Swiss National Body contribution on
JTC 1 strategic planning

1 Introduction
Research and analysis of the reasons for the decreasing demand for international ICT standards developed by JTC 1 are virtually non-existent. Yet, knowledge about these reasons is of key importance for the determination of the strategy for the future of JTC 1, and a possible restructuring of the JTC 1 organization and working methods.

This contribution is meant as a start-up proposal (please amend) for both processes which necessarily have to take place sequentially:

1. Analysis and identification of the market need for ICT standards from JTC 1.
2. The optimal structure and working methods of JTC 1 to respond to the market need.

2 The market need

I. One 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

II. A second important justification is technical, e.g. for:

- interworking of equipment
- interchange of data via networks and media
- shared use of data by different applications
- hardware and software interfaces
- a standard provides information
- a standard demonstrates leadership in technology

III. The third justification is public interest, often combined with legal or regulatory arrangements. Examples are:

- security
- safety
- environmental protection
- emc
There are certainly more justifications for the creation of ICT standards. These types of justification are also often combined.

The sheer existence of far more than 100 consortia strongly confirms that there is a market need: 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.

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

The assets of JTC 1 are:
- well-recognized deliverables, i.e. ISO/IEC standards and technical reports
- an international structure and membership
- an internal structure with units that do no overlapping work
- a process
- a legal status

However, JTC 1 has no / not enough:
- adaptable organization and process
- marketing activity, including public relations and acquisition of projects
- finances
- consultancy, e.g. to generate income
- focused commercial interest.

3 Requirements for timely developed ICT standards

What are the typical requirements to arrive at ICT standards?

Given the short life cycle of many ICT products the time window for the development of standards to be implemented in ICT products is usually small. This implies that usually the time to find a time window is also short. Therefore, to exploit opportunities for ICT standardization and to turn the opportunity into a project requires good contacts in the ICT industry and a very flexible organization that can quickly start and execute a standardization project. Moreover, a group of industries must buy into having a possible standardization project done in JTC 1 instead of making it part of the activities of a new or existing consortium, and bypassing JTC 1 and ISO itself.

Another requirement is often that the risk must be minimized that a prospect specification for standardization may be considerably changed or amended. Such a requirement is in conflict with the definition of standardization. A possible consequence is that competing standards must be allowed.

It is evident from these two requirements - a small time window, and no substantial modifications allowed - that the stakeholders of a possible standardization project want to be directly represented in the project, have a flexible process and have large influence on the control of the technical contents of a standard.

4 JTC 1 as a partner for ICT consortia

To become the standardization partner of a consortium, JTC 1 must have a process that can compete with that of the consortium with respect to standardization. The additional 'sales' argument would then be that a JTC 1 standard has a well-recognized international status and is a real consensus-based standard instead of a specification.
The 'competitive' process must result in a standard that is developed in time, and with a price tag that is comparable to that of a consortium. To determine this, some insight has to be acquired about the resources used by consortia for standardization.

The aspects of competitive cost and timeliness must be added by JTC 1 to its current assets, without jeopardizing these:

- well-recognized deliverables
- global connections and infrastructure, legally based
- a due standardization process, avoiding rubber-stamping
- own identity, no mimicry of a consortium

What is needed to achieve such a situation? Our proposal focuses on the following elements for JTC 1:

- organizational structure
- process
- participation
- finances
- subcontracting

5 A new organizational structure for JTC 1

Currently JTC 1 has four main organizational elements:

1. JTC 1 parent body
2. Technical directions
3. Sub-Committees
4. Working Groups

This should be made meaner and leaner by transforming this in two basic organizational elements:

1. Technical divisions
2. Management group

The Technical divisions are responsible for the total completion of technical work needed for the development of standards and technical reports - the deliverables. This total completion implies that the deliverable may not be changed anymore once it has been released by the Technical division: it has to be published as released unless it is blocked on management level for non-technical reasons (nearly always for questions on 'fairness of the process).

A Technical division is responsible - within the confines of its area of work - for the creation, execution, management, planning, resources, style and quality control, and necessary liaisons needed for its projects.

The Management group is responsible for the creation (including their scope and initial programme of work) and disbandment of Technical divisions, resolution of disputes over competing or possibly overlapping areas of work, changes in scopes of existing Technical divisions, ratification of deliverables coming from Technical divisions, subcontracting to bodies outside JTC 1, marketing of the values of standards, non-technical liaisons, acquisition of new work areas, representation of JTC 1, public relations, finances.

6 The JTC 1 process

The current 5-stage process is too formal and too much controlled by distinctive procedures for each of the stages. Therefore, a much simpler process is proposed:
Within Technical divisions a new project is started when there is substantial support and a number of members, e.g. five, is prepared to work on the project.

A project only works on drafts of the deliverable aimed at, there is no need for distinctive stages (WD, CD, DIS) unless perhaps for administrative purposes only. Decisions that cannot be made otherwise are decided by voting within the project. There is one final approval vote on a deliverable within a Technical division. Projects that have not progressed during six months are automatically stopped within a possibility for appeal.

The Management group has to ratify, without making any technical assessment, the deliverables coming from Technical divisions or subcontractors.

The Management group takes decisions by voting at the meeting. Subjects to be voted upon are announced no less than six weeks before a meeting. Postal ballots can be used for urgent subjects.

7 Participation

On Technical division level the participation is direct for all parties concerned: industries, user groups, administrations, research and other not-for-profit institutions (e.g. national standardization bodies). Each party has only one vote. If several individuals from the same party participate in a project, then they have only one vote between them. If a consortium participates as consortium then it has only one vote.

On Management group level the following types of participants are distinguished:

- National Bodies
- Technical division representatives
- Subcontractors
- Others

The first three types have voting rights: 60% of these rights are assigned to National Bodies.

8 Finances

The current system of national funding has to be replaced by one international system. The national funding system can be retained for national activities. The international funding is needed to:

- cover the operational costs of the Technical divisions and the Management group, including meeting costs, document distribution, etc.
- personnel costs
- publication relations / representation
- acquisition of new work

A treasurer has to be appointed to run the financial operations of JTC 1.

The income consists of:

- membership contributions from participating parties, preferably on an annual basis. Notifications of withdrawal have to be given at least half a year in advance. The minimum contribution period is two years. Categories of members and corresponding contribution levels have to be defined.
- Donations, e.g. subsidies by Administrations other than membership contributions.
- Other, e.g. income from reserves.
The height of membership contributions has to be fixed every year based on an annual budget. The contributions are highly determined by the level of expenses in the budget. Changes in the membership contributions should not fluctuate randomly. Build-up of a reserve / buffer fund is needed to limit fluctuations in the membership contributions and to guarantee a smooth financial operation.

9 Subcontracting

JTC 1 need not to develop all its deliverables from scratch in its own Technical divisions, whilst still maintaining the possibility to ratify deliverables coming from elsewhere.

Current JTC 1 mechanisms to achieve this are the fast-track and PAS procedures. These are broad procedures allowing for deliverables on any subject that falls within the remit of JTC 1.

Also on more focused areas of work (a project or set of projects) subcontracting should be considered by JTC 1 to create a synergetic effort that broadens the support for JTC 1 by appreciating the recognition of the JTC 1 deliverables.

10 Conclusion

This contribution contains several proposals for substantial changes of JTC 1, in particular to turn JTC 1 into an adaptable organization and to strengthen its financial structure, without violating the JTC 1 assets and its parent environment ISO/IEC.

Implementation of these proposals requires entrepreneurship-like actions.

Therefore, it is highly recommended to put a relatively small but influential group in place to prepare an overall implementation plan and to work out change proposals in detail. Also considerable consultation of potential member parties will be needed before restructuring JTC 1.

The test of the muscles and flexibility of JTC 1 lies in the near future.