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The Delta Value of JTC 1 as a provider of International Standards

This contribution is in response to the Long Range Business Plan Implementation Plan, Section 4.3: "Define what is the delta benefit of JTC 1 as a provider of IS." It is also described in section 4.3 as "clearly define what value-add International Standardization bring in the field of ICT." As these are slightly different goals, the premise is that as JTC 1 is the established vehicle for ISO and IEC to produce International Standards, the goal is to establish the delta benefit of doing International Standards in the ICT sector via JTC1 as the ISO/IEC conduit.

By "delta value" we assume that we are identifying unique or added characteristics rather than an attempt to quantify the "amount" of value.

This document proposes several questions on the theme of International Standards and JTC 1 and suggests answers to those questions which identify such delta values.

1   Introduction

The value of standards and specifications cannot be defined by one simple statement, aspect or parameter. There are several, very different types of qualification needed to assess the value of standards. Even for one single standard normally more than one qualification and more than one type of qualification is needed to assess its value.
For a vast area of technology like Information and Communications Technology(ICT) this is even more true because of its all-pervasive character and very wide field of application.
Because both ICT suppliers and users are very often operating internationally the ICT standards have to be international in order to have any impact.

In the following three chapters three types of qualifications are presented:
- economical/commercial
- technical
- political/public interest.

1.1 Economical and commercial qualifications

An important justification for the development of ICT standards is economical, both directly and indirectly.
Direct economic effects are, for example:
- a standard means business
- re-usability, which reduces the cost of development, production, testing, etc.
- market size: standardization fosters competition, and markets with competition grow often bigger than markets without competition.

Some indirect economic effects are:
- a standard is a tool for market access
- shared and reduced risk in market development,
- the creation of tools for development, testing, etc., in case a market is large enough.
- user comfort with vendor products embodying standards.

1.2 Technical qualifications

A second important justification is technical:
- interworking of equipment
- interchange of data via networks and media
- shared use of data by different applications
- hardware and software interfaces
- a standard provides unambiguous information
- a standard demonstrates leadership in technology

1.3 Political and public interest qualifications

The third justification is often combined with legal or regulatory arrangements, for example:

- security
- safety
- environmental protection
- EMC
- cultural aspects
- linguistic aspects(character sets, locals, etc.)

1.4 Conclusions

The sheer existence of about 400 consortia and fora strongly confirms that there is a market need for standards: most of these consortia have a standardization activity on board, although many are not created with standardization objectives at their very beginning. A fundamental difference between consortia and a standardization body like JTC 1 is that a consortium usually only allows participation by parties and individuals who support the objectives of the consortium, whilst JTC 1 has to allow both proponents and opponents in the room: JTC1 offers publicly controlled standards, whilst consortia offer proprietary specifications.

The relevant question is whether and where JTC 1 can offer added value in its response to the market need.

2   What is the value of a formal International Standard in the ICT field?

2.1   Greater credibility and sanction world-wide: formal international standards are the "gold standard" by which all standards and specifications are ultimately judged.

2.2   Acceptance in developing countries: IT standards must be universally accepted and applied to be effective. In many non-developed countries, acceptance of standards and basing decisions upon them is restricted to formal IS due to the limited resources which the country can put into evaluating and making decisions on standards issues.

2.3   Higher level of respect in the international community: formal IS have a status conferred by the "legitimacy" and standing of ISO, IEC and ITU.

2.4   Easier acceptance by governmental bodies and adoption for national procurement purposes: Formal IS from the ISO/IEC process are more likely to be adopted and incorporated into national directives and processes. They are also more likely to be the basis for regulatory structures.

2.5   Level Playing Field: Not only among the participants in the development of formal IS but also between the formal SDOs. Supranational bodies such as WTO, TABD, OECD also consider IS standards for inclusion in UN and related directions.

3   What is it about International Standards that establish this position?

3.1   Credibility of ISO and IEC: ISO and IEC have credibility due to the length of time they have been established, their processes and procedures, and their recognition by governmental and international bodies.

3.2   Recognition of principles of accredited SDO process: The basic principles of fairness, openness, trust, respect, balance, transparency, and consensus itself, give credence to the legitimacy of the standards developed according to this process.

3.3   Input from others: The open development process and public review process establish a position of general acceptance and recognition.

3.4   Durability and stability: The structure of formal SDOs provides for longevity and maintenance processes, and thus supports products developed to their standards in the long term.

3.5 Level playing field for all participants: The nature of the formal standards process guarantees an equal voice for all who participate

3.6 Inclusiveness of work with respect to "history" of a technology evolution: The standards development process and established standards subcommittees in ISO and IEC in general provide for the evolution of technologies and their underlying standards rather than attempting to discard and replace work.

3.7 General applicability: The involvement and awareness of developing countries in the standards development process helps them determine which standards will be necessary for their technical involvement and helps to define standards which are appropriate for developing economies and yet support the more complex needs of the developed countries.

4   What is the value of JTC 1 itself to existing consortia?

4.1 Consortia can introduce existing specifications to become IS via a variety of mechanisms including PAS, fast track, and IWA.

4.2 IPR issues well-understood at outset and the rules are established, so there will not be surprises in the process.

4.3 Access to imprimatur of International Standard for work whose characteristics will benefit from becoming an IS as mentioned in Section 1.l

4.4 Credibility and sanction by association with ISO and IEC.

4.5 Rapid processes: JTC 1 development and adoption processes are the fastest in ISO and IEC.

4.6 Durable structure, maintenance and support for mature specifications: the structure and nature of JTC 1 means that mature standards and specifications can remain relevant and supported for as long as needed.

5   What is the value of JTC 1 as opposed to establishing a new consortium?

5.1 Structure, process and staff already in place: JTC 1 already exists. New work and areas of work can be adopted and working groups or subcommittees formed without having to build an entire organization.

5.2 No need to worry about where it goes when it has outlived its usefulness: consortia which have accomplished what they were created to do have a tendency to try to continue to survive, grasp new work, redefine themselves, and continue to cost their participants money.

5.3 Ability to create lesser-consensus documents such as IWAs in addition to IS.

5.4 Easy to begin with a JTC 1 workshop and progress the output to an IS in little time.

5.5 Participation in JTC 1 is substantially less expensive than consortia.

6   Conclusions

There are valid reasons why some work in the ICT sector should be initiated or introduced into the JTC 1 process to become International Standards. Such work can begin within JTC 1 in the traditional standards development process or be introduced to JTC 1 as existing specifications in a variety of ways. Where work is not intended to ultimately become an International Standard, JTC 1 processes such as the IWA and the JTC 1 Workshop Mode of Operation may still be attractive due JTC being part of the formal ISO/IEC structure with the related advantages discussed above.

6.1 Existing consortia should establish and maintain liaison relationship with JTC 1 and submit work via JTC 1 if:
- they develop work appropriate for transition to IS
- they need liaisons with multiple other venues (use JTC 1 as "switch")

- they do not wish to establish maintenance structures etc for long-lived technologies in their area

6.2 A new JTC 1 subcommittee should be considered instead of creating a new consortium if:
- Control and ownership is not an issue.
- A goal is widespread acceptance, long life e.g. infrastructure technologies
- ISO/IEC process model of consensus, level playing field, etc. are attractive
- It is desirable to have formal interfaces to international and governmental structure