the 2nd CD Editing meeting will be incorporated.*

4097

4098 Basically, a "trilateral agreement" is one among three jurisdictional domains who consider themselves to  
4099 be "peers". Trilateral agreements can exist among any level or category of jurisdictional domains as  
4100 "peers" including:

4101

4102 ➤ among UN member states;

4103

4104 A prime example here is the North American Free Trade Agreement (NAFTA) as well as its  
4105 "environment" and "labour" sub-agreements.

4106

4107 Project Editors' Note:

4108

4109 *Prior to or as part of the FCD document, NAFTA based examples will be provided.*

4110

4111 ➤ among administrative sub-divisions within a UN member state;

4112

4113 ➤ among administrative sub-divisions of three different UN member states;

4114

4115 ➤ among three international organizations.

4116

4117 Trilateral agreements among peer jurisdictional domains may well serve as sources of external constraints  
4118 on business transactions and the modelling and registration of the same as business objects.

4119

4120

### 4121 **7.3.4 Multilateral Agreements**

4122

4123 Project Editors' Note:

4124

4125 1. *A contribution is expected from legal experts for a draft definition of a "multilateral agreement"*  
4126 *which integrates international law, e-business and IT perspectives. It is expected to be ready for*  
4127 *review by SC32/WG1 members prior to the next SC32/WG1 meeting.*

4128

4129 2. *Prior to the issuance of the FCD ballot documents such added contributions as well as results of*  
4130 *the 2nd CD Editing meeting will be incorporated.*

4131

4132 Basically, a "multilateral agreement" is one among four or more jurisdictional domains who consider  
4133 themselves to be "peers".

4134

4135 Multilateral agreements constitute a category of jurisdictional domain which is in force on a wide global  
4136 basis as that of formally UN recognized and registered "treaties".  
4137

4138 Multilateral agreements can exist among any level or category of jurisdictional domains as peers,  
4139 including:

4140

4141 ➤ among UN member states;

4142

4143 Examples here include the "Multilateral-Textile Five Agreement. It remains to be determined  
4144 whether organizations such as the WTO, WCO, etc., are to be categorized as UN "treaty"  
4145 organizations or as "multilateral organizations" and identified and referenced as such.  
4146

4147 Project Editors' Note:

4148

4149 *Work is under way to prepare more information on examples of multilateral agreements as well*  
4150 *as extracting their commonalities to be able to specify them as mandatory elements in modelling*  
4151 *and registering these requirements and integrating this requirement into re-useable business*  
4152 *objects.*

4153

4154 ➤ among administrative sub-divisions within a UN member state, (e.g., among four or more  
4155 provinces, states, territories, länders, cantons, etc.), as jurisdictional domains within a UN  
4156 member state;

4157

4158 ➤ among administrative sub-divisions among four or more administrative sub-divisions of UN.

4159

4160 Examples here include those involving more than three Canadian provinces and American states.

4161

4162

4163

4164 5. *The Project Editors (and others, i.e. legal experts) are working on a single/simplified*  
4165 *mapping between this UN register requirement and the rules governing the Vienna*  
4166 *Convention.*

4167

4168

4169 7.4 AS A REGIONAL ENTITY

4170

4171 Project Editors' Note(s):

4172

4173 *In the context of Part 5, a jurisdictional domain as a "regional entity" pertains to more than three*  
4174 *jurisdictional domains, i.e., it is situated between a bilateral and multilateral. Whether it should*  
4175 *be considered as a particular sub-type of multilateral or "category" on its own is not yet resolved*  
4176 *(with participating experts in international law). Examples include EU, MERCOSUR, etc. {See*  
4177 *further Annex L}*

4178

4179

4180

4181

4182 Project Editors' Notes:

4183

- 4184 1. *Multilateral is more than two.*  
4185  
4186 2. *Need criteria for differentiating between "regional" and "multilateral". {See further*  
4187 *Annex L}*  
4188  
4189 3. *On the whole a multilateral involves multiple UN member states but is short of the status*  
4190 *of international convention/agreement.*

4191  
4192  
4193

#### 4194 7.5 AS AN INTERNATIONAL ENTITY

4195

##### 4196 Project Editors' Notes:

4197

- 4198 1. *Jurisdictional domains as "international entity" pertain to "international agreements"*  
4199 *according to the Vienna Convention.*  
4200  
4201 2. *Under the Vienna Convention [1.1] "international organizations" is considered to be a*  
4202 *synonym for "intergovernmental organization".*

4203

- 4204 3. *See further Annex L.*

4205

4206

4207

#### 4208 7.6 AS SUB-TYPES OF A UN MEMBER STATE

4209

##### 4210 Project Editors' Notes:

4211

- 4212 1. *At the time of preparation of this draft CD document, expected (detailed) text was not yet*  
4213 *received. However, the overall approach can still be presented.*

4214

- 4215 2. *In summary:*

4216

- 4217 2.1 *Each UN member state can sub-type its jurisdictional domains on a*  
4218 *function/accountability basis/mirroring the approach of the UN system.*

4219

- 4220 2.2 *On a geopolitical basis where "administrative subdivisions" may or may not be "peers"*  
4221 *as sub-divisions of their respective jurisdictional domains.*

4222

4223 *[Enter examples for Canada, USA, and Mexico]*

4224

4225 *Note: Need to link legal "peer" jurisdictional domains to IT "peer-to-peer" computing.*

4226

- 4227 2.3 *Annex F {See JTC1N7335} provides some recommended default conventions.*

4228

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.*

4258

4259

4260

4261

4262 8.1 INTRODUCTION

4263

4264

4265 8.2 INTERGOVERNMENTAL ORGANIZATIONS

4266

4267

4268 **8.2.1 UN Specialized Agencies**

4269

4270 **8.2.2 Non-UN Intergovernmental Organizations**

4271

4272

4273 8.3 INTERNATIONAL ORGANIZATIONS

4274 **9 JURISDICTIONAL DOMAINS AND CODED DOMAINS**

4275

4276 Project Editors' Note(s):

4277

4278 1. *Much of the text, rules, definitions and terms related to this Clause is already found in*  
4279 *Clauses 1 through 8, as well as Normative and Informative Annexes to this Part.*

4280

4281 2. *Other aspects of "coded domains" are already being covered in the development of*  
4282 *ISO/IEC 15944-2:200n.*

4283

4284 3. *As a result of ballot resolutions of FCD document for Part 2, this 2<sup>nd</sup> CD document for*  
4285 *this Part 5, relevant text here for Clause 9 will be inserted in this Clause, i.e. that*  
4286 *additional text which is required from an external constraints and jurisdictional domain*  
4287 *perspective.*

4288

4289 **10 TEMPLATE FOR THE IDENTIFICATION OF EXTERNAL CONSTRAINTS**  
4290 **OF JURISDICTIONAL DOMAINS<sup>51</sup>**

4291  
4292 10.1 INTRODUCTION AND BASIC PRINCIPLES  
4293

4294 The approach taken for Clause 10 is the same as that for Part 1 of this multipart standard as well  
4295 as that taken in Part 2..  
4296

4297 This Clause builds on the structure developed in Clauses 1 through 8. Together with the rules  
4298 contained in these clauses, it provides the user with the rules for the specification of Open-edi  
4299 scenarios, Open-edi scenario attributes and attributes of Scenario Components, i.e, roles,  
4300 Information Bundles (IBs) and scenario components (SCs). The purpose of this template, like the  
4301 others, is to capture in a systematic, i.e., coded form, their aspects.  
4302  
4303

4304 10.2 TEMPLATE STRUCTURE AND CONTENTS  
4305

4306 Project Editors' Note(s):  
4307

- 4308 1. *As a result of the SC32/WG1 decision sat its in Tallin, Estonia meeting, some major*  
4309 *changes were made to the Part 2 document. These are reflected in the ISO/IEC FCD*  
4310 *15944-5. Consequently, the existing draft text for this Clause has been withdrawn to align*  
4311 *its with the FCD ballot document for Part 2. It will be inserted based on resultuion of the*  
4312 *ballot comments on the FCD document for Part 2 and be based on the rules in Clauses 5*  
4313 *through 9 and resolution of 2ndCD ballot comments on this document.*  
4314
- 4315 2. *The content of the templates in Part 1 and Part 2 (FCD) are based on rules stated in the*  
4316 *relevant clauses. At the 2<sup>nd</sup> CD ballot resolution meeting the issue of one single template*  
4317 *or several templates for Part 5 will be discussed and resolved.*  
4318
- 4319 3. *To the Part 1 Template will need to be added {See its Clause 7.3.2}:  
4320*
- 4321 ➤ **1150 External constraints and agents**
  - 4322 ➤ 1151 *External constraints require a buyer to use an agent*
  - 4323 ➤ 1152 *External constraints require a seller to use an agent*  
4324
  - 4325 ➤ **1160 External constraints and Third Party**
  - 4326 ➤ 1161 *External constraints require participation of a qualified Third Party.*  
4327  
4328
  - 4329 ➤ **1170 External constraints and regulator**
  - 4330 ➤ 1171 *External constraints require direct participation of a regulator*
  - 4331 ➤ 1172 *External constraints allow for a Third Party to act on behalf of a*  
4332 *regulator.*

---

<sup>51</sup>This Clause is based on and similar in structure to Clauses 7, 8 and 9 in ISO/IEC 15944-1:2002.

4333  
4334  
4335  
4336

In addition, there will be additional entries under "**1700 EXTERNAL CONSTRAINTS**".

4337 **11 REFERENCES**

4338

4339

4340

4341

[To be inserted as required prior to FCD ballot document issuance]

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)

4343

4344

Project Editors' Note(s):

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4346

4347

4348

4349

4350

4351

4352

1. *At this 2nCD 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.*
2. *P, O, and L members reviewing this 2<sup>nd</sup> CD ballot document are encouraged by the project editors to identify and provide rationale for additional annexes.*

4353 **ANNEX A (NORMATIVE) CONSOLIDATED LIST OF TERMS AND DEFINITIONS**  
 4354 **WITH CULTURAL ADAPTABILITY: ISO ENGLISH AND ISO FRENCH**  
 4355 **LANGUAGE EQUIVALENCY**  
 4356

4357 *Project Editors' Notes:*

4358  
 4359 (1) *Annex A Matrix will be updated to reflect the content of Clause 3.1 and all the French*  
 4360 *language equivalent terms and definitions provided.*  
 4361  
 4362

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

4363

4364

4365 **A.1 Introduction**  
 4366

4367 Users of this ISO/IEC 18038 standard may not have ready access to all standards referenced in  
 4368 either the ISO English language version or the ISO French language equivalent where available.  
 4369

4370 This standard maximizes the use of existing standards where and whenever possible including  
 4371 relevant and applicable existing terms and definitions. This Annex A contains the consolidated  
 4372 list of the ISO English and ISO French language paired terms and definitions used in this standard  
 4373 including those terms and definitions introduced in this standard. The source is Clause 3  
 4374 "Definitions".  
 4375

4376  
 4377 **A.2 ISO English and ISO French<sup>52</sup>**  
 4378

4379 This standard recognizes that the use of English and French as natural languages is not uniform or

---

<sup>52</sup> 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.

4380 harmonized globally. (Other examples include use of Arabic, German, Portuguese, Russian,  
4381 Spanish, etc. as natural languages in various jurisdictions).

4382

4383 Consequently, the terms "ISO English" and "ISO French" are utilized here to indicate ISO  
4384 specialized use of English and French as natural languages in the specific context of international  
4385 standardization, i.e., as a "special language".

4386

4387

### 4388 **A.3 Cultural Adaptability**

4389

4390 ISO/IEC JTC1 has added "cultural adaptability" as the third strategic direction which all  
4391 standards development work should support. The two other existing strategic directions are  
4392 "portability" and "interoperability". Not all ISO/IEC JTC1 standards are being provided in more  
4393 than one language, i.e., in addition to "ISO/IEC English," in part due to resource constraints.

4394

4395 Terms and definitions are an essential part of a standard. This Annex serves to support the  
4396 "cultural adaptability" aspects of standards as required by ISO/IEC JTC1. Its purpose is to ensure  
4397 that if, for whatever reason, a ISO/IEC JTC1 standard is developed in one ISO/IEC "official"  
4398 language only, at the minimum the terms and definitions are made available in more than one  
4399 language.

4400

4401 A key benefit of translation of terms and definitions is that such work at providing  
4402 bilingual/multilingual equivalency:

4403

4404 ➤ should be considered a "quality control check" in that establishing an equivalency in  
4405 another language ferrets out "hidden" ambiguities in the source language. Often it is only  
4406 in the translation that ambiguities in the meaning, i.e., semantics, of the term/definition are  
4407 discovered. Ensuring bilingual/multilingual equivalency of terms/definition should thus  
4408 be considered akin to a minimum "ISO 9000-like" quality control check<sup>53</sup>; and,

4409

4410 ➤ is considered a key element in the widespread adoption and use of standards world-wide  
4411 (especially by users of this standard who include those in various industry sectors, within  
4412 a legal perspective, policy makers and consumer representatives, other standards  
4413 developers, IT hardware and service providers, etc.).

4414

4415

### 4416 **A.4 Organization of Annex A<sup>54</sup>**

4417

4418 The terms/definitions are organized in matrix form in alphabetical order (English language). The  
4419 columns in the matrix are as follows:

---

<sup>53</sup> 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.

<sup>54</sup> 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 19544-5) 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:

4433

4434 *The rest of Annex A is not included in this draft 2<sup>nd</sup> 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".*

4436

4437

4438

4439 **ANNEX B (NORMATIVE) CONSOLIDATED SET OF RULES OF ISO/IEC 15944-**  
 4440 **1:2002 GOVERNING BUSINESS TRANSACTIONS, THEIR SCOPING AND**  
 4441 **SPECIFICATION AS OPEN-EDI SCENARIOS AND THEIR**  
 4442 **COMPONENTS OF PARTICULAR RELEVANCE TO "EXTERNAL**  
 4443 **CONSTRAINTS"**  
 4444

4445 *Project Editors Note*

4446  
 4447 ???????

4448  
 4449 **B.1 INTRODUCTION**

4450  
 4451 The purpose of Annex B is to provide a consolidated presentation of all the rules in ISO/IEC  
 4452 15944-1 for the scoping and specification of Open-edi scenarios and their components which  
 4453 pertain to external constraints. Jurisdictional domains are the primary source of external  
 4454 constraints. This Part 5 of ISO/IEC 15944 addresses in an integrated manner the requirements  
 4455 arising from these rules in Part 1 pertaining to specifying external constraints insofar as these are  
 4456 applicable to jurisdictional domains.

4457  
 4458 [Note: Only the Rules themselves are presented here. For related text, as well as associated  
 4459 Guidelines, where applicable, see the relevant Clauses in ISO/IEC 15944-1:2002 as  
 4460 presented in the matrix below].

4461  
 4462  
 4463 **B.2 ORGANIZATION OF ANNEX B: CONSOLIDATED LIST IN MATRIX FORM**

4464  
 4465 The rules and associated references are presented in matrix form. The rules are presented in the  
 4466 numeric order in which they are presented in ISO/IEC 15944-1:2002. The columns in the matrix  
 4467 are as follows:  
 4468

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.

4469  
4470  
4471  
4472

**B.3 CONSOLIDATED LIST OF RULES IN ISO/IEC 15944-1:2002 PERTAINING TO EXTERNAL CONSTRAINTS**

<b>Rule No.</b>	<b>Clause ID</b>	<b>Rule Statement</b>
(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

<b>Rule No.</b>	<b>Clause ID</b>	<b>Rule Statement</b>
(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"> <li>- commitments among parties, i.e., as internal constraints;</li> <li>- external constraints.</li> </ul>
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

<b>Rule No.</b>	<b>Clause ID</b>	<b>Rule Statement</b>
(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-edi Parties at the scenario level.
73	8.3.2.6	Business constraints, if any at the scenario level, pertaining to Open-edi 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-edi 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).

<b>Rule No.</b>	<b>Clause ID</b>	<b>Rule Statement</b>
(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-edi 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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4474  
4475

4476 ANNEX C (NORMATIVE) CODES REPRESENTING UN MEMBER STATES AND THEIR OFFICIAL (OR DE  
4477 FACTO) LANGUAGES

4478

4479

4480

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4486 C.2 Organization of Annex C

90

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4489

4490 C.4 Annex C (Normative) Codes Representing UN Member States and their Official (or de facto) Languages"

x

4491

4492 Project Editors' Notes for Annex C

4493

4494 1. This 2<sup>nd</sup> CD version of Annex C incorporates the ballot comments made on the 1<sup>st</sup> CD document. (For further background  
4495 information on this Annex C, see the Project Editors' Notes to the 1<sup>st</sup> 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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.**

4527

4528

*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).*

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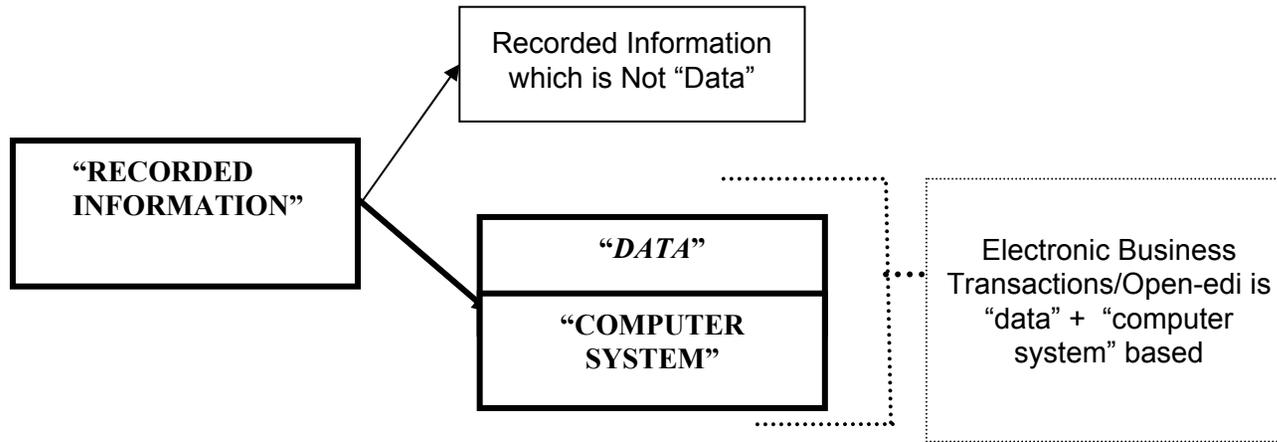
4536

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**Figure 1 — Relation of “Recorded Information”, “Data” and “Computer System” in Electronic Business Transactions / Open-edi**

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*This observation is made in the context of the response to the 1<sup>st</sup> 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:*

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- 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.*

4556 **C.1 INTRODUCTION**

4557

4558 The purpose and scope of this Annex C is to provide a set of codes, i.e. ID codes, as composite identifiers, for  
4559 (1) each UN member state, providing an ISO 3166-1 based code for which the UN is the coded domain Source Authority; and,  
4560 the ISO 639-2/T language code(s) representing the official language(s) or de facto language of that UN member state.

4561

4562 The Annex C identifies those jurisdictional domains which are of the category of member states of the United Nations (UN). As such,  
4563 they are, and are recognized as "peer jurisdictional domains".<sup>55</sup> It is accurate and up-to-date as of the date of this standard<sup>56</sup>.

4564

4565 The source for the component parts of this Annex C is official information as provided by the UN. The UN has provided permission to  
4566 reprint its 3-digit numeric and 3-digit alpha codes in ISO/IEC 15944-5.<sup>57</sup> The English and French (short) names of the UN member  
4567 states are also those as provided by the UN.

4568

4569 The need for such a coded domain arises from:

4570

4571 ➤ the fact that ISO 3166-1 contains in its set of permissible values, identification codes and name representation of many entities  
4572 which are not "countries" although users of ISO 3166-1 (mistakenly) believe they are<sup>58</sup>. {For all the details, see further Annex J

---

<sup>55</sup>The 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.

<sup>56</sup>The 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.

<sup>57</sup>"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](http://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](http://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.

<sup>58</sup>The 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 639-2<sup>59</sup> 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 2<sup>nd</sup> 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

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<sup>59</sup> ISO TC37 and ISO TC46 are jointly responsible for the ISO 639 series.

4604 **Exclusions to Annex C<sup>60</sup>**

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 639-2/T = “smi<sup>61</sup>”) 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 State. Other orderings are possible, (e.g., by date of UN membership, English name of country, French name of country, by the ISO 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
-	<b>IT-Interface</b>	
-	<b>Coded Domain ID</b>	
(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".
-	<b>Coded Domain ID</b>	[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

<sup>60</sup> 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.

<sup>61</sup> 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].
-	<b>ID Code Components</b>	<p>It is quite common for identifiers as ID Codes to be based or structured as a set of component parts.<sup>62</sup> 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"> <li>➤ "1" = "official language"; and,</li> <li>➤ "2" = "de facto language".</li> </ul>
-	<b>Change Management</b>	
(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.
-	<b>Application Syntax</b>	
(08)	Composite Identifier	The Composite Identifier consisting of a combination of the Coded Domain ID value plus the ID Code value.

<sup>62</sup>See 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>
-	<b>Human Interface Equivalents (Linguistic)</b>	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

4621 **C.3 NOTES**

4622

4623 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  
4624 domain.

4625

4626 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  
4627 any updates as per its Registration Authority (Library of Congress). Where there is another English name for the language, (e.g.,  
4628 as found in the UN member state Afghanistan (004)), it has been added as an "a.k.a" in a footnote.

4629

4630 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  
4631 "esperanto" losing its "esp" code assignment.

4632

4633 3. This Annex C may from time to time require updates/amendments based on decisions taken by the United Nations or any of its  
4634 UN member states. It is recognized that during the 1990s a significant number of changes occurred, (e.g., those related to the  
4635 "Soviet Union", Yugoslavia", "Ethiopia", etc.). However, it is assumed that during the next five years there will be a higher level  
4636 of stability and as such there is a much lower probability of the need to make changes to this Annex C.

4637

4638 Possible changes which may occur are of the following nature (or combinations thereof):

4639

- 4640 (a) the code for the member entity remaining the same but the name representation(s) changing;
- 4641 (b) a change in the 2-alpha and/or 3-alpha code reflecting a change in name;
- 4642 (c) the code for the member entity remaining the same but a not only the name representation change but also a change in  
4643 property or behaviour of that entity, (e.g., the Soviet Union not only changing its name to Russia, but also its territory  
4644 reduced, or Ethiopia keeping its code and name but having its territory reduced, or Yugoslavia being split up into several  
4645 new UN member states with two of its parts, i.e., Serbia and Montenegro, keeping the "891" code of the former  
4646 Yugoslavia).

4647

4648 4. Stability of the Annex C "Composite Identifier"

4649

4650 The composite identifier found in Annex C, column (08) of this coded domain is formulated in support of maximizing its use as  
4651 a reusable semantic component, i.e., business object, in modelling common business transactions as scenarios and scenario  
4652 components in that:

4653

- 4654 ➤ 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  
4674  
4675  
4676

**C.4 ANNEX C (NORMATIVE) CODES REPRESENTING UN MEMBER STATES AND THEIR OFFICIAL (OR DE FACTO) LANGUAGES**

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 <sup>63</sup>	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

<sup>63</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>64</sup>	2	1992-05-22	15944-5:c:070:bos:2	Bosnia and Herzegovina	Bosnie-Herzégovine	Bosnian	bosniaque <sup>65</sup>
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

<sup>64</sup>This 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)

<sup>65</sup>See 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 <i>[Syntax Neutral]</i>	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* <sup>66</sup>	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

<sup>66</sup>Tamil (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 <i>[Syntax Neutral]</i>	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	espagnol				
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	espagnol				
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	espagnol				
15944-5	c	218:esp:1	218	esp	1	1945-12-21	15944-5:c:218:esp:1	Ecuador	Équateur	Spanish	espagnol				
15944-5	c	222:esp:2	222	esp	2	1945-10-24	15944-5:c:222:esp:2	El Salvador	El Salvador	Spanish	espagnol				
15944-5	c	222:nah:2	222	nah	2 <sup>67</sup>	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	espagnol				

<sup>67</sup>Note: 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 <i>[Syntax Neutral]</i>	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 <sup>68</sup>	231	amh	2	1945-11-13	15944-5:c:231:amh:2 <sup>69</sup>	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 <sup>70</sup>	232	aar	2	1993-05-28	15944-5:c:232:aar:2 <sup>71</sup>	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

<sup>68</sup>Note: 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.

<sup>69</sup>Note: 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.

<sup>70</sup>The 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.

<sup>71</sup>The 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 <i>[Syntax Neutral]</i>	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	géogien
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 <sup>72***)</sup>	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 <sup>73</sup>	1	1945-10-24	15944-5:c:332:cpf:1	Haiti	Haïti	Creole	créole

<sup>72\*\*\*)</sup> 280 continues to represent "Germany" in certain standards by ISO/TC 68

<sup>73</sup> See 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 <i>[Syntax Neutral]</i>	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 <sup>74</sup>	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

<sup>74</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>75</sup>	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 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

<sup>75</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>76</sup>	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 <sup>77</sup>	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

<sup>76</sup> aka Kyrgyz

<sup>77</sup> 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	Lithuanie	Lithuanian	lituanien
15944-5	c	442:ltz:2	442	ltz	2 <sup>78</sup>	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 <sup>79</sup>	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 <sup>80</sup>	1965-09-21	15944-5:c:462:div:2	Maldives	Maldives	Divehi <sup>81</sup>	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

<sup>78</sup>The three languages for Luxembourg have been coded as de facto official ("2"). However, Luxembourgish (aka Letzebergesch)/luxembourgeois is a national language, German and French are administrative languages. Further clarification/verification/information is required here. (03.08.25).

<sup>79</sup>aka Chichewa

<sup>80</sup>Neither 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).

<sup>81</sup>aka 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 <i>[Syntax Neutral]</i>	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 <sup>82</sup>	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 <sup>83</sup>	nauruan
15944-5	c	524:nep:1	524	nep	1	1955-12-14	15944-5:c:524:nep:1	Nepal	Népal	Nepali	népalais

<sup>82</sup> aka Khalkha Mongol

<sup>83</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>84</sup>	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 <sup>85</sup>	norvégien nynorskbo				
15944-5	c	578:nob:1	578	nob	1	1945-11-27	15944-5:c:578:nob:1	Norway	Norvège	Norwegian bokmål <sup>86</sup>	norvégien bokmål				

<sup>84</sup> aka Bichelama

<sup>85</sup> 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.

<sup>86</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>87</sup>	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

<sup>87</sup>There 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 <i>[Syntax Neutral]</i>	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 <sup>88</sup>	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 <sup>89</sup>	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

<sup>88</sup> aka Filipino

<sup>89</sup> 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 <sup>90</sup>	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

<sup>90</sup> 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 <i>[Syntax Neutral]</i>	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 <sup>91</sup>	1	2002-09-10	15944-5:c:756:roh:1	Switzerland	Suisse	Rhaeto-Romance <sup>92</sup>	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 <sup>93</sup>	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

<sup>91</sup>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)

<sup>92</sup>aka Romansch

<sup>93</sup>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 <sup>94</sup>	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 <sup>95</sup>	2000-09-05	15944-5:c:798:tlv:2	Tuvalu	Tuvalu	Tuvalu <sup>96</sup>	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

<sup>94</sup>There 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).

<sup>95</sup>There are no official languages here. Further clarification/verification/information is needed here re: status of Tuvalu and English. (03.08.25).

<sup>96</sup>aka 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 <i>[Syntax Neutral]</i>	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 <sup>97</sup>	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 <sup>98</sup>	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 <sup>99</sup>	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

<sup>97</sup>There are no official languages here. Further clarification/verification/information is needed re: status of the three languages coded as de facto. (03.08.25).

<sup>98</sup>There are no official languages here. Further clarification/verification/information is needed here re: status of English and Samoan. (03.08.25).

<sup>99</sup>See 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.*

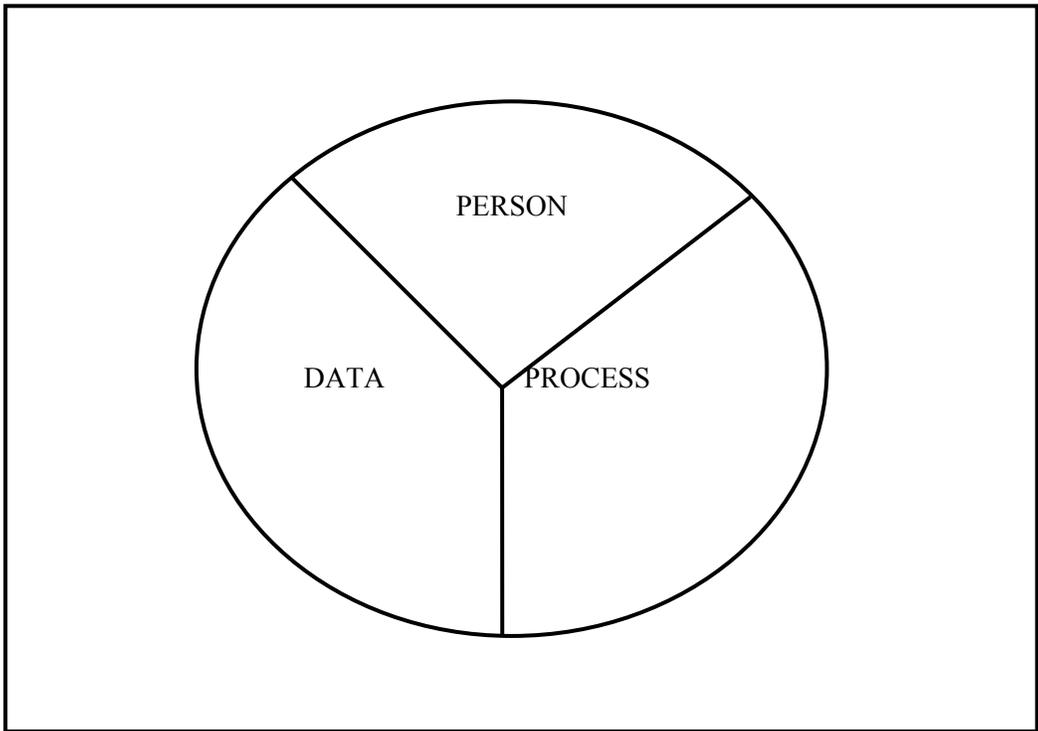
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4688 ANNEX E (NORMATIVE) BUSINESS TRANSACTION MODEL: CLASSES OF  
4689 CONSTRAINTS  
4690  
4691

4692 Business transactions are modelled for registering, reference and re-use as scenarios and scenario  
4693 components. Business semantic descriptive techniques are used to identify and specify the key  
4694 components of a business transaction, i.e., as business objects.  
4695

4696 The Business Transaction Model (BTM), as stated in Clause 6.1.5 of ISO/IEC 15944-1, has three  
4697 required components namely "Person", "Process", and "Data. These three fundamental  
4698 components of the Business Transaction Model are presented graphically in Figure 3<sup>100</sup>  
4699



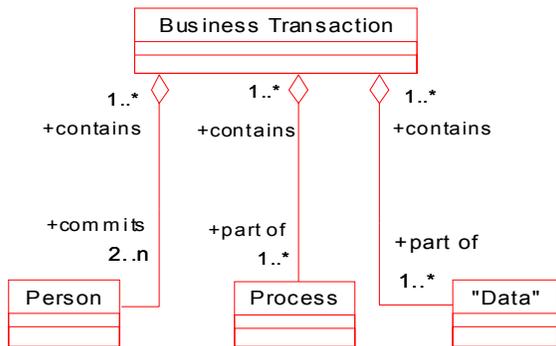
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Figure E.1 - Business Transaction Model - Fundamental Elements (Graphic Illustration)

<sup>100</sup>In 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).

4721 Using UML as a Formal Description Technique, yields the following UML-based representation  
 4722 of the Business Transaction Model and is presented as Figure E.2<sup>101</sup>.  
 4723  
 4724



4725  
 4726 Figure E.2 – UML-based Representation of Figure 3 – Business Transaction Model –  
 4727 Fundamental Components  
 4728

4729 The business transaction model focuses on and addresses the essential needs of commitment  
 4730 exchange among autonomous parties, i.e., the ability of Persons as parties to a business  
 4731 transaction being able to make commitments and to do so while maximizing the use of automated  
 4732 methods. This is in addition to existing standards which pertain to various aspects of information  
 4733 exchange only.<sup>102</sup>  
 4734

4735 As such, what sets Open-edi (or e-business) apart from information exchange in general are six  
 4736 (6) characteristics<sup>103</sup>. They are:

- 4737
- 4738 ➤ actions based upon following clear, predefined rules;
  - 4739
  - 4740 ➤ commitments of the parties involved;
  - 4741
  - 4742 ➤ commitments among the parties are automated;
  - 4743
  - 4744 ➤ parties control and maintain their states;
  - 4745
  - 4746 ➤ parties act autonomously; and,
  - 4747
  - 4748 ➤ multiple simultaneous transactions can be supported.

<sup>101</sup> This UML-based representation incorporates the rules governing the interworking of these three fundamental components as specified in ISO/IEC 15944-1:2002.

<sup>102</sup> 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.

<sup>103</sup> 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".

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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

4836 The class of "internal constraints" has been derived to provide a simplified view of business  
4837 transactions for which there are no external constraints or restrictions to the nature and  
4838 conduct of the transaction. The only constraints are those mutually agreed to by the buyer and  
4839 seller for the explicitly stated goal of the business transaction, i.e., they are self-imposed. This  
4840 allows one to build scenarios and scenario components for referencing, registering and re-use  
4841 as generic or base scenarios without having to include potential external constraints. The rules  
4842 governing specification of Open-edi scenarios and their Components require that all applicable  
4843 external constraints must be stated at the time of instantiation but need not exist at the time of  
4844 registration. {See further, Clause 9 below in ISO/IEC 15944-1:2002 and its Annex I}.

4845  
4846 However, in most business transactions external constraints do apply, i.e., applicable laws and  
4847 regulations. These range from taxation related regulation; health and safety or packaging and  
4848 labelling requirements; ensuring that nature of the business transaction and/or the goods or  
4849 services delivered do not comprise behavior of a criminal nature. Whilst laws and regulations  
4850 exist within and among jurisdictions and are the primary source of "external constraints" on  
4851 Business Transactions, categorization and specification of sub-classes of external constraints  
4852 is outside the scope of this standard.

4853  
4854 External constraints exist which are horizontal in nature. These are the common and generic  
4855 rules for business transactions, (e.g., privacy/data protection, consumer policy, uniform  
4856 commercial codes, etc.).

4857  
4858 The imposition of these horizontal external constraints on business transactions is exemplified  
4859 by the introduction of a third type of role in a business transaction, namely that of "regulator"  
4860 as a third sub-type of Person as a player in a business transaction representing "public  
4861 administration".

4862  
4863 External constraints of a horizontal and common nature are constraints imposed by regulators  
4864 (and enacted through public administrations) which apply regardless of the type of business or  
4865 sector within which the business occurs. This categorization allows one to build scenarios and  
4866 scenario components for referencing, registering and reuse of specific common sets of  
4867 external constraints. These can then be combined with scenarios which focus on internal  
4868 constraints for building application use scenarios.

4869  
4870 There are also external constraints that are of a sectorial nature. In addition, some external  
4871 constraints can be common to two or more sectors and supported through common standards.  
4872 Sectorial constraints are found in telecommunications, transportation and delivery,  
4873 financial/banking, import/export restrictions specific to a good or service, inter-or intra-state  
4874 trade, and so on. Where a sector imposes specific ways of conducting business transactions  
4875 within itself and with other sectors, such sector specific constraints and conditions must be  
4876 identified and specified where applicable, as part of specification of scenarios and scenario  
4877 components.<sup>104)</sup> This allows one to build scenarios and scenario components for referencing,  
4878 registering and reuse of sets of sectorial external constraints such as "customs clearance",  
4879 "transport of dangerous goods"<sup>105)</sup>, etc. These two basic classes of constraints on business

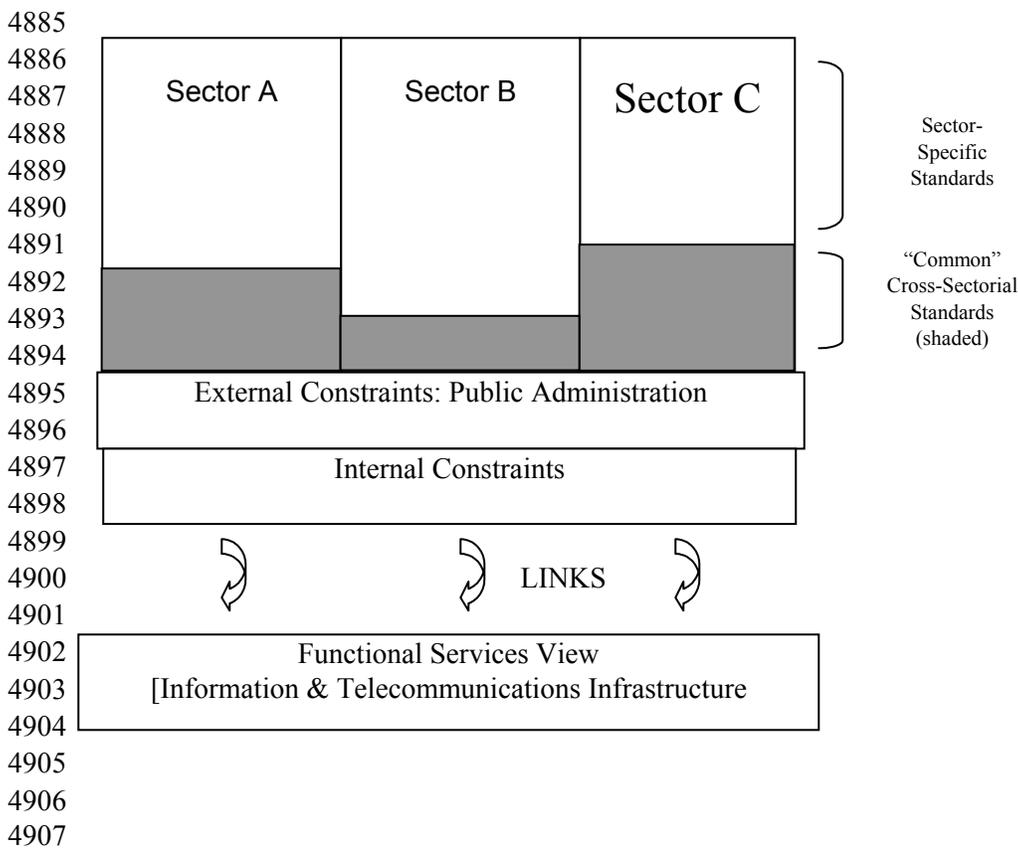
---

<sup>104)</sup> 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.

<sup>105)</sup> Note: There are also requirements for establishing common rules for interchanges between

4880 transactions are illustrated below in Figure 8: Business Transaction Model: Classes of Constraints.  
 4881  
 4882 These two basic classes of constraints on business transactions are illustrated here in Figure E.3.  
 4883

4884 **Figure E.3 — Business Transaction Model: Classes of Constraints**




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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*

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*by the relevant ISO 3166-2 code, (e.g., 124-qc:fra = French as used in the province of Quebec as part of Canada); or "124-nu:iku" would represent the use of Inuktitut as an official language in the Territory of Nunavut" as part of Canada.*

*Notes:*

- 1. Further discussion is still required on the use of delimiters. For the purpose of this 2<sup>nd</sup> CD document in the context of further discussion, we have used the colon (:) as a delimiter between distinct code sets, and the hyphen (-) as the delimiter between sub-sets of a coded domain.*
- 2. Resolution of this issue is especially relevant to the semantic values in Column 06 in the Annex C matrix.*

4974 ANNEX G (INFORMATIVE) EXAMPLES OF VARIOUS ONTOLOGIES RESULTING  
4975 FROM MODELLING BUSINESS SCENARIOS WITH (1) INTERNAL  
4976 CONSTRAINTS ONLY; AND, (2) WITH EXTERNAL CONSTRAINTS: USE  
4977 CASE - "BUYER", "SELLER", "THIRD PARTY" AND "REGULATOR"  
4978

4979 Project Editors' Notes  
4980

- 4981 1. This Annex G applies the concept of "Business Collaboration" and the construct of  
4982 "Collaboration Space" from CD ISO/IEC 15944-4 as found in its Annex F. It is understood that  
4983 the examples in Annex G will be amended depending on the final content of Clause 10 (as well as  
4984 relevant elements of Part 4 of this multipart standard).  
4985
- 4986 2. Prior to the issuance of the FCD document the missing UML diagrams will be added/inserted.  
4987
- 4988 3. This Annex G will be harmonized with the 2<sup>nd</sup> CD for Part 3 and Part documents.  
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4991 G.1 INTRODUCTION  
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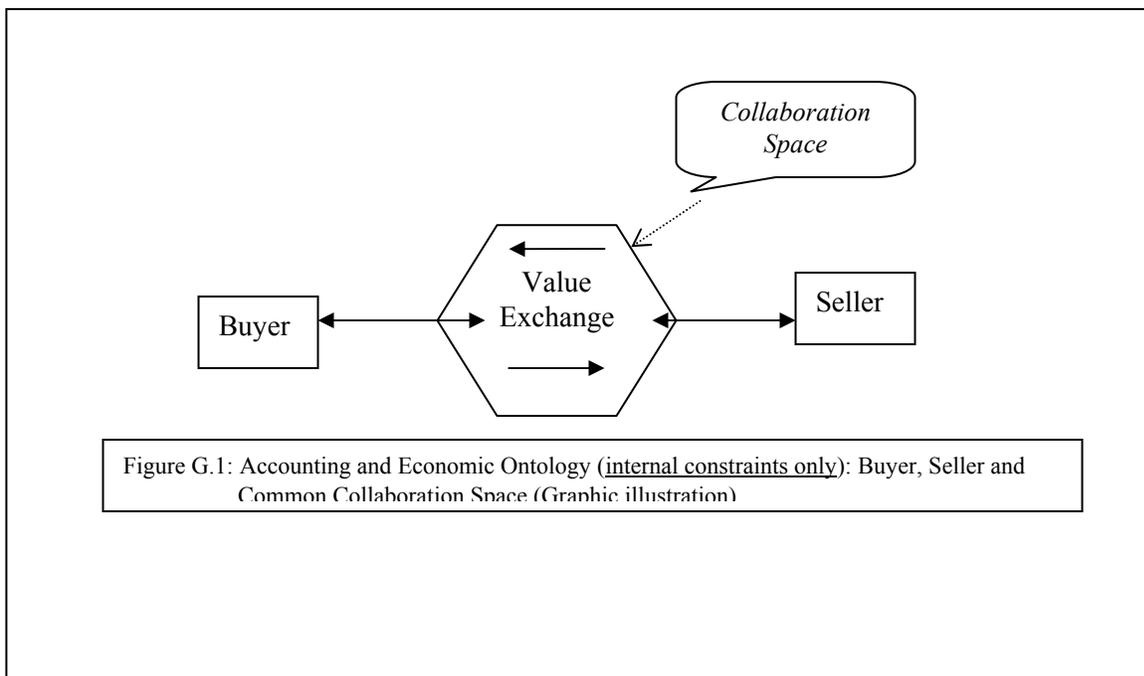
4993 Part 1 of this multipart ISO/IEC 15944 standard introduced the use of templates to identify mandatory  
4994 attributes in registering the scope of a scenario. {See its Clause 7.3 "Template for specifying scope of an  
4995 Open-edi Scenario"} A template is utilized for ensuring that all the information required for the Business  
4996 Operational View (BOV) of an Open-edi Scenario, its components and all attributes required to be  
4997 specified (and registered for re-use) are captured in a systematic and explicit manner. {See its Clause 9  
4998 "Primitive Open-edi Scenario Template"}.  
4999

5000 For this Part 5, use of a template is also an integral part.  
5001

5002 The purpose of this Annex G is to provide an example in the different ontologies which may result  
5003 depending on the specification of the scoping of an Open-edi scenario (1) with internal constraints only;  
5004 or (2) with external constraints. In this Annex G, relevant parts of the Part 1, Clause 7.3 "Template for  
5005 specifying scope of an Open-edi Scenario" are utilized plus those taken from the template in Clause 10 of  
5006 this Part 5.  
5007

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5009  
5010 G.2 MODELLING BUYER, SELLER AND THIRD PARTY - INTERNAL CONSTRAINTS  
5011 ONLY  
5012

5013 ISO/IEC 15944 Part 4 titled "Business transactions scenarios: Accounting and economic ontology",  
5014 models the interactions among a "buyer" and a "seller" of a scenario as their common "collaboration  
5015 space" as follows:  
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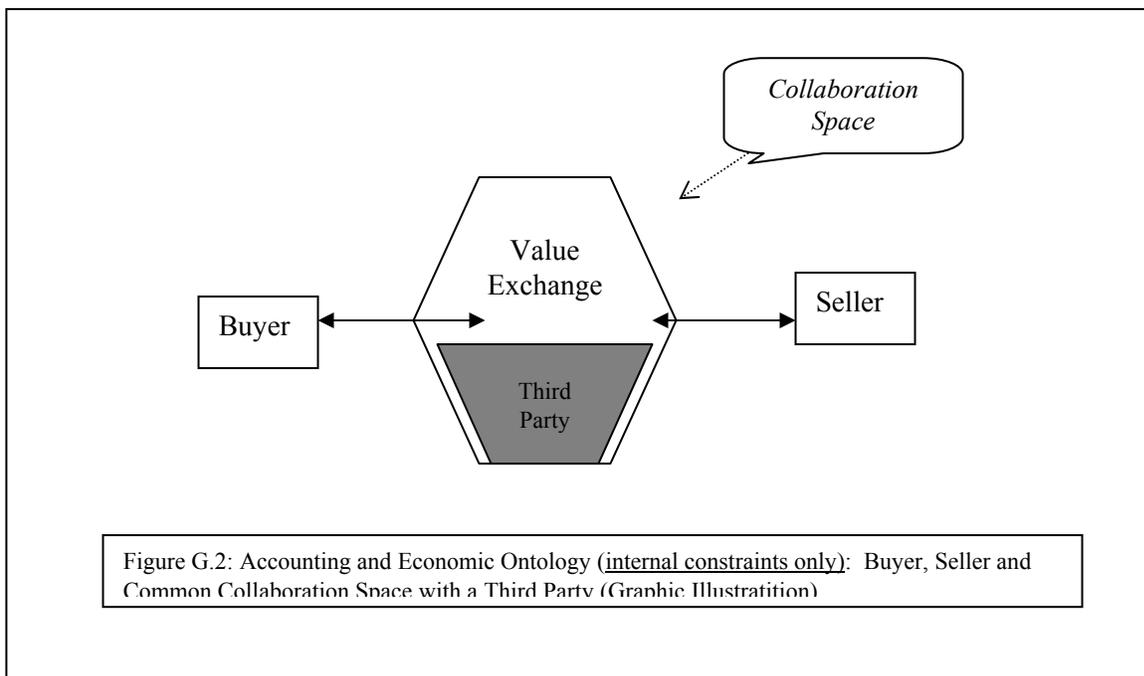


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Further, one can build on this very primitive model and add a "third party" (defined as):

**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:



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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)
<b>1000</b>	1	<b>Business goal of business transaction - No external constraints</b>			
<b>1010</b>	2	<b>Business goal of business transaction includes external constraints</b>			
<b>1110</b>	2	<b>Business Transaction Allows for Agents</b>			
1111	2	Buyer Agent			
1112	2	Seller Agent			
<b>1130</b>	1	<b>Business Transaction allows for Third Parties</b>			
1131	1	By mutual agreement of buyer and seller (as internal constraints only)			
1132	2	external constraint(s) Mandated			
<b>1150</b>	2	<b>External Constraints and Agents</b>			

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 <sup>106</sup>			
1152	2	External constraints require a seller to use an agent			
<b>1160</b>	2	<b>External constraints and Third Party</b>			
1161	2	External constraints require participation of a qualified Third Party			
1162	2				
<b>1170</b>	2	<b>External constraints and Regulator</b>			
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			

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### 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)
<b>1000</b>	2	<b>Business goal of business transaction - No external constraints</b>			
<b>1010</b>	1	<b>Business goal of business transaction includes external constraints</b>			
<b>1110</b>	1	<b>Business Transaction Allows for Agents</b>			
1111	2	Buyer Agent			

<sup>106</sup>A common example here is that of an importer as the buyer being required to use a "customs agent".

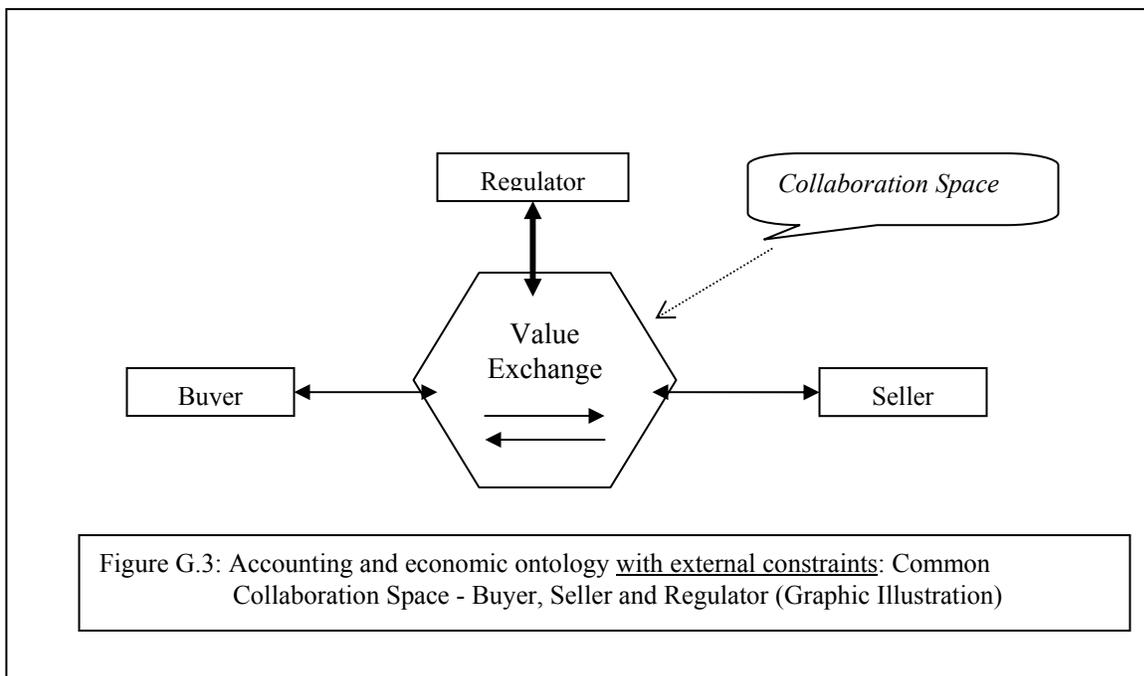
IT-Interface		Human Interface Equivalents			Spare
Scope Tag ID Code	Decision Code	Name (English)	Name (French)	Name (Other)	
(1)	(2)	(3)	(4)	(5)	(6)
1112	2	Seller Agent			
<b>1130</b>	2	<b>Business Transaction allows for Third Parties</b>			
1131	2	By mutual agreement of buyer and seller (as internal constraints only)			
1132	2	external constraint(s) Mandated			
<b>1150</b>	2	<b>External Constraints and Agents</b>			
1151	2	External constraints require a buyer to use an agent <sup>107</sup>			
1152	2	External constraints require a seller to use an agent			
<b>1160</b>	2	<b>External constraints and Third Party</b>			
1161	2	External constraints require participation of a qualified Third Party			
1162					
<b>1170</b>	1	<b>External constraints and Regulator</b>			
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			

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Further, applying the above template, now results in the following ontology which is illustrated in Figure G.3<sup>108</sup> as:

<sup>107</sup> A common example here is that of an importer being required to use a "customs agent".

<sup>108</sup> Shaded space indicates those aspects of the "Collaboration Space" which are governed by the "regulator".



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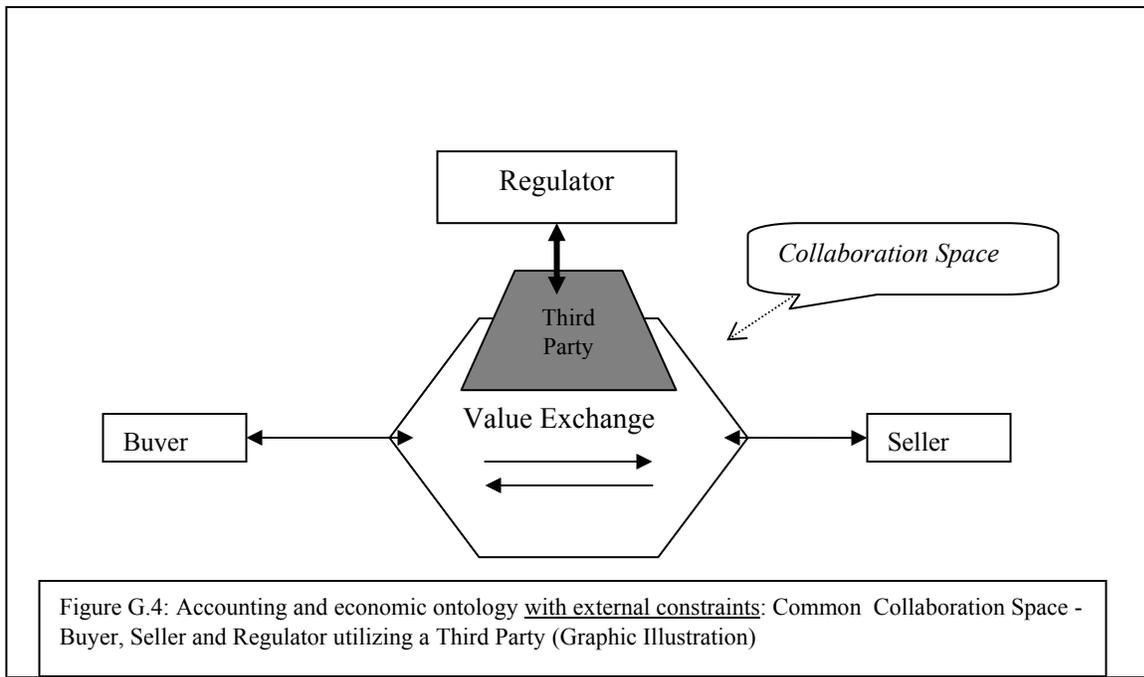
#### G.4 MODELLING BUYER, SELLER AND REGULATOR USING A THIRD PARTY

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.4<sup>109</sup> as:

<sup>109</sup>Shaded space indicates those aspects of the "Collaboration Space" which are governed by the "regulator".



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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.*

5109 ANNEX I (INFORMATIVE) EXAMPLE OF CLASSIFICATION SYSTEM:  
 5110 HARMONIZED SYSTEM NOMENCLATURE OF THE WORLD CUSTOM  
 5111 ORGANIZATION (WCO)  
 5112

5113 An example of a classification system use on a global basis is that of the "Harmonized System  
 5114 Nomenclature" (commonly identified and referenced as "HS") of the World Customs Organization  
 5115 (WCO)<sup>110</sup>.

5116  
 5117 This classification system applies to the movement of goods in and out of its signatory member  
 5118 jurisdictional domains, i.e, import and exports. The HS as a classification system utilizes codes with the  
 5119 ID codes being preassigned and structured in a hierarchical manner. As a coded domain, the Harmonized  
 5120 System (HS) of the WCO thus provides predefined ID codes for all its member entities.

5121  
 5122 For example, the IT Interface value (which likely will also serve in an actualized business transaction as  
 5123 the instantiated value of a semantic component of the item referenced) for "potato" (fresh or chilled) has  
 5124 been assigned the ID code in the HS as "0701". The human interface equivalents are many and taking  
 5125 into account the (official or de facto languages) of jurisdictional domains yielded the following example:  
 5126

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

5127  
 5128 The example demonstrates:  
 5129

- 5130 ➤ a jurisdiction, in this case a country, having more than one language of use and thus multilingual
- 5131 equivalents; and,
- 5132 ➤ differences in uses of the same natural language in various countries and thus different
- 5133 multilingual equivalents within a natural language.

5134  
 5135 Project Editors' Note(s):

5136  
 5137 *This example will be converted into a more standardized format for representing the IT-interface and*  
 5138 *HIE of a coded domain.*  
 5139

---

<sup>110</sup>For 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

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5149 J.2 Organization of Annex J

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5151 J.3 Annex J (Informative) 3166 Non-UN Member States Listed in ISO 3166-1

xx

5152

5153 **J.1 INTRODUCTION**

5154

5155 One common and significant error of those modelling (electronic) business transactions is to assume  
5156 that all the entities listed in ISO 3166-1:1997 (and subsequent amendments) are "countries" and thus  
5157 can be considered as instances of the same object class with respect to their properties and  
5158 behaviours as well as being governed by the same rule base. This assumption is false and e-business  
5159 applications based on this and related assumptions will quickly run into implementation difficulties  
5160 with possible negative legal implications.

5161

5162 In order to ensure that users of this multiple ISO/IEC 15944 standard when modelling business  
5163 transactions as referenceable, registered, and re-useable business objects, do so in accordance with  
5164 (primitive) jurisdictional domain requirements and to avoid mistakes of the nature identified above  
5165 (and frequently made by the "dot.coms" which went out of business in 2002-2003), this informative  
5166 Annex J has been prepared.

5167

5168 The short and commonly used title of ISO 3166-1:1997 is "country codes". The full and complete  
5169 title of ISO 3166-1 is ISO 3166-1:1997 (E/F) *Codes for the representation of names of countries*  
5170 *and their subdivisions - Part 1: Country codes/Codes pour la représentations des noms de pays et*  
5171 *de leur subdivisions - Partie 1: Codes pays. However, many users of ISO 3166-1 do not realize that*  
5172 *ISO 3166-1, contains codes for "entities" which are not "countries".*

5173

5174 At the same time, it is noted that for many users and the purpose of their use of ISO 3166-1 it is not  
5175 that significant whether the entities listed in that standard are countries or not.

5176

5177 The Introduction to ISO 3166-1:1997 (5th edition, 1997-10-01) contains as its first and second  
5178 paragraphs the following text, and we quote,

5179

5180 *"International Standard ISO 3166 provides universally applicable coded representations of*  
5181 *names of countries (current and non-current), dependencies, and other areas of particular*  
5182 *geopolitical interest and their sub-divisions.*

5183

5184 *ISO 3166-1 (Country codes) establishes codes that represent the current names of*  
5185 *countries, dependencies, and other areas of particular geopolitical interest, on the basis of*  
5186 *lists of country names obtained from the United Nations".*

5187

5188 As noted in Clause 0.4 above, "country" in a general sense is associated with many entities which  
5189 are not "countries" in a legal sense, i.e., as nation-states which are full members in good standing of  
5190 the United Nations (or have been recognized as having equivalent legal jurisdictional status such as  
5191 the "Holy See").

5192

5193 In this context, it is also useful to quote the fifth paragraph in the Introduction to ISO 3166-1. It  
5194 states:

5195

5196 *"The three parts of ISO 3166 do not express any opinion whatsoever concerning the legal*  
5197 *status of any country, dependency, or other area named herein, or concerning its frontiers*  
5198 *or boundaries."*

5199

5200 However, in the context of modelling business transactions as common reusable business patterns,  
5201 scenarios and/or scenario components, all requirements must be explicitly stated and specified in

5202 order for them to be able to be transformed into identifiable, registered, referenceable and thus  
 5203 reusable common objects of a business transaction, i.e., as "business objects". {See further ISO/IEC  
 5204 15944-2... Part 2: Registration of scenarios and their components as business objects}.

5205  
 5206 This is of even more importance where such requirements with respect to business transactions are  
 5207 of the nature of "external constraints" in that of a "jurisdictional domain".  
 5208

5209 Therefore, from an e-business needs perspective, it is important to ascertain the nature of a  
 5210 jurisdictional domain as a source of an external constraint and in particular the jurisdictional domain  
 5211 is a UN member state or not.  
 5212

5213

5214 **J.2 ORGANIZATION OF ANNEX J**

5215

5216 Annex J is organized based on the rules governing those for Annex C, i.e., insofar as they are  
 5217 applicable. The matrix is also sorted by the ID Code in Col. (03), which is the 3-digit numeric code  
 5218 of the geopolitical entity as listed in the code set of the UN Statistical Division.  
 5219

5220

5221 The structure of Annex J, presented here in matrix form, is as follows:

Column ID	Label	Specification
	<b>IT-Interface</b>	
	<b>Coded Domain ID</b>	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
	<b>Jurisdictional Codes</b>	
(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)            Code 1 = A member state of the UN (not used in the Annex X)            Code 2 = A geopolitical entity recognized by the UN as a peer entity, i.e., a non-member state.            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.            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. 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 = &lt;&lt;Open&gt;&gt; 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>
	<b>Human Interface Equivalents</b>	
	<b>ISO 3166-1 Short Name</b>	
(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.*

5228  
5229  
5230

**J.3 ANNEX J (INFORMATIVE) NON-UN MEMBER STATES LISTED IN ISO 3166-1**

<b>Annex J: Table nn Non-UN Member States Listed in ISO 3166-1</b>						
<b>IT-Interface</b>			<b>Jurisdictional Codes</b>		<b>Human Interface Equivalents</b>	
<b>Coded Domain ID</b>					<b>ISO 3166-1 Short Names</b>	
<b>Source Authority</b>	<b>Table ID</b>	<b>ID Code</b>	<b>UN Status Code</b>	<b>UN Dep. Code</b>	<b>English</b>	<b>French</b>
(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	Taiwan, 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 <sup>**111</sup>	Sahara occidental <sup>**112</sup>
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

5231  
5232

<sup>111\*\*</sup>) Provisional name

<sup>112\*\*\*</sup>) Nom provisoire

5233 ANNEX K (INFORMATIVE) EXAMPLES OF NEED FOR SPECIFYING GENDER  
 5234 OF TERMS AND NOUNS TO ENSURE UNAMBIGUITY IN USE OF AN  
 5235 OFFICIAL LANGUAGE  
 5236

5237 *Project Editors' Note(s):*  
 5238

- 5239 1. *Annex K is currently under development. The matrix provided here focuses on content.*  
 5240  
 5241 2. *A more defined and specified structured matrix as well as accompanying text is in*  
 5242 *preparation and will be submitted to JTC1/SC32/WG1 either by the Project Editors directly*  
 5243 *or as part of Canadian ballot comments.*  
 5244  
 5245

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	

5246 ANNEX L (NORMATIVE/INFORMATIVE) CODES REPRESENTING LEVELS OF  
 5247 INTERNATIONAL REGULATORY REGIMES (NON-EXHAUSTIVE  
 5248 SPECTRUM)  
 5249

5250 *Project Editors' Note(s):*  
 5251

- 5252 1. *It is likely that this Annex D and Annex L will be integrated into a single Annex*  
 5253  
 5254 2. *Work is under way with the assistance of internationally recognized experts in international*  
 5255 *law on the determination of "Levels" of international regimes governing international treaty*  
 5256 *bodies.*  
 5257  
 5258 3. *Work completed to date has identified the following levels.*  
 5259  
 5260

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

5261

5262 ANNEX M (INFORMATIVE) USE OF UML AND XML  
5263  
5264  
5265

5266 **ANNEX N (INFORMATIVE) - EXAMPLES OF MULTIPLE HUMAN**  
 5267 **INTERFACE EQUIVALENTS (HIEs) FOR A SINGLE IT-INTERFACE**  
 5268 **IDENTIFIER**  
 5269

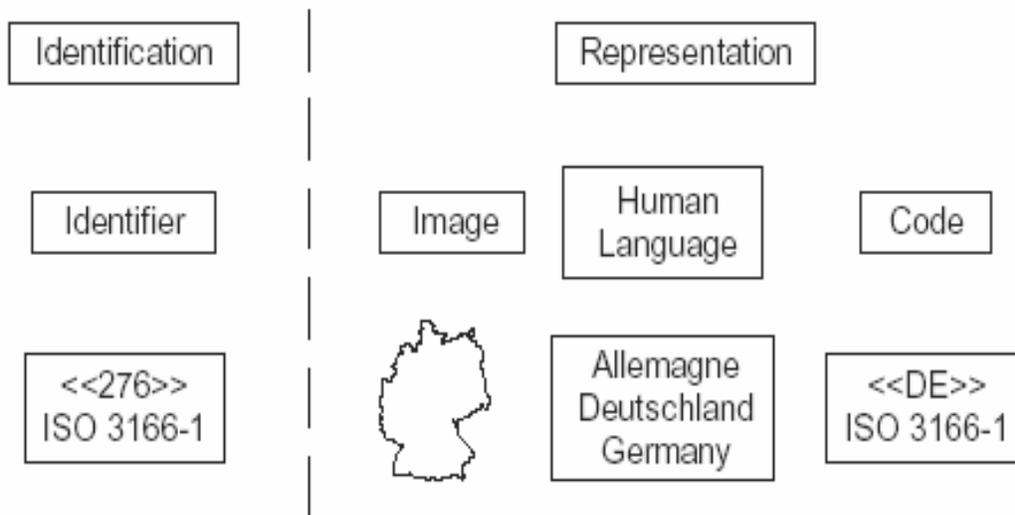
5270 The purpose of Annex N is to provide some examples taken from other ISO standards  
 5271 which are already implementing an approach of having single IT Interface identifier with  
 5272 multiple human interface equivalents (HIEs).  
 5273

5274 The first example is taken from ISO 19135:2005 (E) titled “*Geographic information –*  
 5275 *Procedures for registration of items of geographic information*”. It is taken from Clause 7  
 5276 “*Some principles of registration*” and within this Clause 7 that of Clause 7.2 “*Identification*  
 5277 *of register items*”. The text and figure which follow is a direct quote from ISO 19135,  
 5278 Clause 7.2.1 and Figure 6 in this standard.  
 5279

**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**

5280  
 5281 Four aspects should be highlighted here. The first is that Clause 7.2.1 is normative text.  
 5282  
 5283 The second is that the first sentence in Clause 7.2.1 is of the nature of a rule which is  
 5284 mandatory. From a BOV perspective and in the multipart ISO/IEC 15944-1 standard it

5285 would be presented as

5286

5287 **Rule nnn**

5288 **All items shall include both an identifier that supports the requirements for an**  
5289 **information process efficient denotation and a name that supports the requirement**  
5290 **for a human-accessible denotation (Figure 6)**

5291

5292 ISO 19135 defines identifier as “linguistically independent sequence of characters  
5293 capable of uniquely and permanently identifying that with which it is associated” (Clause  
5294 4.1.5). As such this definition has similar properties “identifier (in business transaction”  
5295 of ISO/IEC 15944-1 as well as of “identifier (in Metadata Registry” of ISO/IEC 11179-  
5296 3.

5297

5298 Thirdly, ISO 19135 requires that the “identifier” support the requirements for an  
5299 information process efficient denotation, i.e. be of an IT-enabled nature.

5300

5301 Fourthly and finally it is noted that the IT-Interface identifier is a composite identifier  
5302 consisting of

5303

(1) the identifier for the coded domain utilized, in this case “ISO 3166-1”; and,

5304

(2) the ID code of the entity in this coded domain, in this case “276” which is the 3-  
5305 digit numeric identifier.

5306

5307 Associated with this single IT-Interface identifier are three types of human interface  
5308 equivalents, namely an “image”, one linguistic in nature, i.e. human language, and the  
5309 third in the form of a code. The examples provide three linguistic HIEs including

5309

➤ “Deutschland” – which is the (short) official name of the country in  
5310 the language of that country

5311

➤ “Allemagne” – which is the name of the country by which it has  
5312 been so designated in the French language

5313

➤ “Germany” – which is the name of the country by which it has been  
5314 so designated in the English language.

5315

Note: Many more linguistic HIEs exist.

5316

In e-business, the “image” HIE is usually presented as a photograph, picture,  
5317 schematic drawing, etc. of a good and so presented in a catalogue with the Catalogue  
5318 Number (or date) serving as the coded domain identifier and the ID code being the  
5319 article or part number in the catalogue.

5320

The second example is taken from ISO/IEC:2004(E/F) “Information technology – Codes  
5321 for the Representation of the Human Sexes”/ «Technologies de l’information –Codes  
5322 pour la représentation des sexes humains»<sup>113</sup>. It consists of copies of two tables taken

---

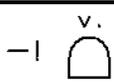
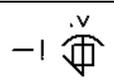
<sup>113</sup> ISO/IEC JTC1 at its November, 2004 Berlin Plenary adopted a resolution to make ISO/IEC 5218 a freely available standard. For those interested in XML, the last section of Annex A is “A.6 Representations of Table “ISO/IEC05218:02” using XML”/ A.6 Représentation en XML du

5323 from “Annex A (Informative) – Codes for the representation of Human Sexes with  
 5324 cultural adaptability/ Annexe A (Informative) – Codes pour la représentation des sexes  
 5325 humains avec adaptabilité culturelle”

5326  
 5327 The first table provides an example of HIEs of a linguistic nature from a global or world-  
 5328 wide perspective. The column containing the Bliss symbols demonstrate that human  
 5329 accessibility requirements can also be supported.

5330

5331

<b>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»</b>					
<b>IT Interface / Interface TI</b>		<b>Human Interface Equivalents (Linguistic)/ Équivalents interface humaine (linguistiques)</b>			
Table ID/ Tableau	ID Code/ Code	ISO UN-ONU English / anglais	ISO UN-ONU French / français	ISO UN-ONU Spanish / espagnol	Symbole / BLISS Symbol <sup>114</sup>
ISO/IEC 05128:01	0	not known	inconnu	desconocido	-  
ISO/IEC 05128:01	1	male	masculin	masculino	v ^
ISO/IEC 05128:01	2	female	féminin	femenino	v Δ
ISO/IEC 05128:01	9	not applicable	sans objet	no aplica	-  

5332

5333

5334 The second example, that of Table 2 below provide an example of HIEs from an official  
 5335 language(s) perspective of UN member states as jurisdictional domain. Those listed in  
 5336 Table 2 represent P-member bodies of JTC1/SC32 who provided the HIEs in their  
 5337 official language(s). In addition, Table 2 demonstrates the ability to be able to represent  
 5338 any language (based on ISO/IEC 10646).

5339

---

Tableau « ISO/CEI05218:02 »

5340

<b>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)</b>						
<b>IT Interface / Interface TI</b>		<b>Human Interface Equivalents (Linguistic)/ Équivalents interface humaine (linguistiques)</b>				
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	ID Code/ 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	

5341

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	kvinn	féminin	weiblich	femmina
ISO/IEC 05218:02	9	ei sovellu	inte lämplig	sans objet	nicht zutreffend	non applicabile

5342

5343

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

5344

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	kvinn	weiblich	femminile	féminin
ISO/IEC 05218:02	9	inte lämplig	nicht zutreffend	non applicabile	sans objet

5345

5346 ANNEX Y (INFORMATIVE) - COMPLETE TABLE OF CONTENTS FOR  
 5347 ISO/IEC 15944-1:2002  
 5348

5349 Project Editors' Notes:  
 5350

- 5351 1. This Part 5 is based on and makes multiple references to Part 1. It is therefore  
 5352 deemed useful to include the complete Table of Contents of ISO/IEC 1594-1:2002  
 5353 as a (temporary) Annex to this Part 5.  
 5354
- 5355 2. The published version of ISO/IEC 15944-1:2--2 does not contain a complete, i.e.,  
 5356 detailed, contents (even though the document submitted by the Project Editor to the  
 5357 ITTF did.  
 5358
- 5359 3. It is noted that at its Tallin, Estonia meeting (October, 2004), SC32/WG1 passed the  
 5360 following resolution to address this deficiency through a Technical Corrigendum to  
 5361 ISO/IEC 15944-1 {See document SC32/WG1 N0279}. The resolution reads as  
 5362 follows:  
 5363

5364 ***"Resolution WG1/19: Technical corrigendum of 15944-1***

5365  
 5366 *SC32/WG1 approves the technical corrigendum to ISO/IEC 15944-1:2002*  
 5367 *with respect to the complete Table of Contents (WG1 Document N280) and*  
 5368 *requests its secretariat to take appropriate action".*  
 5369

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5377 **ANNEX X (INFORMATIVE) REFERENCING EXPLANATORY REPORTS (RER)**

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5379 *Project Editors' Notes*

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5381 *The incoming 5th edition of the JTC1 Directives {see JIN7212} has a new Annex N which requires*  
 5382 *a "Reference Explanatory Report" (RER) to be provided for each "Referenced Specification (RS) to*  
 5383 *be provided.*

5384

5385 *It will be useful to keep these "RERs" and include them in an "Informative Annex".*

5386

5387 *Here are some of the RERs for the RSs contained in this CD ballot document.*

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5389

<b>RER #01:</b>	
<b>RS Title:</b>	Charter of the United Nations (as signed 1945, and Amended 1965, 1968, and 1973).
<b>RS Rationale:</b>	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.
<b>RS Market Acceptance:</b>	The RS has full market acceptance.
<b>RS Transformation into an IS:</b>	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.
<b>RS Referencing:</b>	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 < <a href="http://www.un.org.aboutun/charter/index.html">http://www.un.org.aboutun/charter/index.html</a> >.

5390

<b>RER #02:</b>	
<b>RS Title:</b>	Vienna Convention of the Law of Treaties (1969 1155 U.N.T.S. 331, in force 1980).
<b>RS Rationale:</b>	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.
<b>RS Market Acceptance:</b>	This RS has full market acceptance.
<b>RS Transformation into an IS:</b>	This RS can not be transformed into an IS. The ISO itself is a creature of the UN System.
<b>RS Referencing:</b>	This RS is publicly and freely available and maintained by the United Nations as the Source Authority at < <a href="http://www.unorg.ch/archives/vienna/vien_69.htm">http://www.unorg.ch/archives/vienna/vien_69.htm</a> >

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<b>RER #03:</b>	
<b>RS Title:</b>	Harmonized Commodity Description and Coding System (Harmonized System or HS System), 1983 and subsequent amendments.
<b>RS Rationale:</b>	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.
<b>RS Market Acceptance:</b>	This RS has full market acceptance. About 170 countries and economies use the HS System (covering 98% of world trade).
<b>RS Transformation into an IS:</b>	There is no added value in transforming this RS into an RS.
<b>RS Referencing:</b>	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>.

5394

5395

<b>RER #04:</b>	
<b>RS Title:</b>	International Commercial Terms (INCOTERMS®) 2000*
<b>RS Rationale:</b>	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>
<b>RS Market Acceptance:</b>	Incoterms are used worldwide in all industry sectors, by private sector organizations and public sector administrations.
<b>RS Transformation into an IS:</b>	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.
<b>RS Referencing:</b>	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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<b>RER #05:</b>	
<b>RS Title:</b>	International Patent Classification (IPC)
<b>RS Rationale:</b>	
<b>RS Market Acceptance:</b>	
<b>RS Transformation into an IS:</b>	
<b>RS Referencing:</b>	

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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*

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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".*

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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.

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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.).