

IFIP FULL MEMBER SOCIETY REPORT 2004 to the General Assembly, Toulouse (after WCC 04):

SVI/FSI becomes ICTswitzerland

1. Change of Name and By-Laws

In the year to be reported here (August 2003 – August 2004) the Information Technology related organizations in Switzerland have seen quite a number of transformations. The most visible one is the change of name of the cover organization SVI/FSI (Swiss Federation of Information Processing Societies) to **ICTswitzerland**. However this name change was accompanied by an important enlargement of scope from IT to ICT. Four additional organizations, mainly from the Telecom sector, have now joined ICTswitzerland which encompasses now 19 organizations with roughly 9'000 personal and 2'000 corporate members. The change of the by-laws allows now that ICTswitzerland can improve the representation and the visibility of the ICT sector and its professionals in public.

To summarize : in addition with all duties of coordination, ICTswitzerland is also member of the Swiss Academy of Engineering sciences (SATW) – see below- and as full member of IFIP is the voice of our country at this level.

url : www.ictswitzerland.ch/de/index.asp

2. The Swiss Representation within IFIP managed by SARIT

One of the member societies within ICTswitzerland is **SARIT**, the Swiss Association for Research in Information Technology. All Swiss university professors in Computer Science are members of SARIT. So it is obvious that SARIT is particularly suited to take care of the scientific international contacts of ICTswitzerland, including those to IFIP and to **ERCIM** (European Research Consortium for Informatics and Mathematics). A new contract between ICTswitzerland and SARIT transfers all operational duties of the Swiss representation in IFIP to the Board of SARIT, performed on behalf of ICTswitzerland. SARIT also pays a part of the costs of the Swiss representation in IFIP. Within SARIT the "**Swiss IFIP Committee**" (**SIC**) – see below -encompasses the Swiss Delegates to IFIP's General Assembly and TCs.

url : www.sarit.ch/ifip/index.html and www.svifsi.ch/ifip-2

3. Swiss Committee for IFIP (SIC)

In the January 2004 annual meeting we welcomed two new members appointed in 2003 Prof. H-J.Lüthi (TC 7) succeeding Prof.P.Kall and Prof. U.Nestmann, first Swiss delegate to TC 1. With these nominations, ICT Switzerland is represented in TC 1, 2, 3, 5, 6, 7, 8, 9, 10, 11 and 13. Today 55 specialists from Swiss Academia and industry are participating in these 11 TC's and 28 WG's.

Several SIC members worked within the ICT Committee of the Swiss Academy of Engineering sciences in the organisation of the **EKS Forum** (see below) during the World Summit on the Information Society held in Geneva in December 2003. The Abstract book was distributed and the EKS Proceedings will be published as an IFIP book by Kluwer.

- **TC 3:** R.Morel, vice-chairman of TC 3 until end 2002, was appointed as special consultant to TC 3. A book was published by the Forum Helveticum: "Schule im Netz - Chancen und Gefahren" - "L'école sur le net - espoirs et dangers" to which he has contributed.

- **TC 5:** Mrs E.Gelle was appointed as TC 5 Secretary. The 4th IFIP Working Conference on Virtual Enterprises, PRO-VE 03 took place in Lugano, Oct 29-31, 2003.

- **TC 8:** Our delegate convinced both TC 8 and TC 9 to support the "18th symposium EnviroInfo 2004", an international conference organised by the technical committee 4.6 "Informatics in Environmental Protection" of the German Informatics Society (GI). It is scheduled at CERN in Geneva October 21-23, 2004. Details at: www.enviroinfo2004.org

- **TC 9:** Our TC 9 member L.Hilty revived the Swiss SI Ctee on "Informatics and Society" which had been dormant for some time.

- **TC 11:** The Sixth IFIP TC-11 WG 11.5 Working Conference on Integrity and Internal Control in Information Systems was held in Lausanne (November 13 14, 2003).

- **TC 13:** Its second yearly meeting took place in Zurich as part of the IFIP TC-13 Bi-Annual INTERACT conference. "INTERACT 2003" was organized with active national support from the SI and its special interest group on Software Ergonomics. Our TC 13 delegate Markus Stolze was co-chair of the International Program Committee. The conference gathered 470 participants from 34 countries, 82 full papers, 64 short papers, 7 tutorials, 9 workshops.

M.Stolze is active in the SI Software Ergnomics Special Interest Group which also represents the activities of the ACM CHI Swiss local group and organised four technical events in 2003. A Swiss Usability Professionals Association (UPA) Chapter was founded.

url : ict.satw.ch/SPIP/rubrique.php?id_rubrique=21

4. AIA I: Public Education in ICT

AIA is the name of ICTswitzerland's committee on ICT education. One of the prevalent topics of AIA is the improvement of the ICT education in public schools on all levels. Apparently the most important bottleneck in this field is the lack of ICT experience and knowledge of many teachers and therefore the Education of Teachers. In Switzerland the 26 Cantons are the responsible bodies for public education which makes the coordination of Teaching of Teachers even more difficult. However substantial advancements in this field are now visible (see also below "Public-Private-Partnership").

url : www.bbt.admin.ch/e/index.htm and www.bbt.admin.ch/berufsbi/profil/e/index.htm and www.bbt.admin.ch/dossiers/bildung/e/index.htm

5. AIA II: Improved Education for ICT Professionals in I-CH

Quite a different but also very important area of activity of AIA concerns the professional education. Since 2002 in four pilot Cantons professional education for IT professions started to be based on a completely new concept with *modules*. A module is an amount of knowledge which can be taught in about 40 lectures in vocational schools. During a regular

apprenticeship of four years (partly performed in school, partly in an enterprise, working in productive projects or other tasks) each apprentice has to learn between 27 and 34 ICT modules depending on his professional orientation within IT. This new concept with modules is right now in introduction which absorbs a lot of resources. But the educational results are promising.

url : www.bbt.admin.ch/berufsbi/grund/feld/informatik/f/ and www.i-ch.ch/index_e.cfm

6. ECDL

ECDL shows a significant progress in Switzerland (and Liechtenstein): during the year 2003 more than 11'000 skills cards were sold bringing the total to 33'000 cards. The estimate for 2004 is 16'500.

More than 24'000 certificates have been delivered after successful completions of the exams.

There are 235 approved test centers.

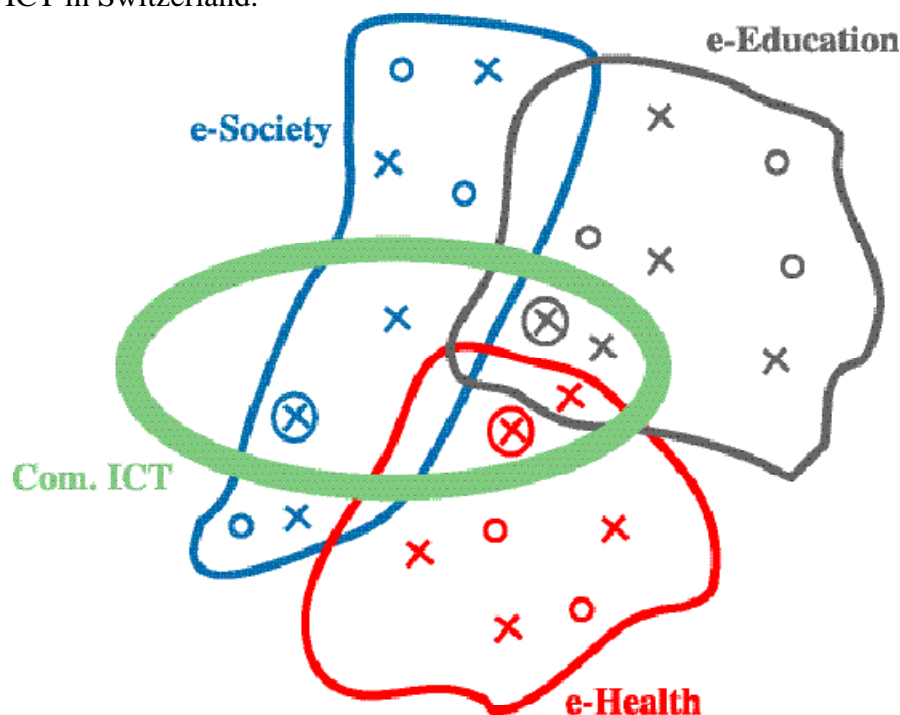
Switzerland is the country which shows the highest ECDL growth rate. Our mid-term objective is up to 40'000 cards per year. An ECDL exam is taken every 5 seconds

ECDL-SI has also received from the ECDL Foundation the responsibility for Kosovo and Cameroun. There are 4 test centers in Kosovo and 1 in Cameroun (where exams can be taken via internet).

url : www.s-i.ch and www.ecdl.ch

7. The Swiss Academy of Engineering sciences (SATW) and the ICT Committee with 3 working groups

ICTswitzerland is one of the ca. 60 member organisations of the SATW. The Swiss Academy of Engineering sciences (SATW) created in 2002 an ICT Committee to promote ICT in Switzerland.



Under the chairmanship of Raymond Morel, member of the **Scientific Board (WBR)**, this Committee works in three domains : **e-Education, e-Health and e-Society** and collaborates with many partners.

Different kind of events were already organised in Switzerland and this Committee take the leadership with 10 partners to promote IFIP during WSIS with the **EKS Forum** (see below).
url : ict.satw.ch/SPIP/rubrique.php3?id_rubrique=1 and www.satw.ch/E/about.html

8. The EKS Forum («Engineering the Knowledge Society») during the World Summit of the Information Society (WSIS)

The **EKS Forum** is the result of a two-days parallel event of the World Summit on the Information Society (WSIS) in Geneva, Switzerland, December 11 - 12, 2003. It is a good example of synergy and collaboration between the World Federation of Engineering Organisations (WFEO) and the International Federation for Information Processing (IFIP). The organisation was in the hands of the Swiss Academy of Engineering Sciences (SATW).

Information Technology (or Information and Communication Technology) cannot be seen as a separate entity. Its application should support human development and this application has to be engineered. Education plays a central role in the engineering of Information and Communication Technology (ICT) for human support.

The EKS Forum addressed the following aspects: **Lifelong Learning and education, e-inclusion, ethics and social impact, engineering profession, developing e-society, economy and e-Society**. The contributions in this World Summit event reflected an active stance towards human development supported by ICT. A Round Table session provided concrete proposals for action.

The proceedings of this EKS Forum has been produced from papers by invited authors from Belgium, Canada, Finland, France, Germany, Malaysia, Mali, The Netherlands, Switzerland, United Kingdom and the USA. In addition the book contains project **proposals for taking action**. Also included are the UNESCO - IFIP World Computer Congress 2002 **Montreal Youth Declaration**, UNESCO - IFIP **Vilnius Declaration**, the World Federation of Engineering Organisations (WFEO) **Carthage Declaration** on the Digital Divide and the European Academy of Sciences and Arts (EASA) **Vienna Declaration** on security of Wireless Lans.

As output of this event, beside the increasing of visibility for IFIP, the proceedings book (published by Kluwer) presents a cross-section of educational implications of the Knowledge Society (or Information Society), an emerging society in which Information and Communication Technology plays an important role. In the words of Klaus Brunnstein, the IFIP president: Renowned experts address essential aspects such as the engineering of ICT-applications for the Knowledge Society, as well as the vulnerability of such applications. Also the concept of a networked economy and an example of telemedicine in Mali are presented. Sustainability is addressed, thus linking Rio to Geneva. More general, very basic aspects of knowledge-based systems are addressed: roles and preservation of information, education and lifelong learning, the development of ICT-skills and professionalism, social engineering, as well as questions related to ethics in the information society.

With such richness in detail an essential basis is built for understanding the relation between the concept of the Information Society and the educational aspects of the Knowledge

Society as discussed in the 2003 General Conference of UNESCO with special reference to the needs of developing knowledge societies.

(for more details on this event, see the report to the GA 2004)

url : ict.satw.ch/SPIP/rubrique.php3?id_rubrique=35 and other important links:

WSIS-Site of the ITU: www.itu.int/wsis/

Site of host country Switzerland: www.wsisgeneva2003.org

ICT4D-Marketplace: www.ict-4d.org/Marketplace/en/default.htm

Swiss foundation Science et Cité: www.science-et-cite.ch/projekte/de.aspx

9. UNESCO Round Tables during WSIS on EDUCATION AND KNOWLEDGE SOCIETIES

Organised by UNESCO Institute for Information Technologies in Education (IITE), with the following partners :

- Club of Rome (CoR)
- International Federation for Information Processing (IFIP) with 5 experts
- International Council for Open and Distance Education (ICDE)
- International Association of Universities (IAU)
- University of Mauritius, Virtual Centre for Innovative Learning Technologies (VCILT) and Lifelong Learning Cluster (LLC)
- Food and Agriculture Organization of the United Nations (FAO)
- NGO-UNESCO Liaison Committee

the event aims were to attract the attention of the Summit Stakeholders to **the significance of education in the construction of knowledge societies and tasks of education in knowledge societies**. Recent undertakings in the field of ICTs are a vehicle to develop Education for All, as well as cooperative efforts of UNESCO and NGOs building up education for and in knowledge societies were be reviewed.

The participants in the three Round Tables discussion were splitted among the following themes :

the event was mainly focus on the Knowledge Society, as a part of the Information Society, and **the role of Education in the Knowledge Society: Education FOR Knowledge Societies** (Which education is needed in the Knowledge Society? How education can prepare a Knowledge Society? What are the main trends and challenges? What kind of policy is needed?), and **Education IN Knowledge Societies** (What is learning, teaching in a Knowledge Society? Which resources and tools are needed? Which strategies can be designed for education in a Knowledge Society?).

The round table addressed **also UNESCO s role in the development of education for Knowledge Societies** (in the spirit of the « Education For All » action plan).

The main objectives of the round tables were:

- to sensitize Member States delegates to the WSIS to the **importance of education and educational use of ICTs** in the Information Society in general and in the WSIS process in particular;
- to analyse the essential **role of education** in the knowledge society;
- to analyse the **core changes** brought by ICTs in society and in education;
- to analyse how education can **prepare future citizens** of the Knowledge Society;
- to provide **recommendations** to the Member States.

url : wsis-roundtable-ed.iite.ru/agenda/ and <http://www.iite.ru/img/upload/flyer.pdf> and www.iite.ru/iite/sitemap

10. Public Private Partnership Schools in the Internet (PPP-SiN)

In December 2000, the OPET (Federal Office for Professional Education and Technology) launched the initiative "Public Private Partnership Schule im Netz" (PPP-SiN). Its aim was to promote the use of IT resources, multimedia and the Internet for educational purposes. Primary and secondary schools throughout Switzerland should be given rapid and simple access to new information and communication technologies.

PPP-SiN is an investment in the future. The know-how and knowledge of the young are Switzerland's most precious resource. Strengthening the media skills of future employees through PPP-SiN is of capital importance for the Swiss economy and its competitiveness.

The idea to launch a Public Private Partnership for education is innovative and convincing. The application of state-of-the-art learning methods and new technologies to education is often bedeviled by scant resources, the lack of appropriate and effective equipment and above all expertise. These are the problems tackled by PPP-SiN. As a national program, it should generate the impetus to deal with these gaps. Its aim is to join forces to introduce innovative measures and drive them forward. The partners involved in PPP-SiN – the Confederation, the cantons, and the private sector provide services corresponding to the areas they are most competent in.

The private sector pledges to supply the infrastructure (hard and software, networking and Internet access). The public sector funds the basic and continued training of teachers, and the development and application of new educational curricula and learning software. The cantons and municipalities commit themselves to the implementation of the PPP-SiN project.

Information on the further evolution of PPP-SiN, on running offers from the industry partners, on software, past experiences by teachers, or special events is available on the Swiss education server.

url : www.bbt.admin.ch/dossiers/ppp/e/index.htm and www.ppp-sin.ch

11. Information Society in Switzerland

Since February 1998, the Swiss government has been conducting a massive campaign to promote the information and communications technologies (ICT). In the text which forms the basis for the Confederation's actions in this area, the Information Society Coordination Group (ISCG) was mandated to lead the federal administration's ICT activities and to make the Swiss population aware of the challenges of the information era. In particular, the ISCG secretariat had the task of setting up an internet site which reflects the scope of federal action to promote the ICT and the result is the infosociety.ch site.

url : www.infosociety.ch/site/default.asp?dossiers=&id_fiche=2789 and two important documents :

- Progress on the information society in Switzerland. The Federal Council's strategy should be adapted to developments (28.06.2004).

<http://www.bakom.ch/en/medieninfo/medienmitteilungen/uvek/artikel/01300/index.html>

and

- Report on Digital Divide in Switzerland (June 2004) only in French or German

www.infosociety.ch/site/default.asp?dossiers=16

and a monthly newsletter www.infosociety.ch/site/default.asp?dossiers=23

12. "INTERACT 2003" in Switzerland

The major event of TC13, the biannual INTERACT Conference, took place Sept 1-4, 2003 in Zurich, Switzerland and was successful with an attendance of ca. 470 delegates.

This ninth IFIP TC13 international conference on Human-Computer Interaction was organized at the Swiss Federal Institute of Technology (ETH).

url : www.interact2003.org/

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