1 Introduction

In this rapidly changing environment, the ITU-T, which has enjoyed worldwide recognition and competence in telecommunication standardization, faces challenges from the market forces. This market requires specifications, or standards, to be developed quickly in order to respond to growing demands for the accelerated development of new services and products. There are now many standardization bodies, multilateral meetings, and forums actively developing global standards. The ITU-T’s pre-eminence is under threat.

There is a lot of criticism of the ITU/ITU-T. In my opinion, much of it is based on past impressions of the CCITT of the old days. Those impressions have had a lasting negative impact on the ITU/ITU-T, and unfortunately, they still prevail in many places within ITU and outside ITU.

I would like to present an image of the real ITU-T, as it exists today, and discuss ITU Reform and improvements based on reality, not on misperceptions.

At the beginning of this year, I had prepared a document “ITU-T’s current situation and its future”, which is available at: http://www.itu.int/ITU-T/tsb-director/martigny/martigny2

Attached in Annex 1 are some slides extracted from that document.
2 Current situation
Currently the ITU-T has 189 Member States, 168 ROAs (+ 7 in 2001), 229 SIOs (+ 38), 7 Associates (new) and 42 other members (+2).

There were about 15,000 registered participants/delegates during the 1993-1996 and 16,000 during the 1997-2000 Study Periods respectively. The big telecom companies have always been active in ITU-T, a decrease in their participation in some SGs was observed during the last decade. Developing countries have shown an increasing participation in ITU-T since 1996. In general, some Study Groups have noted a 20% increase of participation during the last four years.

Since the 1990’s, the ITU has lost its momentum in some working areas such as IP and mobile technologies. It is very difficult to restore the momentum.

The TSB has received some voluntary cash contributions from Sector Members. Other companies are also ready with voluntary cash contributions. In addition, some companies are considering hosting ITU-T meetings.

By now, all ITU-T Study Groups had successfully run their first meetings. The newly-created SSG (Special Study Group) on “IMT-2000 and Beyond” had held its first meeting in Mid-December 2000, with a good participation. The AAP process was officially launched at the end of January 2001, which had approved 25 draft Recommendations by 1 March 2001. More draft Recommendations are to follow. With AAP, the ITU-T can approve its technical Recommendations in less than two months.

An unexpected merge of SG 7 and SG 10, both were adopted by WTSA-2000, had been approved unanimously by the recent TSAG meeting, Geneva, 19 - 23 March 2001. Work is underway to organize some SG meetings in different regions this year. A workshop on IP and Mediacom will be held in April, and several information workshops will be organized this year in different regions, associated with SG meetings, or as a separate activity.

ITU-T is showing, in a timely manner, its capability to adopt to changing needs of the market in the competitive environment.

3 WTSA-2000 and TSAG views
The last WTSA-2000 was held in Montreal, Canada, 27 September – 6 October 2000. The discussions on ITU reform, particularly on Standardization reform, have made tremendous contributions to the success of WTSA-2000.


At the recent TSAG meeting, Geneva, 19 – 23 March 2001, a group on “reform” was set up. The opinions of this group are highlighted as follows:

1) AAP voting at SG level
The meeting noted a proposal to introduce a two-stage approach to allow Sector Members to vote at the first stage and if majority of Sector members supported, then a vote by Member States at the second stage, for technical Recommendations under sustained non consensus by AAP. Further details are still missing and the impact on the current CS and CV has to be investigated.

2) Financial issues
The meeting noted a proposal that TSAG should provide input to WGR on financial and budget aspects of “a new entity”, but no agreement was reached. Instead, the TSAG encouraged the author of the proposal to submit its contribution directly to the forthcoming WGR4 meeting in April.
3) Issues related to WTSA

The meeting agreed on the following issues:

a) Study Groups activities should not be interrupted by WTSAs;
b) WTSA should focus on high level strategies;
c) Shortening duration of WTSAs and reduction of their intervals.

4 Opinions of Industry Members

The Union’s Strategic Plan indicates that “the solution to strengthening the Union lies in treating the Sector Members more as partners in appropriate work of the Union”. To achieve this goal, it is necessary to establish contacts and to achieve mutual understanding between ITU and the industry members at different levels.

I invited a group of senior executives at Vice-President level of some Sector Members to attend informal consultation meetings in Martigny, Switzerland in 2000 and 2001.

All meeting documents (input and output) are available in the ITU-T homepage under the URL http://www.itu.int/ITU-T/tsb-director/martigny/.

A document on “Consensus Views” from the first meeting was sent to WGR in Document WGR/59. The report of the second meeting is reproduced in Annex 2.

Consensus views of the industry’s participants are as follows:

- ITU-T is and must remain a unique global standards body with unique assets in competence and environment.
- Key improvements in procedure and roles have been achieved and endorsed at WTSA-2000. This is well recognised, and the improvements need to be utilized to the full and made widely known via special attention on promotion work on ITU’s successes and the changes at ITU-T.
- The enhanced authority and responsibility of TSAG must be used effectively and aggressively, and the role of WTSA redefined to reflect this.
- The current achievements are a necessary, but not sufficient first step, and further improvements are required to make and keep ITU-T an attractive place for industry to define standards.
- Industry urges the Member States to support reforms and their speedy implementation. The consequence of not doing so would be a weakened ITU and ITU-T to the detriment of the global telecommunications industry.”

For those key reform issues debated at AHG 1, it was noted that there was no consensus views at the second meeting of the industry members.

The request to have “equal footing/equal voice” was high on the list of priorities under diverse views, with a majority of support.

While, according to my impression, some other points of consensus from industry could be added, including:

- **ITU-T still remains one of the best** (or “preferable” as some industry people choose to say) places for the industry to develop the worldwide telecom standardization.
- Industry emphasizes the importance to keep the ITU’s inter-governmental status.
- After WTSA-2000, ITU-T’s procedure to approve technical standards is quite efficient.
Industry has recognized that they have enjoyed a significant role in ITU-T.

Industry would like to see a stronger ITU rather than attending a number of specialized SDOs to look for products.

Industry is willing to provide further support to strengthen ITU, including voluntary contributions, to promote ITU and to support the meeting activities.

It will become irrelevant to the industry if no changes are made.

5 Hot topics on ITU-T
(For more information, see the Director’s document “ITU-T’s current situation and its future” at http://www.itu.int/ITU-T/tsb-director/martigny/martigny2.)

5.1 ITU/ITU-T is very slow to approve its Recommendations.
No, it is not true. With TAP, ITU-T can approve its Recommendations in 9 months since 1997, while with AAP, it can now approve its technical Recommendations in less than 2 months. The speed of the procedure can challenge any SDOs. In addition, ITU-T pays high attention to the quality of its products.

5.2 “Power” of Member States and Sector Members
It is difficult to explain the meaning of “power”. According to the ITU Rules, the Member States have an overall power, while in practice, Sector Members have enjoyed a lot of real power.

For example, the power to approve technical Recommendations stays with Member States only, however, Sector Members can stop the development of technical Recommendations at any moment so that at the end of the approval process, the Member States would have nothing to approve. On the other hand, the statistics show that during the last two “Study Periods”, there was no single case in which the approval of a technical Recommendation was stopped by Member States or by developing countries. Furthermore, Convention 246A and 246B clearly state that “for technical Recommendations, formal consultation of Member States not required and that AAP… may be approved by Member States and Sector Members, acting together…”. As defined in ITU-T Recommendation A.8 (AAP procedures), during the “Last Call” both Member States and Sector Members can provide comments and their opinion: “yes” or “no”. There is no distinction between ITU-T Members.

As far as the procedure to appoint Chairmen/Vice-Chairmen of Study Groups is concerned, although the decision was made by the Heads of Delegations at WTSA-2000, the actual situation is: 14 out of 15 SG Chairmen are from Sector Members of a few developed countries.

At the second Martigny meeting, it was unanimously agreed that in ITU-T, Sector Members already have a significant leadership role in the ITU-T technical standardization activities (see Annex 2, clause 2).

It should be noted that Sector Members, who are by far the main contributors to technical standards development and the main users of standards, dominate the business in all SDOs, while in ITU, they cannot. However, ITU-T/ITU is the only place where the governments and industries co-exist.

Sector Members, particularly big companies, have expressed a desire for a status of equal footing/equal voice between Member States and Sector Members, while some Member States expressed a view that “power and obligations” cannot be treated separately.

Failure to make ITU attractive to industry would be a weakened ITU and ITU-T to the detriment of the global telecommunications industry. ITU must find ways to keep industry.
5.3 ITU-T expenditures for languages

ITU-T has taken measures for years to save money for language expenditures, thanks to the good support by the Member States. It is a long time practice that in ITU-T, no meetings lower than the Study Group level (except for TSAG and SG 3) receive interpretation; meetings outside Geneva run without interpretation; no interpretation of a particular language has been provided to a meeting where only one delegate was present. (e.g.: no Chinese interpretation for TSAG meetings in April and October of 1999, neither for the TSAG meeting in March 2001). Except for draft Recommendations determined for approval by TAP, no documents (normal contributions, delayed contributions, Temporary Documents, Reports, etc.) were translated into other languages (except for SG 3 reports).

Statistics show that 1/3 of the whole ITU-T budget was used to cover the language expenditures, including interpretation, translation, typing, editing and publication. It is noted that the entire Sector Member contributions from ITU-T Sector corresponds to 1/3 of the entire ITU-T budget.

ITU-T’s expenditure on languages is not a practical problem.

5.4 Voting

In the current ITU Rules, Sector Members do not have power “to vote”, while the Member States have never used their “voting” power to approve Recommendations.

Although all SDOs have “voting” procedures, “consensus” is reached in most cases to approve their standards. To use “voting” represents a failure rather than a success. No SDO takes “voting” as a key to their success. In addition, there are many issues on the details of “voting”, which are not so simple as to be resolved even after the idea of “voting” is accepted.

However, voting by Sector Members is considered as an important matter of principle by many Members.

The issues relating to Sector Member’s voting should be addressed where the “power and obligations” are discussed.

5.5 Financial issues

The ITU financial and budgetary system is a central-control system. PP-98 made decisions on the four-year financial plan and on the biennial budget 2000-01, leaving a little flexibility for 2002-03. There is no linkage between the Sector budget and the incomes from Sector Member Contributions and the sales of the Sector products.

In my experience, the Sector cannot use the savings obtained by reducing the amount of documents in order to recruit staff, or the savings obtained by the retirement of certain staff for other purposes. The savings will go into the ITU reserve fund at the end of the budget year. On the other hand, the T-Sector budget is maintained at a level similar to that in the past. It is very difficult to increase it.

The total membership fee contributions from the Sector Members represents about 13% of the total ITU budget, with more than a half from T-Sector Members.

The ITU-T Sector Members fee contribution corresponds to 1/3 of the Sector budget.

The majority of Sector Members pays an annual fee of 31,000 SFrs, which is at a level of the lowest ones of company’s membership fees for SDOs.

The amount of the Sector Member’s fee is not based on the criteria of responsibility sharing. It does not encourage its members to contribute more, because a member will enjoy everything just by paying the minimum.
The current system should be changed.

**The recent TSAG meeting had expressed its strong will** to be more involved with the financial and budget work of the Union, including:

- TSAG be represented in the Council Financial Group; and
- TSAG should have a chance to provide its views on the budget plan before it is presented to Council.

### 6 Proposals under the current situation

Under the current rules, ITU-T can make many changes such as:

- To start a project in one of the forms: project team, experts group, forum, focus group, joint group, etc., or even by a Study Group;
- To start the development of requirements of new services and standards as early as possible;
- To establish more close co-operations with SDOs and to play a real leading role;
- To organize workshops, seminars, conferences in the regions to promote the ITU-T activities;
- To encourage more active involvement of developing countries;
- More can be done through TSAG.

The **most important and urgent things** ITU-T should do are 1) **to convince the industry to support ITU-T** by demonstrating ITU-T’s strengths and success and showing its changing nature towards market-oriented future, and 2) **to take an aggressive and effective promotion** in the public. (see Annex 2, clause 6)

### 7 Proposals for PP-02 and after

ITU **should not miss its chance at the next Plenipotentiary Conference in 2002** to make changes. The following topics should be discussed and solutions should be found:

- Rights and obligations of Sector Members vs. Member States (e.g.: to allow voting in specific cases)
- Financial and budgetary systems
- Appropriate structure of ITU standardization work
- The converging roles of WTSA/TSAG in ITU-T
- To broaden the scope to cover both telecom and information technologies
- Adopting meeting registration fees to encourage students/young engineers to join ITU
- Reduce membership fees of the Sector Members from developing countries
- To provide more flexibility to the Sectors to deal with their situation
8 ITU structure

The ITU-T has maintained a good collaboration with both R- and D- Sectors.

For ITU-R, the collaboration between SGs and Bureaus of both sides on broadcasting, digital TV, IMT-2000, IPR issues, etc. has been streamlined. No major conflict has been reported. Joint activities, including joint papers by both Directors and meetings co-organized by both sides, have been encouraged. A desire to provide a common interface to the industry becomes a strong voice.

For ITU-D, the efficiency of cooperation between two bureaus has brought benefits to both sides. ITU-T’s regional activities have been reinforced with support from the ITU regional/area offices. Two regional preparatory meetings for WTSA-2000 were co-convened by both Directors. The joint efforts by two bureaus on projects, such as Y2K and accounting arrangements, were managed very efficiently.

A proposal to merge all technical standardization work into one sector has been raised several times. To elect Directors at the Sector Conference/Assemblies has been raised during the last few years. WGR might have to look at these issues at its meeting in April 2001.

9 Conclusion

A good promotion of ITU and an effective process to introduce more efficiency are the two major actions the ITU-T should concentrate on at present. In parallel with this, an active participation in the ITU reform discussions for the future after PP-02.

In order to maintain the worldwide pre-eminence of ITU-T, it is very important to create a good working environment attractive to Sector Members.
Annex 1

INFORMATION ON THE CURRENT SITUATION

Approval of new and revised Recommendations - Sequence of events (TAP)
AAP Sequence of Events

LC: Last Call
AR: Additional Review
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval time</td>
<td>4 years</td>
<td>2 years</td>
<td>18 months</td>
<td>9 months</td>
<td>2-9 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(exceptional case: 5 months)</td>
<td></td>
</tr>
<tr>
<td>Publication time</td>
<td>2-4 years</td>
<td>2 years</td>
<td>1-1.5 year</td>
<td>6-12 months</td>
<td>3-9 months</td>
</tr>
</tbody>
</table>

Notes:
1. Pre-published Recommendations, available on ITU-T Website, from a few days to four weeks after approval of the text.
3. Forms of publication: paper, CD-ROM, electronic bookshop, online, etc.
4. **FREE ONLINE ACCESS SINCE JANUARY 2001** (one free access per member, 3 free downloads for public)
5. “Approval time” counted between “determination/consent” and final approval.
<table>
<thead>
<tr>
<th>Administrations (96/2208)</th>
<th>ROAs (87/1783)</th>
<th>SIOs (167/1875)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A. 342</td>
<td>NTT 188</td>
<td>Lucent 166+58+</td>
</tr>
<tr>
<td>China 232</td>
<td>FT 184</td>
<td>Ericsson 147+5+</td>
</tr>
<tr>
<td>Germany 187</td>
<td>BT 148</td>
<td>Siemens 136+17+</td>
</tr>
<tr>
<td>France 106</td>
<td>DT 134</td>
<td>Nortel 91+51+</td>
</tr>
<tr>
<td>Russia 99</td>
<td>ATT 77</td>
<td>Alcatel 35+23+40+18+</td>
</tr>
<tr>
<td>U.K. 95</td>
<td>KDDI 69</td>
<td>CSELT 69</td>
</tr>
<tr>
<td>Canada 63</td>
<td>Telecom Italia 65</td>
<td>NEC 47</td>
</tr>
<tr>
<td>Japan 63</td>
<td>Swisscom 65</td>
<td>Nokia 46</td>
</tr>
<tr>
<td>India 62</td>
<td>KT 59</td>
<td>Fujitsu 42</td>
</tr>
<tr>
<td>Ukraine 58</td>
<td>Telenor 58</td>
<td>Telecomedia 36</td>
</tr>
<tr>
<td>Italy 56</td>
<td>Royal KPN 58</td>
<td>Motorola 27+8</td>
</tr>
<tr>
<td>Syria 53</td>
<td>Telia 46</td>
<td>OKI 32</td>
</tr>
<tr>
<td>Korea 50</td>
<td>Telekom Austria 37</td>
<td>ETRI 32</td>
</tr>
<tr>
<td>Total: 1466 (66%)</td>
<td>Total: 1188 (67%)</td>
<td>Total: 1126 (60%)</td>
</tr>
</tbody>
</table>

(Note – Cisco: 13)

Top Members participation (07/98-08/00)

TSB
<table>
<thead>
<tr>
<th>Budget</th>
<th>SDO</th>
<th>Membership fees</th>
<th>Note</th>
<th>Annual fee (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(25,000,000 $) 40,000,000 SFr</td>
<td>ITU-T</td>
<td>choice minimum</td>
<td>½ unit (31,500 SFr)</td>
<td>20,000</td>
</tr>
<tr>
<td>20,275,000 $ (21,909,000 Euros)</td>
<td>ETSI</td>
<td>obliged turnover</td>
<td>45 units (5,000 Euros/unit)</td>
<td>211,050</td>
</tr>
<tr>
<td>1,200,000 $</td>
<td>ECMA</td>
<td>Obliged</td>
<td>$ 42,000 / $ 18,000 / $ 10,000 standards free</td>
<td>42,000</td>
</tr>
<tr>
<td>(18,300,000 $) 29,305,000 SFr</td>
<td>ISO</td>
<td>Through national members</td>
<td>Shared by national members (five big members pay 9% of the budget)</td>
<td>(individual company up to 50,000)</td>
</tr>
<tr>
<td>(11,900,000 $) 19,000,000 SFr</td>
<td>IEC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4,456,200 Euros) 4,000,000 $</td>
<td>3GPP</td>
<td>Shared by 6 SDOs</td>
<td>Average 500,000/SDO</td>
<td></td>
</tr>
<tr>
<td>1,840,000 $</td>
<td>3GPP2</td>
<td>Shared by 5 SDOs</td>
<td>Average 360,000/SDO</td>
<td></td>
</tr>
<tr>
<td>50,000 $ / 5,000 $, standards free</td>
<td>W3C</td>
<td>Obliged</td>
<td>50,000 $</td>
<td>50,000</td>
</tr>
<tr>
<td>IEEE</td>
<td>Obliged</td>
<td></td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>2,870,000 $</td>
<td>ATM</td>
<td>obliged + meeting fees</td>
<td>$ 14,000/5,000/3,500/1,500, $ 250/275 per meeting 4 meetings/year, standards free</td>
<td>14,000+1,000/1,100 x?</td>
</tr>
</tbody>
</table>

(Some SDOs receive secretariat support from their members; such expenditures are not counted in the budget.)

**Company’s dues to SDOs (provisional and indicative)**
Participation of one company in standardization work during the last decade
Annex 2


SOURCE: Meeting participants

Introduction
At the invitation of the TSB Director, an "informal Consultation" meeting of industry executives from 10 SIOs and 12 ROAs was held in Martigny on 27-28 Feb 2001 to discuss the future of the ITU-T.

An excellent exchange of views on the current situation and the future of ITU-T took place in the open and free discussions leading to the following observations and recommendations:

1. **ITU-T vision, mission and scope**
ITU-T is and should remain the unique worldwide venue for industry and government to work together in developing, providing and promoting global consensus-based telecommunication requirements and standards for the Information Society.

The ITU-T should:
- facilitate the identification of requirements and architectures for networks and services,
- efficiently develop high-quality, global, consensus based, market-driven standards in its core competency areas on a timely basis,
- facilitate the interoperability of networks and services,
- produce recommendations that have regulatory and policy implications,
- be flexible and constantly look for ways that it can improve to do its job better, and
- cooperate and, where appropriate, collaborate with others so as not to duplicate effort.

The ITU-T’s core competence is in setting standards for network infrastructure and services, including aspects such as interoperability, interconnection, and network performance for both current and next generation networks. This includes the incorporation of new communications infrastructure technologies to support emerging Information Society applications such as e-commerce.

2. **Environment / Role of Sector Members**
There was a consensus that after the WTSA-2000, the ITU-T procedures are now very streamlined and efficient so that any perception of slowness can no longer be attributed to the ITU-T methods. However, there was a concern that ITU-T needs to address the ITU-T’s end-to-end standards production cycle, particularly the front-end of the cycle, to attract industry to come to work in ITU-T.

The meeting fully recognized that Sector Members have a significant leadership role in the ITU-T technical standardization activities. This includes holding 14 out of the 15 Study Group chairmanships, originating the overwhelming majority of the technical contributions, and debating and resolving technical issues and drafting technical Recommendations, essentially all of which are approved without objection by Member States or Sector Members.
There was a diversity of views among those present at the meeting on the issue of “equal footing/equal voice”: some felt that the private sector already has an adequate voice, but others felt that the lack of an equal footing by Sector Members is a fatal flaw in the future of the ITU-T. However, the majority of the companies present expressed the view that the private sector still does not have a sufficient voice in ITU-T management decisions affecting the technical work and consequently many companies are reducing their ITU-T participation.

Those expressing the above opinion feel that creating an equal footing in the ITU-T for Sector Members is required to make the ITU-T a desirable place to do technical standards. In the long run decreased participation by Sector Members hurts the interests of the Member States. This is not a desirable or sustainable situation for many Sector Members, who believe it is in the best interests of all ITU members for the private sector to have an equal voice on any decision in the ITU-T that affects the technical activities.

3. Deliverables

The meeting noted that there are discussions in TSAG and the WGR on new deliverables for ITU-T other than Recommendations and the meeting encourages those discussions. Of particular interest is the status of each of the deliverables and the preparation and approval process to be used for each, should the concept of new deliverables be agreed.

4. Structure and Process

Encourage:

- ITU-T members, through TSAG, to actively review SG work programs establish and restructure SGs as required and develop working methods and processes that continue to improve the quality of work.
- SGs to fully utilize the existing rules and resolutions and their flexibility, e.g. to set up focus groups, conduct workshops, etc.
- SGs to work on a project basis with emphasis on use of electronic tools and greater efficiency of physical.
- TSAG to introduce a project-oriented WG/WP structure as an alternative to Study Groups in order to ensure that a new work be started with clear and agreed upon requirements and expected deadline.

PP-02:

Modify rules and regulations to allow Sector Members and Member States to act “on equal footing” on matters related to technical work. (Note: This was a majority view. See the Section 2 on the “Environment/Role of Sector Members for more discussion of the views expressed.)

WTSA:

- WTSA role, functions and the interval between WTSAs should be reviewed now that the WTSA has increased the authority and responsibilities that can be exercised by ITU-T members between WTSAs through TSAG.
- The four-year Study period concept should be abandoned so that continuous ITU-T’s activity can be ensured.
- The terms of office for TSAG and SG leaders and the procedures to appoint them should be further reviewed.
5. **Relation to others**

ITU-T should refine its rules and procedures for dealing with consortia and partnership projects so as to allow direct re-use of their deliverables and direct involvement of ITU-T participants in their technical activities.

6. **Promotion**

Commit to develop and execute an aggressive plan to effectively communicate both the successes and the changing nature of the ITU-T. This effort would:

- describe the market relevance and private industry lead of the ITU-T, including the market/business impact of ITU-T technical standardization activities,
- be designed to attract new members and increase participation,
- promote knowledge transfer related to the technologies standardized in Recommendations, and
- develop information for distribution to the media and for posting to the ITU Web site on the market impact of significant ITU-T results.

Commit to increasing the attractiveness of the ITU-T and its products to the wider community and, in particular, to new companies and talented young engineers and university professors/students. Possibilities to consider include:

- mechanisms to overcome economic entry barriers (option of per meeting fee, transition arrangements for new members, etc.),
- creation of attractive web-based applications on ITU site aimed at young engineers and students, and
- greater access to working documents for non-members and the objective of free access to ITU-T deliverables.

7. **Business model**

The ITU-T should have a dedicated transparent budget that is directly managed by the Director on behalf of the ITU-T memberships. Goods and services should be purchased competitively. The Sector Member contributions to the ITU-T should have a direct linkage with ITU-T budget.