SMART workshop
The role and impact of professional and scientific societies
in ICT research, education and innovation

Brussels, 18-19th January 2011

MINUTES

Workshop agenda

SMART WORKSHOP
18-19.1.2011

Venue:
European Commission, Building No.25
Avenue de Beaulieu
B - 1160 Brussels, Belgium

ROLE & IMPACT
OF PROFESSIONAL
&SCIENTIFIC SOCIETIES
IN ICT RESEARCH,
EDUCATION
AND INNOVATION

18-19.1.2011
BRUSSELS
DG INFSO

AGENDA

Day 1: Tuesday 18 January 2011

12:00 – 13:00	Lunch
13:00 – 13:10	Welcome (European Commission DG INFSO, Assistant to the Director - Mr. Franco Accordino)
13:10 – 13:15	Presentation of the workshop agenda (ASM & APINTECH)
13:15 – 13:25	Overview of SMART 2009/0061 study (ASM, Agnieszka Kowalska)
13:25 – 14:00	Results obtained from inventory and on-line survey (ASM, Michał Jabłoński)
14:00 – 14:30	Overview of proposed strategies (APINTECH, Dr. Nikos Sakkas)
14:30 – 14:45	Coffee break
14:45 – 15:45	Expert panel on proposed strategies 1&2 (general discussion)
15:45 – 16:00	Filling in opinion questionnaire on presented strategies 1&2

Day 2: Wednesday 19 January 2011

10:00 – 10:15	Welcome and presentation of the agenda (ASM & APINTECH)
10:15 – 11:15	Expert panel on proposed strategies 3&4 (general discussion)
11:15 – 11:30	Filling in opinion questionnaire on presented strategies 3&4
11:30 – 11:45	Coffee Break
11:45 – 12:45	Discussion on the final recommendations for strategies
12:45 – 13:00	Closure of the workshop

Presentations

The following presentations were delivered

- Presentation on the background and rationale for the study, by Franco Accordino, European Commission
- an **overview** of the project activities
- a **presentation of the data collection phase**, including the factual data (Inventory) and the opinion data (survey)
- a **presentation on strategic directions,** for closer collaboration among ICT societies in the EU

The workshop started with the Contractor presenting an overview of the project activities, concentrating on the results achieved until now that is ICT societies inventory in the first place as well as opinion based on-line survey outcomes, which followed.

Inventory debate

After the method and results of the Inventory study with records of 444 societies was presented with statistical data, the participants raised the issue of the data collection method applied, as not all the societies had not been contacted directly. The contractors explained that information was gathered by National Correspondents using **internet search** and, if data collection was difficult or the data were unclear, the NC contacted the societies by means of **phone/ or e-mail contact**. The SMART consortium added that it had not been necessary or possible, in all the 444 cases, to establish direct contact with the societies The consortium acknowledged that, prior to any publication, there is a data validation issue that must be settled, and would look into ways how to deal with this.

Survey debate

In the next presentation, given by the Contractor the SMART survey with a sample of the statistical results was presented. The survey was based on 474 responses of ICT society stakeholders who gave their feedback on line. A participant remarked that the number of respondents was very low, and wondered whether an extra effort could be done to reach a higher response rate.

A number of statistical issues where raised by the workshop participants as regards aspects of the data processing and presentation, carried out by the consortium. The consortium responded that the statistical elaboration was done with all possible statistical good practice. The limited views offered by the presentation on the data was often a source of misunderstandings therefore after the workshops the contractor uploaded on the study website a summary report presenting more in detail the on-line study results. One participant questioned the Thomson Reuters database for assessing impact of ICT societies. Conferences are far more important than journal citation. Another question was asked about the certificates.

Overall however, of the workshop participants recognized that the exercise was sizeable and the data collected significant and, to some extent, innovative, as no other such opinion survey has even been carried out among ICT societies.

Given the time constraints, the consortium members responded that data collection for the inventory and for the surveys can not be restarted.

Strategy directions

Second part of the workshop was devoted to presentation by the Contractor and discussion among participants and expert panel proposed strategy options for ICT societies in Europe.
The experts invited to contribute in the panel discussion were following:

- Prof Keith Jeffery, Director International Relations STFC Rutherford Appleton Laboratory;
- Prof Imrich CHLAMTAC, PRESIDENT of CREATE-NET Research Consortium;
- Marc SHAPIRO Senior Researcher INRIA & LIP6;
- Dr Fabrizio GAGLIARDI External Research EMEA Director Microsoft Research;
- Prof Christine CHOPPY Vice-dean Universite Paris 13.

The consortium members presented to the workshop four ways for the scientific societies to have a stronger voice in the EU:

1. **ICT SOCIETY STRATEGY DIRECTION No 1: Towards an EU ICT society umbrella organization:**
   Design and work towards the set-up of a lean ICT umbrella like organization, an EU ICT society platform, with the aim to provide a ground where all ICT societies will meet, interact, lobby, and design joint activities.

2. **ICT SOCIETY STRATEGY DIRECTION No 2: Towards a virtual EU ICT society platform:**
   Design and work towards the set-up of a virtual EU ICT society platform, built around the web 2.0 model. The platform should stay clear from emerging in "one more site", or turning into a replica of the individual society web sites. The platform should, first and foremost, provide a crystal clear on line directory service (who is who) and then design innovative services that may create synergy, co-operation and visibility.

3. **ICT SOCIETY STRATEGY DIRECTION No 3: Towards a networking concept around an agreed upon priority:**
   Identify a key horizontal aspect of ICT society operation that maximizes ICT society interest and co-operation impact. Focus efforts on this priority element, in order to, by achieving scale economies, drastically leverage the impact of ICT societies on it. As priority areas: international co-operation and streamlining the research, policy development & standard adoption process in the EU may be suggested.

4. **ICT SOCIETY STRATEGY DIRECTION No 4: Fostering open access:**
   Design a targeted action in the direction of open access products. Design inter-society networks, contributing to open access products that:
   - will result to scale economies,
   - secure a large visibility, at no expense of the quality of the open access products and
   - will establish the EU as forerunner in the emerging open access model.

Discussion – Day 1

After the presentations of the strategy directions a discussion was raised, which touched several important for the future of ICT societies issues (Day 1):

- European scene is very fragmented therefore joint action of European societies is needed, because it could make European professionals' voice heard and recognized. There are three areas, in which European voice should be heard: cooperation with BRIC countries; certification and professional standards.
- Societies have made a huge success in the US. However, the American model of successful ICT society definitely won't work in Europe, mainly because of differences in professionals' attitudes

toward membership.

- We should recognize European societies' strengths and build a strategy upon them. In Europe, there are strong technical societies (specializing in very narrow and advanced topics), that are recognized as leaders in their domains. Therefore, these societies should be brought together and supported.

- A variant of umbrella organization is needed. However, we should first define, what "umbrella organization" means in this case. We definitely don't want another European Technological Platform – these kind of organizations do not work.

  Such organization - a variant of umbrella organization for European ICT societies - would be a good opportunity for lots of society members. There would be space to accommodate variety of goals, which are different for companies, education institutions, research. Those different issues should be included but they could be made more centralized.

  However, we should first define what "ICT" really means. Is telecommunications a part of it? Should practical applications of ICT be also included?

  Another issue is that there is a shortage of people with CS degree in Europe. A lot of people are not interested in being in Europe.

- The fragmentation is a problem. It's easier to get critical mass from China or Japan than from Europe. Cultural differences are the issue. CS in Europe is more concerned with mathematics and is not chartered institution. Therefore it should never be overlooked that Europe is fundamentally different than the US. In Europe, there is no tradition of becoming a member of ICT society, whereas in the US, most of professionals are society members. Therefore, we should not imitate ACM. We should rather make European professionals' more prominent in global organizations.

What is the purpose of cooperation? Why do we actually need it?

- Education, research and industry are fundamentally different. While creating a strategy for ICT, we should diverge them. We should not try to unify everything.

- We need very clear goals to make this initiative successful. What issue are we facing? What is wrong? What is lacking? There are lots of bodies that do all the things that have been mentioned here (duplicating of activities in Europe). We should first identify particular needs and then design a service to satisfy them.

- Options 1 and 2 are definitely unacceptable. We don't know a clear goal for another organization of this sort and it will duplicate the functions of existing bodies. Option 3 is the best one.

- We have a clearly defined issue that could be addressed by a new umbrella organization. In Europe there are lots of organizations that are bureaucratic and not connected. These organizations decide on critical policy issues without sufficient expertise and legitimation. Meanwhile, there are lots of competent experts in ICT societies (technical societies) that do not influence policy because nobody knows them They are very fragmented, they feel that they do not have a voice and are not represented. Therefore a new platform should bring together political bodies and experts from those societies (motivate strategy thinking).

- The point is that experts from societies are not heard now. A new platform is needed in order to make them recognized. Therefore the best solution would be "option 2 with flavor of 3 and 4".

- There should be a common stand point at European level as now majority thinks of themselves as "local", which is disappointing.

- Top-down approach will definitely not work here. An umbrella organization need social legitimation and this goes from bottom up only.

  It should come from societies. One needs to argue, motivate the members etc. because otherwise the idea will fail. More speed and impact is needed!

  What could EC do? If there are some incentives or we there is a place to meet – that could be a step forward.

- One more thing we need to be careful about - cultural differences existing between European countries which must be taken into account.

- Option 1 will not work. Umbrella organizations that are established by the EC tend to become bureaucratic and inefficient. Option 2 is safer but poorly defined – what is that? Social network? If we create a social network and ask young people to join they will only do it if we offer something valuable as there are already linked to many of this kind. Option 3 – implausible, a variation of option 2. Option 4 – unrealistic, open access will never be powerful enough.

  The best thing we can do is to identify a need and then design a service that will satisfy that need. We must first figure out what exactly we want to deliver. What the service is?

- Agree with bottom-up approach. Communication and bringing societies together is needed. However it is unclear, what the EC can do to foster that approach. We should also be aware of that "social network" approach does no magic. We need something more concrete than that.

- We should definitely fill in the horizontal gaps and a channel for representing the European ICT professionals.

- There are good mechanisms that satisfy the needs that have been mentioned here (e. g. CEPIS, consultancy mechanisms). We don't need yet another body to do it.

- The answer from the audience was that CEPIS has no real impact on European policy. What we need is a wide, open platform where everybody could be able to speak (talk together how the societies should progress). A group focused on broader context of expertise is needed as otherwise ICT will become more and more fragmented.

- We should be mastering a social paradigm for absorption of ICT innovation. This is even more important than generating more innovation.

Discussion – Day 2

During the second day of the workshop the debate from the first day has been continued with following experts:

- Prof Keith Jeffery, Director International Relations STFC Rutherford Appleton Laboratory;
- Prof Imrich CHLAMTAC, PRESIDENT of CREATE-NET Research Consortium;
- Marc SHAPIRO Senior Researcher INRIA & LIP6.

The discussion concentrated on more concrete details of the strategy options, especially favourable option **No 2: Towards a virtual EU ICT society platform**. The participants discussed mainly membership options, focus on topics or general idea.

- There should be a key European organization, where societies become members automatically

- In terms of virtual platform, member is an individual (legal person). Therefore there should be agreement of individual societies – no legal impediment. Societies become members automatically but hey can opt out.

  Another issue is that this organization could be controlled by the presidents of society members.

  What should be not forgotten:

- services and representation for individuals,

- a research agenda.

- Another voice was that we need to start small. There are too many different societies to get under the umbrella of the key European organization.

  Thus first we should put together technical societies – EUROSIS, EATCS, Euro graphics etc. and ask them to write an agenda and then see what happens.

- The issue is that an organization should offer a certain benefits on collaboration. It's an illusion to think that the key European organization will link those societies without offering services because of certain local support.

  Members – it's their choice whether to join in or not. Thus the more important point than who is the member is whether we can provide value.

- An opposite point of view has been presented basing on the fact that scientists and large companies have different goals. There should be more focus on who are you representing. In this sense we should start discussion with groups that have the same interest.

  The essence is understanding what the focus is, which interest you represent. After this step look into other platforms (groups) and think with whom you have to meet with.

- To find a way to have discussions within ICT sector and not fragmented groups alone (without EC). The idea being to get together and with a clear and common view go to the EC.

  The approach is good but … it's difficult to come to one idea together. The academia for instance will have own lobby.

  Stimulate mutual discussions, discussions between individuals – might be a solution.

- We should provide tools to societies to get together, to be able to represent ICT. Offer on one hand web tool and on the other small things the societies can gain.

- We should not oblige people to join in but create a tool to make them willing to join. AAL functioning is a good example: small issues are brought into the agenda and then search for interested people is initiated (small groups: meet and discuss).

Crucial issues are specific topics. Different views were presented in this matter:

- If you want to do all you will not achieve much therefore there should be focus on specific topics.

- Should keep in mind that topics are about including and not excluding.

- There is a lot of mechanism that address topics and does not have one voice – topics encourage fragmentation.

- Topics can bring together fragmented topics.

- Topics do not necessarily mean fragmentation therefore we need to find a synergy.

- Topics mean excluding.

- Maybe we should try define topics of tomorrow? Get together professional societies and ask them what is missing.

- Or maybe define topics that come across different societies?

- The virtual platform would allow to blossoming of all topics. Structure that stimulates performance of groupings.

- There is a clear desire from societies on collaboration aspects. We can take the topics from the survey and elaborate on them later on (see what the structure should be in the following steps).

Other aspects were also raised:

- Web 2.0 is useful but you do not get agenda through this.

- There is a need of impacting the societies. Why not thinking of a platform of different activities and you decide on the kind of governance of each activities. The general structure should be though light.

- For this approach incentives are needed. One of the incentive could be stronger single voice.

- But how to formulate stronger single voice in a document?

- This 3 issues are needed:
  - improve profile to be more recognizable,
  - have stronger voice in policy development,
  - increase professionalism.
- Why do we need to set up the platform. Incentives are important but the initiative should come inherently from the group. It's about quality of work, improving way of thinking.

  Few points has been mentioned at the end of the workshop to close the discussion:
- Societies do wish to have common representation in the EC.
- Web 2.0 is needed but not exclusive.
- Face to face meetings are also needed.

Summing up the 2 day workshop following points were raised by the participants:

Strategic direction 1: This strategic direction suggesting a legal set-up was rejected by a large majority as it would add bureaucracy and unneeded cost. One representative claimed that the society she represented was doing just that and as such there is no need for duplication

Strategic direction 2: The idea of a virtual platform appeared by far the most attractive, as it would secure the most lean and cost efficient basis for ICT society convergence.

Strategic direction 3: Participative technologies, were not considered as able to, on their own, formulate any strategic perspective. They were, however, considered helpful as a complement to the potential virtual, collaborative platform.

Strategic direction 4: The idea of "open access" did not receive any particular interest among the participants. The issue appears void of strategic potential; it also receives different interest and priority among the societies. Overall, open access was down played as an element towards strategic convergence within the ICT community in the EU.

Overall **the dominant concept was that of the second strategy**,

> **a virtual platform build in a social networking concept and also making strong use of participative technologies** (direction No.2)

Further important views raised and suggestions made:

1. The **main priority should be to establish a democratic, bottom up approach that could attract ICT professionals from all areas, and could gradually emerge into a unified EU voice, along all possible representation contexts** (international blocks, other activity areas, e.g. health, etc.) **while recognised as a leader organisation by all the ICT community in the EU.**

   - **Inventory:** A lot of societies from EU inventory (47,07%) already use web 2.0 technologies (N=444).

   - **Survey results:** Even more societies and society stakeholders (77%) acknowledge the importance of these technologies agreeing that participative technologies can play a useful role in spreading the knowledge on society existence and its activities.

2. In consequence of the above, the EU Society virtual platform **should not initially put its primary emphasis on interfacing at the policy level but on fostering cooperation**

- **Survey results:** Both in cooperation with European and International (worldwide) societies, official association between societies was the most common (29.4% of all responses in case of cooperation between worldwide societies and 28% in case of cooperation with European societies)

- **Inventory results**: 54,1% of national societies are officially associated with other national societies operating in their countries, 44,6% with European societies, 42,8% with worldwide societies and less with other national societies in other countries – 34,5%.

3. **Policy and strategy development** was seen as major motivation (after cooperation) so needs to be included.

- **Survey results:** Elaboration of common policy and standards for ICT sector (7,9%) and increased influence on policy (4,8%) are considered as main benefits of having stronger European ICT societies although at lower priority than acceleration of technology and knowledge transfer (11,4%).

4. **Securing independence from political and business interests as well as not compromising the diversity of the ICT community** throughout the EU, would always remain fundamental aspects of the new construct.

5. The virtual platform should provide for a number of horizontal, all-member-relevant added value services. It should, however, on an equal footing, also provide well defined technical "spaces", where **specialists from a given thematic area would be able to join, exchange and interact and even define and build their own activity areas and services, under their own governance.**

- **Inventory**: Open access is practised by an already important number of ICT societies (28,6%), with a clear increasing use trend.

- **Survey results:** It is also perceived by the majority of survey participants (86,2%) that open access approach to knowledge can play a useful role in the development of ICT societies in Europe (N=282)

6. Linking the community better to **standardisation issues** was highlighted as an important priority.

- **Survey results:** Standardization issues (38,8%) is considered as a desired role of leading EU ICT society although at lower priority than workshops, conferences, seminars (43,7%) and education related activities (39%).

- **Inventory:** Standard development activities including technical and people friendly dissemination of research results and activities are, despite their acknowledged importance, much less represented (4,1%) among the society activities.

7. Linking the community better to **educational and professional certification** was highlighted as an important priority.

- **Survey results:** Issuing widely recognized standards and certificates was pointed by 20.9% of respondents.

8. A **think tank dimension was highlighted as imperative for the platform. This** would allow to discuss and **further develop our understanding of the the link between technology and society.**

9. **The requirement for the platform to provide for clear participation incentives and visible value was highlighted.**

10. A **gradual and step by step model, based on a "start small" concept** and, thereby, minimizing risks was proposed.

- **Survey results:** 70,57% of respondents think increase of stronger cooperation between national and European ICT societies is needed, only 9,57% is against. 67,73% of respondents think increase of stronger cooperation between European and worldwide ICT societies is needed, whereas 12,06% is against.

ACTIONS	ITEMS ADDRESSED
• Set-up of a **virtual network model infrastructure** ○ **fostering Web 2.0** ○ **bringing together existing societies (having all their members by default also of the virtual organization)** ○ **embracing diversity both society and cultural** ○ **communicating** this development to the ICT societies and broader community across the EU ○ **linking to the ICT business** ○ **amplifying the voice** of ICT professionals	1, 2
• **Provide for <u>EU wide ICT representation</u>** ○ **at an international level** ○ **in standard development and communication process** ○ **in education** ○ **in accreditation** ○ **via-a-vis other areas (health care, environment, etc.)**	2, 6, 7
• **Develop horizontal<u>, value adding services to the community such as:</u>** ○ **who-is-who like information to the broad EU ICT society** ○ **employment/ employer search, partnering** ○ **etc.**	5, 9
• Besides horizontal services, **members should be allowed to join, set-up technical areas, jointly work on issues of common interest and define their own governance rules** • setting up **a mature technical area in an early moment would create a good practice example** and a clear guideline towards the further development of the vertical, knowledge, dimension of the platform	2,4,5, 10
Provide for a **<u>think tank</u>** as regards impact of ICT on **society at large**	8
• **Avoid bureaucratic set-ups**	1
• **Avoid initially emphasis on the EU policy interface**	3
• Provide **for openness and transparency, and stay clear form political and commercial interests**	2,4