



ISO/IEC JTC1/SC22

**Programming languages, their environments and system software interfaces
Secretariat: U.S.A (ANSI)**

ISO/IEC JTC1/SC22

N 2123

April 1996

TITLE: The Normative Referencing of Specifications Other Than International Standards in International Standardized Profiles - Guidelines for ISP Submitters

SOURCE: Secretariat, ISO/IEC JTC 1/SC22

WORK ITEM: N/A

STATUS: N/A

CROSS REFERENCE: SC22 N2106 (res 13)

DOCUMENT TYPE: JTC 1 Guidelines Document

ACTION: To SC22 Member Bodies, Working Group Conveners and HODs for action or information as applicable.

Address reply to: ISO/IEC JTC 1/SC22 Secretariat

William C. Rinehuls

8457 Rushing Creek Court

Springfield, VA 22153

Tel: (703) 912-9680 Fax: (703) 912-2973 E-mail: rinehuls@access.digex.net



DATE: 10 April 1996

ISO/IEC JTC 1
INFORMATION TECHNOLOGY
Secretariat: U.S.A. (ANSI)

- TITLE:** The Normative Referencing of Specifications other than International Standards in International Standardized Profiles - Guidelines for ISP Submitters-
- SOURCE:** ISO/IEC JTC 1/WG-RS
- PROJECT:**
- STATUS:** In accordance with JTC 1 Sydney Resolution 13 (reference document JTC 1 N 4058), JTC 1 approves a policy that normative referencing from JTC 1 International Standardized Profiles to documents other than International Standards are permitted, subject to the Guidelines in JTC 1 N 4047. JTC 1 further approves JTC 1 N 4047 for a trial period ending July 1998, after which the applicability and usefulness of the Guidelines should be evaluated. Further, during the trial period, review of National Body experiences and concerns about the application of the Guidelines will be a standing topic on the agenda of the JTC 1 Plenary meeting. SGFS is also requested to report at the Plenary on experiences and concerns. The JTC 1 Secretariat will update the JTC 1 Directives accordingly.
- ACTION:** This document is circulated to the National Bodies of JTC 1 and to SGFS for implementation, as appropriate.
- DISTRIBUTION:** P and L Members
SGFS Secretariat and Chairman

Address Reply to:
Secretariat ISO/IEC JTC 1 - American National Standards Institute, 11 West 42nd Street, New York, NY 10036 Telephone: 212-642-4932; Facsimile: 212-398-0023; e-mail: irajchel@ansi.org

**The Normative Referencing of Specifications
other than International Standards
in International Standardized Profiles**

- Guidelines for ISP Submitters -

1995-03-13

Table of contents:

1 Purpose and scope of this Guide.....	2
2 JTC 1 approach to referencing other specifications.....	3
3 Terms for normative references to other specifications	3
4 Principles for referencing of specifications.....	3
5 Description of the process for ISP submitters use	4
5.1 RSs in ISPs.....	5
5.2 Announcement of intent to make reference	5
5.3 Preparation of the Referencing Explanatory Report	5
5.4 Availability of the Referencing Explanatory Report.....	5
5.5 Submission of a PDISP	5
5.6 PDISP Review	6
5.7 DISP Ballot.....	6
5.8 Publication of the ISP	6
5.9 Maintenance	6
5.10 Documentation requirements.....	7
6 Evaluation of a proposed RS	7
6.1 Introduction	7
6.2 Supplementary elements	7
6.3 Criteria	7
6.3.1 <i>Cooperative stance</i>	7
6.3.2 <i>Intellectual property rights</i>	8
6.3.3 <i>Quality of the referenced specification</i>	8

3

2 JTC 1 approach to referencing other specifications

According to ISO/IEC rules, referencing sources other than ISO, IEC, or ITU is a valid approach for making use of such specifications, provided JTC 1 deems it appropriate. While JTC 1 supports this approach, it has to maintain the quality of its work and the integrity of the standards development process. Therefore, it is necessary to establish some referencing rules that complement those of ISO/IEC. Though rules and guidelines are important, JTC 1 wishes them to be as straightforward as possible. This also takes account of the fact that the initiative for establishing references usually comes from the standards developing community within JTC 1 or from a Regional Workshop. Further, no undue burden should be put on either the originator of a specification being referenced or the developer of an ISP.

3 Terms for normative references to other specifications

The process of establishing normative references in ISPs to documents other than from ISO, IEC or ITU is based on the ISO/IEC Directives, the JTC 1 Directives, ISO/IEC TR 10000 and the JTC 1 / SGFS procedures with the addition of the following terms:

- **Referenced Specification (RS)**
A specification from a source other than ISO, IEC, or ITU is called a Referenced Specification (RS) if it meets certain criteria (see Section 6) and has been balloted and accepted together with the DISP at the JTC 1 National Body level as suitable for normative referencing in the resulting ISP. An RS may be a part of a larger specification.
- **RS Originator**
The originator of an RS or a proposed RS is called an RS Originator.

4 Principles for referencing of specifications

Note: The order of the principles below does not indicate any priority

- 4.1 An RS shall normally be within the JTC 1 scope. In case the RS is within the scope of another ISO or IEC TC with which a cooperative agreement already exists on the development of ISPs, a prior agreement with this TC is required regarding the handling of this RS.
- 4.2 Concerning conformity and interoperability, ISPs containing normative references to other specifications have to follow the same requirements and rules as for other JTC 1 standards as defined in the JTC 1 Directives.

Note: The inclusion of the interoperability aspect in this clause is based on the assumption that the interoperability ballot to amend the JTC 1 Directives will pass.

- 4.3 When the referencing specification (DISP) is submitted for ballot it shall be accompanied, in addition to the (ISP) Explanatory Report, by a Referencing Explanatory Report (RER) which has been generated by the ISP submitter wishing to incorporate the RS in a target ISP.
- 4.4 The RER shall contain the following elements:

5

5.1 RSs in ISPs

It is understood that an RS can be validly referenced in a profile in the sense of ISO/IEC TR 10000. However, ISP submitters are reminded that the use of the PAS transposition process, followed by a reference to the resulting IS, remains the preferred method for handling references to documents other than international standards.

Also, if an RS is later transposed into an international standard (through the PAS transposition process), the ISP will have to be revised in order to correct the reference.

5.2 Announcement of intent to make reference

There shall be early notification of the ISP submitter's intent to submit a PDISP containing normative references to RSs, to enable JTC 1 / SGFS and the JTC 1 National Bodies to identify relevant expertise to provide support for the review and ballot process. This notification to SGFS shall take place at least six months before the planned submission of the PDISP. It shall be accompanied by an identification of all RSs being used for this PDISP, and a proposal for a new taxonomy entry if this does not yet exist. SGFS will forward this notification to JTC 1. JTC 1 National Bodies will be invited to comment prior to PDISP submission.

As usual, the proposed submission will be documented in the SGFS Standing Document SD-4, with an indication of the RSs to be referenced.

5.3 Preparation of the Referencing Explanatory Report

It is the obligation of the ISP submitter which develops an PDISP containing normative references to specifications other than an international standard, to provide for each such reference a related RER. The elements of this Report are described in clause 4.4 above. In order to avoid any undue delay in the standard ratification process and to avoid the wasting of development resources, the production of an RER should commence as soon as the ISP developing organization has determined the need to establish a normative reference to an RS.

The degree to which a cooperative arrangement is established between the ISP developing organization and the RS Originator may vary, and is not prescribed by JTC 1. However, since some elements of the RER require final endorsement of the RS Originator, it is recommended that a contact be established with the RS Originator as early as possible to explore its willingness to accept the referencing.

5.4 Availability of the Referencing Explanatory Report

The RER shall be made available to JTC 1 and its National Bodies as early as possible and appropriate. The latest date for availability of the Report is the PDISP submission.

5.5 Submission of a PDISP

The submission of a PDISP shall be accompanied by.

- The (ISP) Explanatory Report which is requested to address the following additional items.
 - the ISP submitter shall provide corroborative evidence of the validity and technical consistency of references to the RSs;

9

5.10 Documentation requirements

Further to the requirements in the ISO/IEC Directives, Part 3, all RSs to which a normative reference is made, shall be identified in a subclause of clause 2 of the ISP. This subclause should start with the following text:

All references in this subclause were correct at the time of approval of this International Standardized Profile. The provisions of the referenced specifications, as identified in this subclause, are valid within the context of this ISP. The reference to a specification within this ISP does not give it any further status within ISO/IEC; in particular, it does not give the referenced specification the status of an International Standard.

6 Evaluation of a proposed RS

6.1 Introduction

JTC 1 has established criteria which serve as a basis for the judgement as to whether a particular specification can be accepted as a normative reference in an international standard. This judgement initially occurs at ISP submitter level when a decision to establish a normative reference is made, and later at NB level during the DISP ballot.

JTC 1 considers that the primary benefit of these criteria is guidance for consistent evaluation rather than an absolute pass/fail mechanism. There is a wide variety of specifications available for consideration as well as a wide variety of needs within the JTC 1 community. An absolute pass/fail mechanism over such a wide variety of material is unlikely. What is needed throughout this process is flexibility and good judgement on the part of all concerned. Rather than provide quantitative measures to evaluate acceptability of a proposed RS on a pass/fail basis, the criteria set forth the key topics for consideration and measures for evaluating them in terms of the scope, depth, and thoroughness with which the criteria topics have been considered.

6.2 Supplementary elements

It is intended that the questions asked under each Criteria Category are to be viewed as examples of ways in which the basic criteria sub-category might be evaluated. There may well be other responses to unasked questions that best describe how well a given proposed RS meets, for example, an acceptable level of "Quality". In general, the more complete the RER and its accompanying documents, the easier it will be for JTC 1 National Bodies to evaluate a DISP making a normative reference to an RS.

- d) What conformance/interoperability tests or means of implementation verification do exist, and what provisions has the RS for testability?
- e) Are any ambiguities known in the RS and if so, to what extent are they addressed in the ISP?

1 Purpose and scope of this Guide

ISO/IEC JTC 1 has defined and implemented a policy that encourages and assists the transposition of certain technical specifications from sources outside JTC 1 into international standards. JTC 1 N 3582 (*The Transposition of Publicly Available Specifications (PAS) into International Standards - A Management Guide*) describes in detail this transposition process.

JTC 1 also recognizes that there may be situations where it is appropriate to reference a specification without performing the transposition process as described in JTC 1 N 3582. This situation may apply in a number of cases. JTC 1 assumes that the procedures and conditions for referencing depend on the process and the kind of international standard (IS or ISP) in which the reference will be established. One of the cases is described in this document, namely where an International Standardized Profile (ISP) is developed and submitted to JTC 1 by an authorized ISP submitter. For an initial period, an authorized ISP submitter in the context of this document denotes a JTC 1 Subcommittee, or a Regional Workshop being one of the S-liaison organizations to SGFS. Other cases will be considered later.

Note: It is recognized that, according to the procedures of JTC 1 and its SGFS other organizations are also entitled to submit drafts for ISPs to JTC 1/SGFS. However, for an initial trial period only JTC 1 Subcommittees and Regional Workshops will be admitted as submitters of ISPs with normative references to documents other than International Standards. Therefore, throughout this document an ISP submitter denotes a JTC 1 Subcommittee or a Regional Workshop

JTC 1 re-emphasizes its preference for transposition into international standards as the approach to include material from outside JTC 1. However, if the referencing approach is chosen, it is necessary to establish such references in international standards in a consistent way which ensures the quality of international standards established by JTC 1 as well as the proper treatment of IPR issues. Therefore, a process has to be defined by JTC 1 for the establishment of references to documents other than from ISO, IEC or ITU.

ISP submitters may, in the course of their work, find it appropriate to incorporate RSs into an emerging ISP. The need for such action, the selection of the appropriate specification, and the evaluation of the proposed RS itself are matters for the ISP submitter to determine. Any such decision will, however, be subject to JTC 1 National Body evaluation during the DISP ballot.

As no restrictions apply to making informative references (see ISO/IEC Directives Part 3), the scope of this document is limited to the normative referencing of a specification other than from ISO, IEC or ITU in an ISP

These Guidelines complement ISO/IEC TR 10000 and the JTC 1 / SGFS procedures.

These Guidelines provide insights to facilitate the ISP submitter's consideration and subsequent incorporation of an RS into a JTC 1 ISP. Since the consideration of a proposed RS may well involve more than purely technical considerations, it is deemed helpful to provide these Guidelines. The ISP submitter is asked to use this document to facilitate the process. As to IPR issues or organizational matters, it is expected that the ISP submitter will contact the appropriate bodies (e.g. ITTF) to obtain the necessary information and that it will, if necessary, facilitate discussion between ISO/IEC and the RS Originator.

- 4.4.1 a justification for the referencing which shall also address the following aspects:
- relationship of the proposed RS to existing or emerging international standards (and regional or other standards as appropriate), and when the RS is competing with or complementing an existing or emerging international standard, the rationale for the referencing;
 - the degree of market acceptance of the proposed RS; and
 - the rationale as to why the transposition of the proposed RS into an IS is inappropriate or impractical,
- 4.4.2 statements that address the criteria as detailed in section 6.
- 4.5 The material submitted for ballot shall include a copy of the proposed RS. If the referenced material has been made available to JTC 1 member bodies previously as an N-numbered document, it is acceptable, instead, to refer to this document.
- 4.6 For actual referencing, the rules of the ISO/IEC Directives, ISO/IEC TR 10000 and the SGFS procedures apply. In particular, any reference shall be specific and indicate the publication date and/or version number as appropriate.
- 4.7 If an RS, in turn, contains a normative reference to a specification other than an international standard, the information required by an RER shall normally be provided for each additional reference. The exception to this requirement is when the level of detail involved would be so time-consuming to assemble, and difficult to interpret, that its collection would be counter-productive. In this case, the ISP submitter shall explain the situation in a way that will enable National Bodies to make an informed assessment of the references that are being made. The ISP submitter is expected to thoroughly process all nested references.
- 4.8 The overall goal is to assure full global harmonization in a proactive way. Therefore, if the ISP submitter is not an SC, documented evidence is requested that each Regional Workshop has thoroughly reviewed the ISP containing one or more RSs.
- 4.9 An ISP shall not consist entirely of RSs, and, therefore, shall be based on a "core set" of ISs.
- 4.10 References to a specification which is currently being internationally standardized shall refer to the proposed standard rather than to the original specification.
- 4.11 The submitter of an ISP containing RSs shall document within the (ISP) Explanatory Report the technical feasibility of implementing the ISP.
- 4.12 The submitter of an ISP containing RSs shall document within the (ISP) Explanatory Report market and/or user needs for the ISP.

Note. It is recognized that clauses 4.11 and 4.12 above establish requirements for ISP submitters beyond those in TR 10000 and the SGFS procedures. As they are deemed generally useful, it is recommended that they be considered for all ISPs

5 Description of the process for ISP submitters use

The ISP submission process as defined in the JTC 1 Directives and the SGFS procedures applies with the following additions:

6

- the ISP submitter shall document the technical feasibility of implementing the ISP;
 - the ISP submitter shall document market and/or user needs for the ISP;
 - if the submission is from a Regional Workshop, it shall demonstrate that global harmonization has occurred in a proactive way. Therefore, the ISP submitter shall document that each Regional Workshop has sufficient knowledge to review thoroughly the PDISP.
- An RER for each RS referenced in the ISP.

5.6 PDISP Review

Though the current SGFS procedures exceptionally allow for a PDISP review by only the submitting organization, this exception is not applicable when the PDISP contains normative references to RSs. In such case, the Review Group shall always include SGFS National Bodies. The ISP submitter is encouraged to identify experts familiar with the RS who could be included in the Review Group.

5.7 DISP Ballot

The material submitted for DISP ballot shall include the (ISP) Explanatory Report, the Review Report, and for each RS an RER together with a copy of the proposed RS. If the Report(s) and/or the RS have already been provided earlier to JTC 1 members as N-numbered documents, it is acceptable to refer, instead, to these documents and to verify that no changes have occurred in the meantime.

Comments and votes are handled in the usual way with the following addition:

If a NO vote is cast, or if a major technical comment is made during the JTC 1 DISP ballot, then (according to the SGFS procedures) a ballot resolution meeting will be held. The RS Originator shall be invited to attend the appropriate part of any resolution meeting held. ITTF should only designate a DISP as approved if there is no need for a ballot resolution meeting. Otherwise, even if the ITTF criteria for approval are met (i.e. sufficient YES votes, not too many NO votes), it should be the responsibility of the ballot resolution meeting to establish the status of the DISP, i.e. approved or not approved. Ballot resolution is allowed to occur via electronic mail or teleconference, to ensure that JTC 1 National Bodies' concerns are addressed even if they are not able to attend the ballot resolution meeting.

Note. It is recognized that the above procedure requires ITTF collaboration and approval.

5.8 Publication of the ISP

No particular provisions regarding publication apply where an ISP contains a reference to an RS. The source of the RS may be different from that of an ISP, and it is not required that the text of the RS should be published, or distributed, with the referencing ISP.

5.9 Maintenance

It is expected that JTC 1, with the help of the ISP submitter, will evaluate the consequences of any change to the RS subsequent to its inclusion as a reference in an ISP, for appropriate action (e.g. revision, exclusion).

8

6.3 Criteria

6.3.1 Cooperative stance

On initiative of the ISP submitter, the RS Originator shall provide or acknowledge a written statement that it agrees to the referencing of a specific document or family of documents in a JTC 1 standard. An applicable prior written statement may be used. Should the RS Originator decline to provide or acknowledge such a statement, the reference shall not be made.

There should be acceptable statements covering the following categories and topics:

6.3.1.1 Ongoing maintenance:

- How will the RS Originator advise the ISP submitter of any change to the RS?
- Who is responsible for maintenance of the RS if and when the need arises?

6.3.1.2 Changes:

What is the flexibility of the RS Originator to apply changes to the RS if so requested during the process of balloting the DISP?

6.3.1.3 Availability of the referenced specification

What is the status of public availability of the RS on fair, reasonable and non-discriminatory terms and conditions?

Is the RS Originator willing to notify JTC 1 in a timely manner of any intention to terminate the availability of the RS?

6.3.2 Intellectual property rights

It is the ISP submitter's responsibility to ensure that statements in response to 6.3.2.1 - 6.3.2.3 are provided in the RER. The RS Originator is requested, in the strongest terms, to make known in writing its position on the items listed below.

6.3.2.1 Patents:

What is the status of meeting the ISO/IEC policy on patent matters?

6.3.2.2 Copyrights:

What copyrights exist, and what copyrights is the RS Originator willing to grant, throughout both the evaluation and the publication cycle?

6.3.2.3 Trademark rights:

What trademarks apply to the RS and with what conditions?

6.3.3 Quality of the referenced specification

The ISP submitter shall establish that the proposed RS is of adequate quality and that it is readily and widely available. The following items should be addressed:

- a) How easily can implementation take place without the need of additional descriptions?
 - b) How long has the RS existed, unchanged, since some form of verification (e.g., prototype testing, paper analysis, full interoperability tests) has been achieved?
 - c) To what extent and for how long have products been implemented using the RS?
- 10