

Title: Referencing PAS in ISPs - a liaison statement to JTC1/WG-RS

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1. Introduction

This liaison statement has been prepared in response to ISO/IEC JTC 1 N3419, Liaison from JTC 1 WG-RS to SGFS on the role of SGFS in the progression of ISPs containing referenceable specifications.

In order to provide background information for the response, there are three Annexes. Annex A outlines the requirement for referencing PAS in ISPs. SGFS also calls your attention to previous liaison statements on this need (JTC 1 N2821, JTC 1 N3140). Annex B outlines the current procedures for ISP approval.

It is also the understanding of SGFS that during its meeting in Kista WG-RS asked SGFS to provide further information on what profiles containing references to PAS can be expected during the coming year. In response to that request, Annex C contains material, supplied by the SGFS S-Liaison organizations, on profiles containing such references planned for submission (should this be allowed) within the next 12-18 months.

2. Background on SGFS views on the use of PAS in ISPs

With the inclusion of PAS within the context of JTC 1 (either as a source for transposition, or as a specification which can be referenced) the role of JTC 1 within the standards community has been changed from an organization developing standards to an organization providing standards (including standards development).

In order to maintain the quality of approved JTC 1 standards, JTC 1 National Bodies must either, at one extreme, enlarge their 'review groups' (to ensure that every possible specification can get a full technical review), with the consequence that specifications are rejected where no reviewers can be found, or, at the other extreme, JTC 1 must restrict itself to considering (as ISs or ISPs) only those specifications that come from 'recognized' sources.

The former case may result in a situation that is difficult to manage (by JTC 1 NBs): organizing (potentially large) review panels and still reaching a consensus (or at least a well documented opinion) in a limited period of time. In the latter case it is assumed that the submitting organization has done a full check on any referenced specification, and has documented, in an explanatory report which is available for JTC 1 during the final

ballot, its findings on a number of requirements (specified by SGFS and JTC 1) with respect to that specification. For the JTC 1 NBs this opens up the possibility that there is not always a need to review the proposed IS or ISP (including all its references) fully and completely (although they may of course decide to do so when there is no lack of expertise) because the proposal comes from an organization which JTC 1 NBs have recognized (by ballot) as a reliable source.

The latter route has been selected for the transposition of PAS. A pool of recognized organizations is established by JTC 1 through the granting of PAS Authorized Submitter status. The same concept is proposed out of the June 1995 WG-RS meeting for the adoption of IS which contain normative references to PAS - the recognized body in this case being the JTC 1 SC.

For ISPs, the SGFS S-Liaison organizations are recognized submitting organizations.

It is stressed again that the ultimate decision always lies with NBs. The procedures are not intended to take approval of documents out of their control. The procedures give the NBs the same level of approval over standards that cover a larger domain namely, not only standards developed by SCs but all types of OSE standards and profiles - more or less the whole of IT.

3. Questions from N3419

Question 1:

ISPs do not currently contain "new" normative technical material (i.e., technical material is included by referencing previously approved international standards and by making appropriate selections such as parameter specification). Thus, technical evaluation of the ISP is limited to a determination (by relevant JTC 1 technical experts) of whether the ISP is consistent with the referenced international standard(s). When referenced document is not an international standard, JTC 1 cannot readily determine whether the reference is consistent with the specification. Therefore, the current role of JTC 1 in its technical evaluation of ISPs is no longer valid. What, then, is the role of JTC 1, via its SGFS procedures, in the evaluation of ISPs containing references to specifications other than international standards?

In general, the technical content of (or technical material in) an ISP is the specification of the (technical) choices made by the ISP developing experts to satisfy the required functionality of the profile documented in the ISP. Two types of technical choices can be distinguished: the choice of the base specifications to be followed in the provision of the required functionality of the profile, and the choices made in the use of the provisions (in terms of subsets or options) of those specifications.

SGFS believes that the role of JTC 1 in the evaluation of ISPs containing references to PAS remains essentially unchanged: to determine (through evaluation by appropriate

experts) that the ISP is consistent with the referenced specifications (standards and PAS). In the case of JTC 1 standards the experts will be drawn from those who have been involved in the development and/or use of the standards - normally from the SCs concerned. In the case of PAS the experts will, again, be drawn from those involved in development and/or use - normally from the PAS source or the submitter. (It should be noted that, in some cases, the same experts may be involved for both standards and PAS.) Both sets of experts will be involved in issues concerning the relationships between standards use and PAS use.

SGFS does not propose a fundamentally different review and approval process when the set of base specifications on which ISPs are built is expanded to include PAS. However some fine tuning of the requirements for such ISPs (requirements to be documented in TR 10000) and of the SGFS procedures (to ensure that JTC 1 NBs have all necessary information during the ballot) are proposed in section 4 of this document.

Question 2:

Unlike ISs, ISPs are typically developed outside JTC 1 SCs and, thus, normative references to ISPs are not selected by technical experts in JTC 1. Therefore, technical expertise on a specification other than an international standard may not exist in JTC 1. How will JTC 1 identify a pool of experts to conduct a technical evaluation and what action will JTC 1 take if no satisfactory pool of experts can be identified?

Since it is normally the case that a PAS will be referenced because it complements formal standards in specifying some aspect of system functionality, it will frequently be the case that technical experts in JTC 1 will be familiar with the provisions of the PAS.

Nevertheless, in section 4 proposals are made to modify the ISP process to ensure that adequate technical information is available to assess PAS references in an ISP.

Should JTC 1 NBs find that a thorough technical review needs to be made (in addition to the technical work done by the submitting organization and documented in the Explanatory report), then it is, of course, always open to JTC 1 NBs to decide to reject an ISP on the grounds that sufficient expertise has not been available for such a review. Questions that could be considered in making such a decision are:

- +what is the urgency to come to international agreement on satisfying the user requirements identified (and specified) in the ISP?
- +what alternative action can be taken to meet the requirement?
- +how significant is the already acquired international support for this ISP?
- +how well-known is the organization which owns the PAS?

4. Proposed modifications

4.1 Proposed additions to the ISP process

4.1.1

ISP developing organizations will be reminded that the use of the PAS Transposition process, followed by a reference to the resulting IS, is the preferred method for handling such references.

4.1.2

The ISP developing organization must provide corroborative evidence of the validity and technical consistency of references to the PAS as part of the Explanatory Report.

4.1.3

There should be early notification of an intent to submit a PDISP, identifying the PAS to be referenced - to enable SGFS and NBs to identify relevant expertise to provide support for the review and ballot process (or for NBs to take part in the development process if they wish). This notification should take place at least 6 months before the planned submission date.

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

4.1.4

The Reference Reports for the PAS concerned in the form agreed by JTC 1 should be provided.

4.1.5

The current SGFS procedures allow for a PDISP review by the submitting organizations (under certain conditions). For PDISPs containing a reference to a PAS, the review should always be done by the SGFS NBs.

4.1.6

Because of the potential for reference to specifications unique to a single region, the SGFS procedures will be updated to stress the importance of harmonization in the case of references to PAS. Also, the need for a valid taxonomy entry will be stressed.

4.1.7

The ISP developing organizations should be invited to identify experts familiar with the PAS who could be added to the SGFS review list.

4.1.8

If a referenced PAS is transposed, the ISP will be revised in order to correct the reference.

4.1.9

If a NO vote is cast during the JTC 1 DISP ballot, or if a major technical comment is

made during that ballot, then (according to the SGFS procedures) a ballot resolution meeting will be 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 (by consensus) the status of the DISP (approved or not approved). Ballot resolution will be allowed (as it is now) to occur via electronic mail or teleconference to ensure that NB concerns are addressed even when they are not able to attend the ballot resolution meeting.

4.2 Additional ISP Documentation requirements to be added to TR 10000

4.2.1

All PASs to which a normative reference is made should be identified in one subclause 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 ISP. The provisions of the referenced specifications, as identified in this subclause, are valid within the context of this ISP; the reference of a specification within this subclause does not give any further status within ISO/IEC to that specification."

4.2.2

Requirements identified in the procedures documented by WG-RS should be included along with the SGFS requirements.

4.2.3

SGFS will give consideration to providing text in TR 10000 which is similar to, or in place of, the text in the SGFS procedures document stressing the PAS transposition process, the need for harmonization and the need for a valid taxonomy entry.

Annex A OSE profiles and PAS

The original scope of ISPs was limited to specifications of profiles of OSI standards to satisfy particular communication needs.

The scope of ISPs has now been extended to cover the specification of profiles, Open System Environment (OSE) profiles, that can address a much wider range of system functions and support the specification of Open Systems i.e. systems that enable the objectives of portability and interoperability to be met.

While many of the base specifications required for OSE profiling are formal international standards (ISO/IEC standards or ITU-T Recommendations), others are PAS published by other organizations. Important examples are the IEEE POSIX and X/Open XPG4 specifications for application portability, the IETF specifications for TCP/IP, ECMA specifications concerning security and the OMG specifications for object-oriented system operation.

In some cases (e.g. some X/Open XPG4 specifications) such PAS may be subject to transposition but there can be no guarantee either that this will happen in all cases, or that it will happen in time to meet user needs for OSE profiles. Thus the timely development of ISPs meeting user requirements for OSE profiles may require that such ISPs reference PAS as well as formal standards, and the OSE profiling process must allow such combined specifications to be developed.

The development of such ISPs extends the activity of JTC 1 from a concern solely with the development of formal standards to a concern with how those standards can be used with specifications for which it is not responsible. This extension is necessary in order for users to exploit JTC 1 standards to meet their Open System needs.

Annex B The ISP approval process

Note: the procedures described in this annex are the procedures currently in use; the changes that will result from the proposals in section 4.1 are not included.

The ISP approval process is documented in the JTC 1 Directives and in Standing Document 1 (SD1) of SGFS. The main provisions are outlined here in order to consider how references to PAS could be addressed.

Submission of a PDISP requires approval of an entry in the Taxonomy of profiles corresponding to the profile specified in the PDISP. In general, this approval will have been requested and given well in advance of the submission of the PDISP.

The ISP approval process requires that the submitter should provide, at the time of submission of a PDISP, an Explanatory Report providing

- * background information on the development of the PDISP;
- * a statement of purpose, position in the ISP taxonomy and relationship to other ISPs;
- * a statement indicating the nature of the process by which global harmonization of the provisions of the PDISP has been reached;
- * a statement of the base standards referenced and the degree of compliance with those base standards;
- * a statement of informative references to other documents (e.g. national or regional standards) and their purpose.
- * a statement of the degree of compliance of the PDISP with the requirements of TR 10000

The Explanatory Report is subject to review by experts familiar with the base standards referenced. This list of review experts is open. Based on the comments of the review experts, a Review Report is produced, addressing, in particular, compliance of the PDISP with the provisions of the base standards cited. Both the Explanatory Report and the Review Report are available to NBs at the time of the DISP ballot.

The DISP ballot itself is a ballot of NBs on:

- * acceptance that the ISP procedures have been followed correctly;
- * acceptance that the requirements on the preparation of the ISP (i.e., requirements from TR 10000) have been met;
- * agreement on the suitability of the chosen base standards to meet the requirements for the profile;
- * agreement on the specified uses of the base standards concerned;
- * agreement on the contents of the Explanatory Report (specifically the statement on harmonization).

It is the intent of the ISP development process to avoid disagreement at the ballot stage either on the user requirement or the merits of the chosen solution to the requirement. It is the responsibility of the submitting organization and any organizations involved in the development to try to resolve any differences during the harmonization process.

Annex C Information on planned profiles with references

To be supplied.