SC22/WG20 N916

REFLECTIONS AND RECOMMENDATIONS ON THE FUTURE OF ISO/IEC JTC 1 PREPARED BY THE ISO AND IEC CEOs

HISTORICAL BACKGROUND

When JTC 1 was established in 1987, the major market players were well represented. Since that time however, the ICT industry has undergone some profound changes, all of which have had some impact on JTC 1's current relevance to the market place.

The first of these changes concerns the restructuring of IT (and other) companies in the late 80s and early 90s, which saw fairly drastic reductions in corporate standards units within many companies. Such corporate standards units had generally coordinated participation by company experts in standardization activities. Virtually simultaneously with this development, the Internet and World Wide Web took off (essentially banishing to the history books the work that JTC 1 and ITU had been doing on Open Systems Interconnection), and industry consortia started to emerge as fora for addressing particular standardization issues within the industry. Some consider the restructuring and subsequent boom in consortia to be linked through a cause and effect relationship but, be that as it may, there are currently something of the order of 400 consortia each addressing particular standardization needs in different corners of the IT field. One large company has estimated that its annual cost of participating in the formal standardization system as well as the consortia is of the order of MUSD 50.

The combined effect of these two changes are that decisions to participate in standards work are now essentially taken autonomously by the product development and engineering units of companies, more often than not without reference to any corporate standards unit. In some, if not most cases, corporate management is ill-informed about where their companies are participating. Additionally, the ease of participation for companies in consortia - simply paying the annual fee to be a member - and the free availability of consortia-developed specifications have tended to lead to fairly derisive attitudes about the formal international standards system, i.e. ISO/IEC JTC 1 and ITU-T, within companies.

The third change worthy of note is that the market drivers over the last decade have become the software companies rather than the large manufacturers which was the case when JTC 1 was established and that the dominant software companies do not have the same long tradition of working within and supporting the formal standardization system.

Over the last few years, noting the significant fall off in proposals for new work, JTC 1 itself has been trying to address the various issues that lead to preference being given to consortia rather than the formal system when addressing new standardization needs.

MORE RECENT DEVELOPMENTS

This was the background to JTC 1's request that certain types of documents be made freely available on the web and to the more recent market trial proposal that electronic versions of JTC 1 standards be available cheaply and at a flat rate. More recently, the discussions within

JTC 1 concerning mechanisms to allow direct participation of corporate bodies within JTC 1 on a pay to play basis were again intended to make JTC 1 as accessible as consortia are.

It is to be noted that all of these issues have been controversial within JTC 1, including the free availability of standards, some of the traditionalists being a little closer to the reality that income from sales finances to a lesser or greater extent the national standards bodies. JTC 1 has also adopted as its doctrine that what it uniquely can deliver to the ICT industry is formal standards bearing the ISO and the IEC logos and it has therefore generally been loathe to consider implementing the ISO and IEC new deliverables.

Although JTC 1 is currently considering the possibility of introducing a workshop mechanism, similar to the ITA and IWA process as an adjunct to JTC 1's current operations, this needs to be seen in the context that JTC 1 leaders became convinced that there was very little likelihood of any other form of direct participation being acceptable within the traditional time tested and respected national member body delegation system in ISO and IEC. There is still skepticism, however, about what, if anything having workshop agreements within JTC 1 will do for JTC 1, as well as skepticism about whether it would be sufficient to bring a change in attitudes in the industry toward the formal system

It cannot be denied that despite the fact that "old hands" in the industry often cite OSI as an example of the failure of the JTC 1 formal standardization system – they also seem to overlook the fact that it was industry itself which was driving the OSI activity – today there are nevertheless some very successful and relevant JTC 1 product lines including MPEG (SC 29 in general), credit cards, and character sets. There have been some suggestions about restructuring JTC 1, e.g. transforming the existing SCs into individual ISO or IEC technical committees. This would again however only assure a continuance of the existing product lines and would in fact essentially represent an admission that ISO and IEC are content and able to respond to the market needs only in a few of the ICT sectors.

In this kind of passive case scenario, unless the formal system for some reason fails to continue to deliver good standards in these areas, one might expect these isolated JTC 1 activities to continue and for JTC 1 SCs to be simply one of many standards suppliers to the ICT industry, alongside for example the Internet Engineering Task Force (IETF), the World Wide Web Consortium (W3C), the Open Group, etc. etc. There are strong indications, however, that this kind of passive response on the part of ISO and IEC would not be appreciated by the ICT industry in general, and could lead in a few years to the more or less complete irrelevance of ISO and IEC in the sector.

There is a need, even more than in the late 1980s when JTC 1 was set up, for the ICT industry to be served by a centrally coordinated standards developing system; for both the normal full consensus "formal" standards; and also for lower cost mechanisms to develop consortia-like workshop agreements with non restricted and direct company participation. Access assistance to these workshops and related services should be available to all market participants from the center which should also provide comprehensive and up-to-date standards management information services to all companies and organizations who need it -- tailored to their needs - and at a fair price.

As noted above, many participating companies are becoming more sensitive to the costs of participating in all the formal fora and consortia that and they would seem to have a preference that the existing system come up with solutions which will help them to rationalize

those costs whilst also repositioning JTC 1 as a preferred forum for new standards work as an alternative to establishing yet more consortia. Aside from the cost rationalization, other potential economies of scale are apparent -- including management reports on ongoing work, company participants, consolidated meeting calendars, web based work sites, etc, etc.

ISO, IEC and ITU are the natural centers of gravity for promoting facilitating and supporting ICT standardization. If a strong industry consensus in favour of a more flexible and more centralized ICT standards support service as described above would be expressed, it will happen.

RECOMMENDATIONS

ISO and the IEC are prepared to respond to the ICT industry needs in processes, cost and timeliness and in this respect a repositioning of JTC 1 is under consideration. At this stage, it is too early to advance comprehensive solutions, but what is certain is that the solutions will not be derived using the consensus decision making processes of the standards development system itself (JTC 1 national body decision making procedures), and that a top level management dialogue needs to be installed between the formal system and the IT industry, in something akin to the IT Management Group (ITMG) which originally gave birth to JTC 1, or similar to the IEC Sector Boards, but without permanent status

- 1. To invite a dialogue with ICT industry leaders to advise the ISO and the IEC management on the best way forward, including possible fundamental changes in the global ICT standardization process, in order to review and to augment the existing standardization structure and its logistics.
- 2. Given a strong consensus of industry support, to invite JTC 1 and its subcommittees to review in a very short time frame their current work programmes to identify those work items for which the industry needs a full International Standard (or other committee deliverable) and those for which the ITA or IWA mechanisms and deliverables may offer the more appropriate and timely response to ICT market needs. It should be highlighted that wherever the ITA or IWA model will be implemented, direct representatives of industry, consortia, and other interested organizations can find their way into the process; and have rapid and potentially free access to the final document agreed upon.
- 3. To widely promote the ITA or IWA mechanisms with the relevant industries as well as with the Member Bodies of the ISO and National Committees of the IEC as the most appropriate means for the ICT industry to participate directly under the ISO and the IEC umbrella. In particular it needs to be explained that these solutions are considered especially appropriate given that the industry has demonstrated, by its continuous participation and support for consortia, that in many instances formal standards are not required in the ICT sector, but that the ISO and IEC infrastructure is nevertheless available to allow market players to reach agreements on specifications representing a more limited consensus than is normally achieved through ISO and IEC committee processes.