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STRATEGIC DIRECTIONS AND NEXT STEPS

Operating procedures of the permanent groups of the United Nations Centre for Trade Facilitation and Electronic Business

Version 2, Release 5[*]

Submitted by the Forum Procedures Team of the UN/CEFACT Forum Management Group

Summary

This document is submitted for approval by the heads of delegation in an intersessional process and is **for confirmation** at the fifteenth session of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).

These procedures are being submitted pursuant to paragraph 49.3 of the Terms of Reference and Mandate of UN/CEFACT (ECE/TRADE/R.650/Rev.4)

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[*] UN/CEFACT Business Standard prepared by the International Trade and Business Processes Group (TBG).

CONTENTS

LIST OF ABBREVIATIONS AND DEFINITIONS

ATG	Applied Technologies Group
Audit	An official examination and verification of UN/CEFACT official documents by the Information Content Management Group (ICG) (in the role of an independent party) to ensure that all procedures and documentation requirements have been respected.
BIE	Business Information Entity
BRS	Business Requirements Specification, a formal document that expresses the specific business requirements in accordance with the UN/CEFACT Modeling Methodology (UMM), including business process elaboration, information flow definition, conceptual model definition, and business rules. [CEFACT/ICG/005 or successor].
CCL	Core Component Library
Conformance	In accordance with referenced set of rules and/or standards.
Core component	This term is used generically within this document to cover all categories of core components as defined in the Core Components Technical Specification.
FMG	The Forum Management Group coordinates activities among the UN/CEFACT permanent groups in support of the UN/CEFACT mission.
Forum	The Forum collectively refers to all the permanent groups and their participants. It also refers to semi-annual week-long meetings of all the permanent groups.
ICG	Information Content Management Group
LG	Legal Group
ODP	Open Development Process, the UN/CEFACT process for developing its various publications. [TRADE/R.650/Rev.4/Add.1 or successor]. This document elaborates part of the process.
PG	Permanent Group, generically refers to each of ATG, ICG, LG, TBG, and TMG.

RSM	Requirements Specification Mapping is a working document that supports the Business Requirements Specification (BRS) by providing the requisite technical information to enable the business requirements to be implemented in one or more target technologies. An RSM includes the conceptual data model (from BRS), canonical data model, business information entity library references, and core component library references. [CEFACT/ICG/006 or successor].
TBG	International Trade and Business Processes Group
TMG	Techniques and Methodologies Group
UML	Unified Modelling Language
UML artefact	A piece of information produced as part of the process of developing specifications, in compliance with the UN/CEFACT UMM UML profile.
UMM	UN/CEFACT Modelling Methodology
Validation	The examination of a given document or object for correctness with respect to defined rules.
Verification	The action of establishing or testing the accuracy or correctness of something.

INTRODUCTION

1.   The "Forum" of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) was created to schedule the concurrent meeting of the UN/CEFACT groups to facilitate face-to-face interaction as a single working body. The Forum is governed by the mandate, terms of reference and procedures for UN/CEFACT as documented in TRADE/R.650. The five UN/CEFACT operational groups are interdependent:

- Applied Technologies Group (ATG)
- Information Content Management Group (ICG)
- Legal Group (LG)
- International Trade and Business Processes Group (TBG)
- Techniques and Methodologies Group (TMG).

2.   TBG defines the business requirements on behalf of UN/CEFACT stakeholders, in compliance with TMG specifications and methodologies, ATG transforms the business requirements into syntax solutions, ICG confirms conformance to applicable specifications, and LG and TMG respectively provide legal and technical advice on request.

3.   These groups need to have clear operating procedures enabling an effective workflow among them. The UN/CEFACT standardization process requires considerable business-user involvement in all steps of the process. The business user is generally situated in TBG. Since TBG defines the requirements, that Group must oversee the transformation of the business requirements and confirm that the information is posted to the appropriate repositories.

4.   The procedures expressed in this document have been devised to support these requirements so that the responsibilities of each group are respected and the interfaces between each group clearly defined. These procedures cover the points of interaction with the UN/CEFACT Open Development Process (ODP).

**I.   INTERNATIONAL TRADE AND BUSINESS PROCESSES
GROUP "PROJECT LEAD"**

5.   Each business-requirements-development (BRD) project must have a TBG "project lead" [project leader] who has the responsibility of ensuring the successful progression of the specification through approval, transformation, and publication. TBG must identify a project lead before the FMG approves a project.

The project lead's role is to:

(a)   Solicit resources necessary for BRS and RSM development;

(b)   Prepare the project plan with major milestones. In the case where a project plan was submitted as part of the "new project request", the project lead shall confirm that the original project plan still applies. If it does not, the project lead shall propose revisions;

(c)   Ensure that the TBG approves the BRS or equivalent;

(d)   Ensure validity of RSM (if a syntax solution is required) or equivalent (if a CCL is required);

(e)   Report project progress to the TBG Permanent Group Steering Committee;

(f)   Collaborate with ICG and ATG to ensure that the RSM is correctly transformed and complies with the BRS;

(g)   Facilitate project issues resolution;

(h)   Confirm that the technology solution is a correct interpretation of the BRS on behalf of TBG;

(i)   Ensure that BRS and/or RSM are updated if later changes required;

(j)   Be available during ICG audit of the resulting technology solution.

II.   WORKFLOW PROCESS PROCEDURE

A.   Process concepts

6.   The following three concepts apply at every point in the process:

- Iteration
- Coordination and collaboration
- Conformance confirmation.

7.   Iteration enables refinement of the work product through encouraging brief returns to previous steps. Coordination and collaboration refers to the requirement that TBG (including the harmonization function), ATG, ICG, TMG, LG and the project lead all work together to complete the workflow. This means that at any point in the process, one group can identify work product improvement opportunities in areas over which another group has responsibility. Conformance confirmation validates the work product (or parts of it) against applicable standards. A common reason for iteration is to address conformance issues.

B.   Business requirements definition

Figure 1:   Process flow diagram for BRS/RSM process
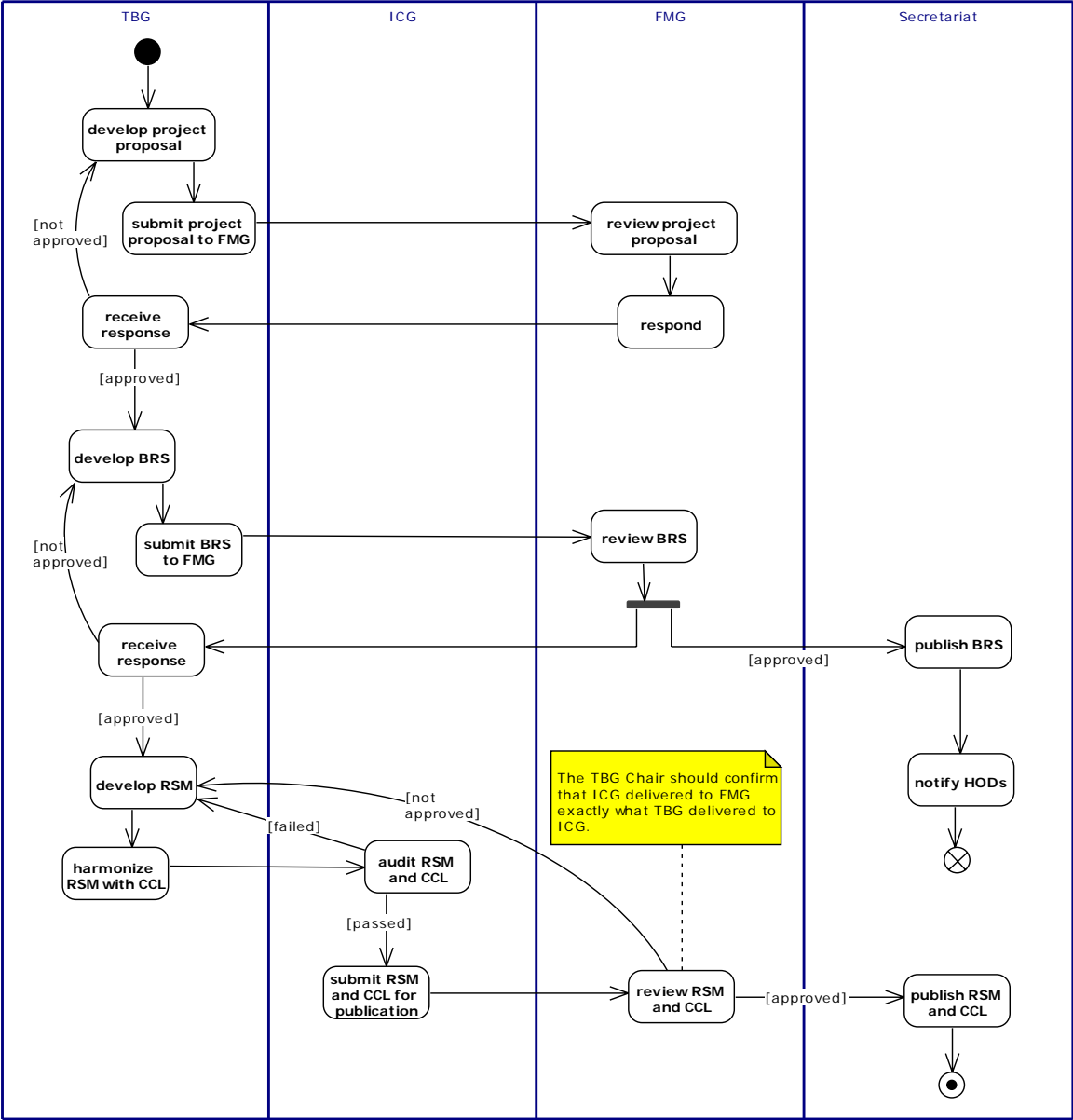
1.   Submitting a business requirements project proposal

8.   The process begins when the TBG Steering Committee receives a project proposal. Business requirements project proposals may be submitted by TBG members, by another UN/CEFACT group, or by the FMG (e.g. proposals received from the UN/CEFACT session, a Plenary member, or an outside body recognized by UN/CEFACT). BRS project proposals shall be processed by the TBG Steering Committee and approved (or rejected) by the FMG.

9.   Project proposals should be evaluated using such criteria as:

   (a)   The scope is within the TBG mandate;

   (b)   Resources are sufficient for successful project completion have been committed;

   (c)   The scope does not duplicate or overlap with that of any other project;

   (d)   A project lead has been identified.

10.   The TBG chairperson, following TBG procedures, submits each project proposal to the FMG. The FMG considers the proposal and either approves it, suggests revisions, or rejects it. The FMG reports rejected projects to the UN/CEFACT Plenary. If changes occur during the project that result, or would result, in a significant departure from the project proposal, a revised project proposal must be submitted to the FMG for approval.

11.   An approved business requirement project is the vehicle for BRS development and for BRS progression through the ODP, culminating in the BRS becoming a UN/CEFACT business standard.

2.   Forming a project team

12.   The process of forming a team includes an activity called "a call for participation", which is an announcement to interested parties regarding the intent to execute a BRS project, and an invitation to contribute. Regardless of the method by which the project team is formed, it is acceptable for the team to be composed entirely of a small number of subject-matter experts, who may serve as editors, with one editor designated as the "project lead" [project leader].

3.   Developing a Business Requirements Specification

13.   The project team engages stakeholders and domain experts to document requirements in the form of a BRS[1]. The BRS development follows the UN/CEFACT Modelling Methodology (UMM), and BRS technical specification documentation template. It may be prepared by the

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[1] http://www.uncefactforum.org/ICG/ICG_document_downloads.htm.

project team or may originate from an external source. In either case, it shall progress through the ODP as a UN/CEFACT publication.

14.   The BRS contains the necessary UMM artefacts (e.g. use case diagrams, collaboration diagrams, class diagrams). It is the formal document that describes the business requirements. It is a document that is governed by the ODP following the steps detailed for the publication of business standards. Collectively the BRS content will become the foundation of the business information content of the UN/CEFACT registry.

4.   Developing Requirements Specification Mapping

15.   RSM in this document refers to the UN/CEFACT RSM or equivalent document. The RSM[2] is a UN/CEFACT internal document that serves as the bridge between the business requirements as expressed in the BRS document and the standardized components contained in the various technical libraries and directories maintained by UN/CEFACT, in particular the Core Component Library (CCL) and the XML schema library.

16.   The RSM describes the electronic information payload for which a technology solution needs to be developed, in the form of a conceptual data model (conventional UML class diagram as depicted in the BRS) and the canonical data model (a UMM compliant class diagram depicting the conceptual data model as Core Components).

17.   The canonical data model may in certain cases be identical to the conceptual data model; for instance, where the modelling analyst develops the conceptual model directly using Core Components in a UMM-compliant manner.

18.   In specifying one or more technology solutions, each RSM becomes the specification exchanged between the TBG, the ATG and the ICG for the development of technology solutions. The RSM may be updated as it progresses through this process. The RSM is only required when a new technology solution is required. The document evolution comprises several steps.

(a)   RSM is initiated within TBG by a project team and is completed when existing Core Components have been identified and candidate Core Components have been proposed to satisfy the business requirements defined in the BRS;

(b)   The new and amended business information entities (BIEs) requested in the RSM are processed for implementation by the TBG harmonization working group (TBG17). The RSM is updated accordingly;

(c)   On finalization by TBG of a new release of the Core Component Library, the library along with the supporting BRS and RSM documentation is forwarded to ICG for audit and registration;

(d)   ICG audits the Core Component Library and RSM documentation;

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[2] http://www.uncefactforum.org/ICG/ICG_document_downloads.htm.

(e)   On completion of the audit, ICG notifies the FMG;

(f)   FMG confirms publication readiness of the Core Component Library and RSM documentation, taking account of a TBG consistency check to ensure that these artifacts were not inadvertently modified;

(g)   UNECE secretariat publishes RSMs and Core Component Library;

(h)   ATG uses the approved RSMs and the Core Component Library to generate the syntax-specific solution(s);

(i)   ICG audits the syntax-specific solution(s);

(j)   TBG reviews and approves the syntax-specific solution(s);

(k)   ICG notifies the FMG that these artefacts can be released as UN/CEFACT standards;

(l)   FMG authorizes publication;

(m)   UNECE secretariat publishes syntax specific solutions.

5.   Harmonization

19.   The RSM is harmonized within TBG against the existing libraries. The TBG harmonization function includes the task of transforming "candidate" Core Components into "draft" Core Components.

6.   Validation and approval

20.   TBG is responsible for validating and approving the BRS and the RSM. The BRS is subject to the ODP. The RSM is an internal UN/CEFACT working document and as such is not subject to the ODP.

C.   Finalize the Business Requirements Specification

1.   Verification

21.   TBG then submits the approved BRS to ICG for publication. Any accompanying RSM is submitted at the same time and shall be used within the remainder of the process as the base working document. ICG shall verify that the BRS is correctly formatted and contains all mandatory details.

2.   Publication

22.   ICG publishes the verified BRS.

D.   Validate the Requirements Specification Mapping

23.   The RSM is processed by ICG as part of its audit function to validate draft Core Components and UML artefacts for correctness and the registration of new syntax-neutral Core Components as required. Following a successful audit and FMG approval, new and modified Core Components are published in the registry, along with the BRS and RSM documentation, as part of the next publication release. ICG registers the RSM in a registry and informs FMG that it is available for technology solution(s) development.

E.   Publish the Requirements Specification Mapping and notify heads of delegation

24.   Following FMG approval, FMG will deliver the RSM to the UNECE secretariat for publication. The FMG will draft a notice to the heads of delegation regarding the RSM publication and direct the secretariat to communicate it to the heads of delegation.

F.   Technology solution transformation and publication

1.   Transformation

25.   Once the RSMs and draft Core Component Library have completed the audit process, all RSMs are forwarded by TBG to ATG for transformation. The RSM specifies the root-level message assembly.

26.   ATG develops the technology solution specification in the targeted technologies, such as XML or UN/EDIFACT (United Nations Electronic Data Interchange for Administration, Commerce and Transport).

2.   Publication

27.   At the conclusion of ATG activity, the final version of the RSM, along with the technology solution, is forwarded by ATG to both TBG and ICG.

28.   ICG audits the technical solution to ensure that it correctly reflects the RSM and that the relevant rules have been respected. TBG reviews the technical solution to ensure that it correctly reflects the RSM.

29.   After a successful audit and approval by TBG, FMG approves publication of the technical solution by the UNECE secretariat.

Figure 2:   The process flow for the technology solution transformation and publication
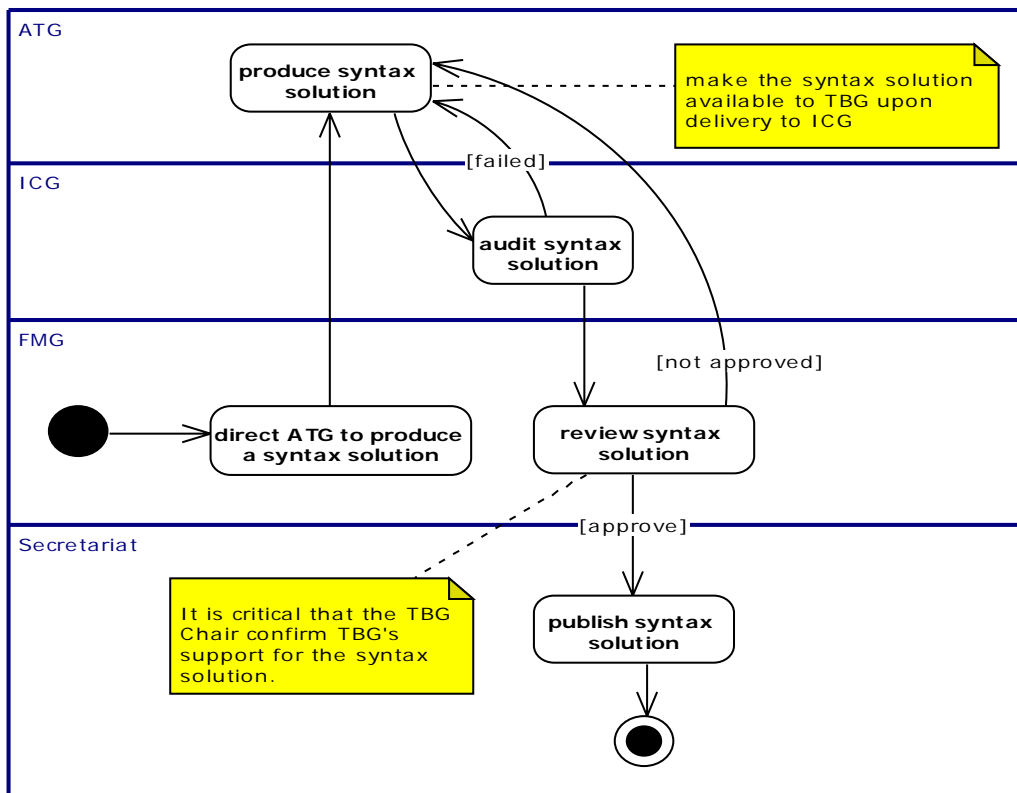
III.   BULK CORE COMPONENT AND/OR UNIFIED MODELLING LANGUAGE ARTEFACT SUBMISSION

Figure 3: The process flow for bulk submissions or submissions from other outside organizations
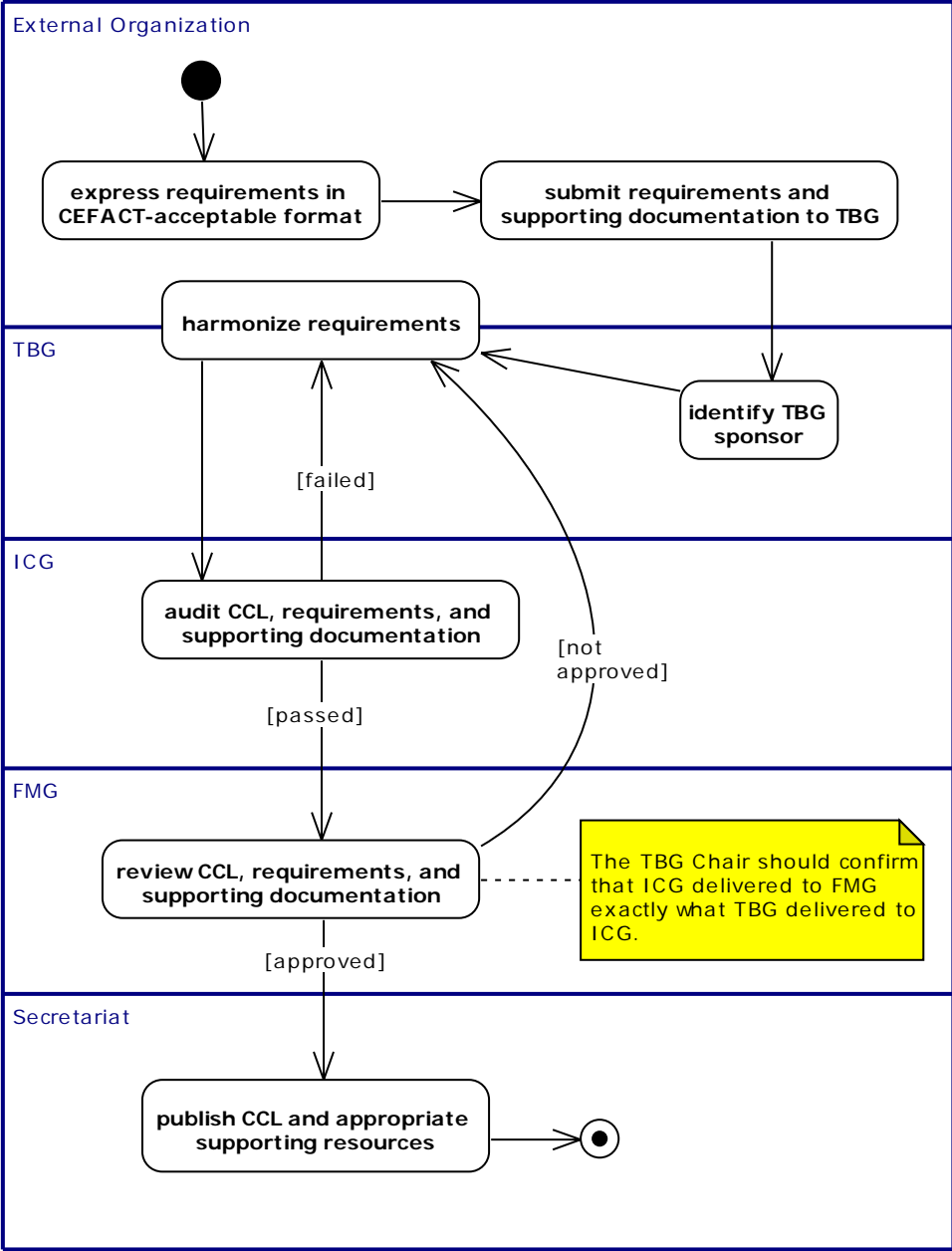
30.   UN/CEFACT has agreed that in certain circumstances it may be necessary to permit the bulk submission of candidate Core Components and/or UML artefacts. RSM equivalent documentation (e.g. model references, mapping tables) is provided in support of the submission. These external bulk submissions are made through the TBG. For example, a bulk submission is possible when a specific sector submits a set of candidate Core Components and/or UML artefacts that it has extracted from an existing repository of business processes. This is particularly relevant when other standards development organizations wish to submit their Core Components to UN/CEFACT.

31.   RSM equivalent documentation must have a level of detail that enables the correlation of all changes and additions to the UN/CEFACT Core Component Library to formal business requirements either expressed in a BRS or detailed in another standard. Where another standard has developed a formal business requirements definition under its own standards development process, it is not necessary to replicate this definition in a BRS.

32.   The TBG harmonization process applies to these bulk submissions, and may result in changes to the submission prior to publication.