European Forum for ICST

Platform for Information and Communication Science and Technology in Europe

Blueprint - July 18, 2011

Task Group: V. Baltac/F. Fanning (CEPIS), B. Bigalke (EAI), Chr. Choppy (Informatics Europe), K. Jeffery (ERCIM), M. Shapiro (ACM Europe), P. van Roy (EAPLS), and J. van Leeuwen (Informatics Europe and EATCS, moderator).

Summary. A platform organization is described for the cooperation between ICST societies in Europe. The Task group recommends that the Extended Panel moves to establish the platform following a scenario from Section 7, and to create the platform in initial form as outlined in Section 8.

1 European Forum for ICST

Europe has many professional and scientific societies in Informatics or, more generally, in ICT (Information and Communication Technologies) or ICST (Information and Communication Science and Technology). While diversity is an asset and a feature of the field, there is a widespread realization that the Informatics community needs to join forces, not in the least at the European level.

As a result of several debates, workshops and panels on the issue¹, the prevailing opinion is that a 'strong but low-overhead' platform should be established for closer contact and cooperative activity between ICST societies in Europe. The platform should aim for more unity and, in this way, a more widely recognized and prestigious position of the field.

In this document an outline is presented of a platform organization for ICST. The motives and mission for a platform organization are sketched, and it is described what the platform should be expected to do. Subsequently an organizational blueprint is given, and a number of scenarios are presented for how the platform could operate in practice and be sustained if it were established. As working title for the platform is proposed: *European Forum for ICST* (EFI), also referred to as 'the Forum' of 'the platform organization' in the sequel.

This document was commissioned by the Extended Panel on the 'Future of the European Scientific Societies in Informatics' during its meeting in Brussels on March 17, 2011. The Extended Panel is a joint effort of ACM Europe, CEPIS, EAI, EAPLS, EASST, EATCS, ERCIM, and INFORMATICS EUROPE.

2 A platform organization

The European Forum for ICST is a platform organization of the scientific and professional organizations and societies in ICST which contribute to the interests of the European Informatics and/or ICST communities. The Forum is dedicated to improving the general recognition

This includes sessions at two ICT Conferences, a panel at ECSS 2010, a SMART Project workshop, and an Extended Panel on March 17, 2011 in Brussels. See http://www.cs.uu.nl/groups/AD/societies.html.

and prestige of ICST, including the field's contribution to innovation, economic growth and social welfare in Europe.

The Forum should eventually be based on the active support of the leading organizations and societies in ICST. Through their cooperation in the Forum, the organizations and societies in ICST can ensure the field's participation in the development of relevant international, including EU, policies and actions. Through the Forum, the field can 'do together what needs to be done together'.

The Forum could have any shape, ranging from a coordinated assembly of societies to a managed platform.

2.1 Motives

The need for a platform organization of organizations and societies in ICST has been identified at several occasions. The main reason for establishing a platform, from the perspective of the associations, is the need for greater coordination and collaboration at a strategic level. (The European ICT industry is represented by the platform organization DIGITALEUROPE.)

Before a platform is established, a series of key questions must be answered: why is a platform needed, who will it represent, what problems does it solve, what are the goals, is there a common 'platform problem' that motivates it, what should the platform bring forth, what role should it play, and not in the least, what prestige will it have (and: how to make sure it has prestige).

Key issues for which the platform is needed include the following, among many other issues:

- express common viewpoints for ICST in Europe, when and where needed,
- create unity rather than emphasize diversity and fragmentation,
- join in synchronized, strategic directions for the field,
- give more visibility and identity to the field,
- improve the image and recognition of ICST,
- promote ICST as the key factor for innovating all processes in science and society,
- emphasize the need for high quality research and education in ICST,
- develop professional standards and their recognition,
- make ICST more visible to other disciplines and to each other,
- aim at a better synchrony with platforms in the IT industry
- influence research funding and policies for the field,
- function as a community that cooperates and interacts across sub-area boundaries,
- establish a realistic model of ICST research (from curiosity- to innovation-driven),
- make Europe more prominent in ICST research, and
- represent the (European) excellence of the field.

2.2 Mission

As a platform for the ICST organizations and societies, the Forum should represent the interests where they need to be represented jointly. At the same time the Forum should contribute to the greater recognition of the field in Europe in general: in research, in science, in technology, in innovation, in education, and as an economic factor. The mission of the Forum can be captured as follows:

• The development of common viewpoints and strategies for ICST in Europe and, whenever appropriate or needed, a common representation of these viewpoints and strategies at the international level.

2.3 Aim

The Forum is to be an effective and strong but 'low-overhead' platform, to represent the commonality of the ICST field in Europe. Its aim is to lead to closer contact and the exchange of viewpoints between the ICST societies on common issues in the development of Informatics/ICST in the 'Innovation Union', and the representation of these views where it counts. Concretely the Forum aims to:

- act as a platform for cooperation and joint action,
- be a political factor by acting jointly,
- represent joint perspectives on the development of ICST,
- promote research and education in ICST,
- stimulate the valorisation of ICST results and insights, and
- balance the influence of industry.

2.4 Key platform problems

As the platform will bring a non-trivial number of different ICST organizations and societies together, a number of dominant problems must be defined that are recognized challenges now and that will act as 'binding forces'. The key platform problems will bring urgency, purpose and synergy, which are necessary conditions for the platform to find a place on the joint agendas.

The Task group identifies the following challenges as examples of key platform problems that may be leading now:

- develop a 'white paper' on ICST, to publicize current key research priorities in the field.
- analyze and promote opportunities for cross-disciplinary ICST research in EU-programs.
- give guidelines and examples for the effective and leading position of ICST in innovation chains.
- develop a 'white paper' on ICST education at all levels, giving guidelines for vitalizing and revitalizing curricula in school- and university settings.

• create common viewpoints on needed developments in research, training and/or innovation in ICST and represent these viewpoints to (national and) EU-agencies.

A general key platform problem will be to create an active discussion among the member organizations and societies to discover common strategic interests and develop joint actions.

3 Forum membership

The Forum must be based on active participation by scientific and professional organizations and societies in ICST. The Forum is *not* to be seen as nor intended to become a new association.

3.1 Open and virtual

The Forum should be open to all relevant societies (see section 3.2). The openness leads to an aspect of scale: given that the number of potential members is considerable, the Forum needs a 'core' to manage it. Further organizational structuring is to be kept to a minimum.

The Forum should be organized by the following principles: it is (largely) a virtual organization, and it implies no removal of autonomy of member organizations.

3.2 Members

The Forum exists by virtue of the members who share strong interests in acting jointly on important issues in the ICST field. Members of the Forum can be:

• any organization whose mission concerns (a segment of) ICST in Europe and which satisfies some reasonable entry requirements.

The focus of the Forum will be on organizations and (learned) societies with an interest in both the science and the technology in ICT, in a broad sense. Not all associations in the field need to join.

The membership criterion may be refined into the following *entry requirements*. Potential member organizations should:

- represent a (sub-)discipline and/or professional community in ICST in Europe,
- be recognised by a significant community and has a substantial membership,
- be focused enough so their voice carries some weight (in Europe),
- have a recognized commonality of purpose wrt the other members, and
- have objectives including a strategic vision for ICST in Europe.

Example of potential member organizations and societies are the following:

- general organizations: CEPIS, EAI, ERCIM, INFORMATICS EUROPE, ...
- associations by domains: EAPLS, EATCS, EASST,

• societies with large European presence: ACM(-Europe), IEEE,

National societies (BCS, GI, ...) may be included as well, although they may already be represented through other associations. Member association are expected to be represented in the Forum by officials of their executive board.

Implicit in the virtuality of the Forum is that there is basically 'no membership fee': each member organization bears its own costs. However, as even virtual platforms need a minimal infrastructure, some (small) contribution may be required.

3.3 Delineation

The field of ICST is broad and expanding, the tools and techniques of the field have major impact on science and society. This makes the boundaries of the ICST field rather open and ill-defined, with many new disciplines (e-Science, bio-informatics, e-Humanities, and so on) on the horizon which require active attention and policies. This broadness is inherent to the field but easily becomes unmanageable in one Forum.

The focus of the Forum should therefore be on (scientific and professional) organizations and societies for which (a segment of) ICST in Europe is the core interest. However, the Forum should have an open approach to the many, multi-faceted application areas of ICST.

4 What the platform organization should do

The European Forum for ICST has an important task, namely to advocate the high quality practice of ICST, to promote the contribution of the field to the competitiveness of European science and industry, and to contribute to the recognition and use of ICST results for the realization and quality of systems and organizations in society.

The Forum should provide a 'common voice' for its member organizations and societies in the formulation, adoption and implementation of views and policies pertaining to ICST in the EU, and represent and speak for the joint interest of the members in these matters through any relevant channels.

In this section a number of directions for action is outlined, distinguishing between goals 'inside' the ICST domain itself and goals 'outside' the ICST domain. Also the direct interest for member organizations is outlined. Finally in this section, it is indicated what the Forum should *not* aim to do.

4.1 Activities of the Forum

The activities of the Forum should be carried by the joint member organizations. The following activities would be characteristic:

- identifying strategic issues for ICST and community
 - consult with EC/EIT/other parties,
 - identify joint strategic issues of member associations, and
 - create position papers to assist and influence strategies.

- pursuing goals inside the ICST domain:
 - coordination of general strategic actions in ICST in Europe
- pursuing goals outside the ICST domain
 - joint representation: when called for, in negotiations etc,
 - advise/lobby for ICST in national governments and the EU,
 - demonstrate commonalities across ICST, and
 - increasing awareness of the ICST field in any context.
- acting when triggered
 - triggers should be jointly identified, and
 - only processes should be created, no structures.
- communicating information via the Web to 'everyone'.

4.2 Key indicators

The Forum should eventually have impact. The measures of success include the following, among others:

- increased and strongly supportive member participation,
- greater recognition for ICST at the European level,
- more interaction and joint strategies among the Forum members,
- influence on research policies and funding in ICST in Europe,
- effect on valorising ICST results and innovation processes,
- increased numbers of students in ICST disciplines,
- improved targeting of ICST education at all school levels,
- position as leading platform ('common voice') for joint strategies and actions, and
- recognized by organizations, societies and individuals as representing ICST in Europe.

4.3 Recognition and prestige

The Forum should have a recognized and leading position. This requires the active support of recognized and leading ICST scientists and professionals, visibly represented in the core of the Forum.

Views and policies proposed or advocated by the Forum should be presented and supported by the leaders of the field (in Europe).

At the same time it is clear that the Forum should earn its position of 'recognition and prestige' by its activities.

4.4 Members should benefit

As a cooperative platform, the Forum should have a visible effect to the participating organizations and societies: 'it should be worth to invest in the joint action'. The benefit for members should not entirely be long term. Identifying a number of major benefits, the Forum:

- gives (political and scientific) weight to the ICST field in Europe,
- is the recognized partner in the complete playing field of ICST,
- contributes and co-acts on strategic issues through common viewpoints,
- gives visibility ('one face') to the joint member organizations and societies,
- implies a powerful network outside the own community, and
- provides a means to cross-advertise actions to the field of ICST.

By virtue of being a (largely) virtual organization, the joint web presence should give a highly valuable visibility to the ICST spectrum at 'low overhead costs'.

4.5 What the platform organization should not do

The platform should be seen as a combined force but not itself become yet another organization that would add to the fragmentation of interests. The Forum thus should strictly be a joint committee or platform, serving the joint interest of the participating organizations and societies. It follows that the Forum should restrict itself to its mission and aims, and not do:

- anything that doesn't fit the mission,
- duplicate tasks of individual members,
- interfere in the own playing fields of members, nor
- provide services (other than its website and interfaces).

As to the latter, it is assumed that the services provided by the individual member organizations are adequate for their respective memberships.

5 How the platform organization should be organized

The Forum should be (largely) a virtual organization. While the organizational overhead is to be kept to a minimum, some structuring is needed in order to:

- lead the Forum,
- promote and activate it,
- interact with members about communications and activities, and
- publicize Forum activities to external parties.

In this section we describe how the Forum may be organized. The implementation of the Forum will require that some organization is in place and that it can be sustained.

5.1 Leading the Forum

The Forum will need a core of (appointed or elected) representatives, to lead it and carry out some activities e.g. on key platform issues.

A lightweight organizational unit for this is a *Coordinating Committee*², chaired by the *President* of the Forum. The President and the Coordinating Committee should give visibility and prestige to the Forum.

The position of President could *rotate*, with a relatively short term of office (e.g. two years) to keep the task attractive and give equal opportunity to the membership to serve in this position.

Candidates for the presidency can be Presidents or past-Presidents of member organizations or societies (no substitution). Candidates should have the potential to lead the Forum for a term, and have some resources available by way of organizational support.

The Coordinating Committee may chose to distinguish other, specialized tasks or duties as well. An example is the appointment of a General Secretary for process management tasks, communications, and supervising other infrastructural matters.

Member associations on the Coordinating Committee are to be represented by an official of their executive board, viz. their president or a vice-president on his behalf.

5.2 Activating the Forum

The organizations and societies in ICST that are a member of the Forum together form the *Forum*. Member organizations and societies can and should be represented by one or more of their board members in any meetings of the Forum.

While the organization is virtual and communicates by modern media, physical meetings of the Forum may be needed. The Forum may meet e.g. once a year or when necessary. Meetings will be convened by the (organization of the) Forum's president and will typically serve the following purposes:

- inform the members about activities and achievements,
- approve initiatives and proposals of the Coordinating Committee,
- determine joint interests and required actions of the Forum,
- set up task groups with active member involvement,
- decide on any matters involving financial commitments,
- elect the President and other officials for special duties, and
- discuss/amend the role and operations of the Forum.

²In a later stage an *Executive Committee* might be formed.

5.3 Acting on triggers

The Forum will need to actively promote and advertise itself as the European platform for the field. In practice this will be a task of the President and the Coordinating Committee. If the platform is created, it will have to be prepared to carry out tasks that are in line with its mission. Also, it should be *easily reachable* for it.

The Forum's President and the Coordinating Committee may have to activate and involve members in any activities, triggered by internal or external causes. Members should be prepared to be involved in tasks.

The success of the Forum is ultimately determined by the success of its (joint) actions and lobbies.

5.4 Communicating, interacting, publicizing

It is vital that the platform and what it stands for are widely known. Information about the platform and its activities should be quickly and openly accessible to the entire field of ICST and those interested in it. This requires an attractive website which gives all the information people need and possibly the use of other media for binding the membership. The website should be the central resource which:

- publicizes the aims of the Forum,
- expresses the European representation of ICST.
- shows what the Forum does,
- gives information about the membership,
 - also creating awareness of member associations of each other, and
 - giving information on how to join,
- is informative and up-to-date on 'European' ICST matters, and
- can be used for relevant announcements.

The information on the website should be mostly stable, i.e. the website should not be a daily news medium and not require much maintenance.

6 Operations of the Forum

6.1 Strategies

The Coordinating Committee will actively pursue the mission of the Forum in representing the field in Europe and developing strategies for ICST.

6.2 Actions

The Forum is a joint effort of the member organizations and societies, with no further core structure than described. Consequently, depending on the issues and/or triggers at hand, the

Forum can only reach its aims by (recruiting the) active participation of members inside or outside of the Coordinating Committee. Typically the required task groups or advisory teams will be created and assembled by the Forum's President and the Coordinating Committee.

6.3 Meetings

Meetings are organized by or under the auspices of the Coordinating Committee c.q. the General Secretary. See als under 'Finances' below.

6.4 Maintenance of the membership

The European Forum on ICST is an open platform. Organizations and societies interested in joining the European representation and fit the characteristics for the Forum (see Section 3.2) and are interested in European representation, should be able to join easily and quickly.

The procedure for becoming a member of the platform would be:

- find the required information on the Forum's website,
- submit an application for consideration by the Coordinating Committee (which checks the entry requirements),
- after approval, the association is informed and linked into the website.

Interactions with (potential) members and processing membership applications require a *contact point* where this can be handled.

Membership does not entail any intrinsic overhead or obligation. However, the Forum is a cooperative platform. Thus, when joining one should also be prepared to contribute, through appropriate delegation, to relevant common causes.

6.5 Finances

The platform is expected to work without a budget, except for marginal costs that cannot otherwise be handled. This implies that a 'small membership fee' may be required, in the initial phase of the Forum, to cover the cost of creating the minimal joint infrastructure but no more.

Coordinating Committee members, i.e. their organizations or societies, are responsible for their own costs. The (presumably minor) costs for leading/running the Coordinating Committee are to be carried by the organization represented by the President. These costs are thus evenly divided among the members over time by the rotating scheme.

If an external party requests something, it will need to pay for the costs involved in any activity or consultation involving resources of member organizations.

7 Operational scenario for the platform

The platform does not require much infrastructure but some provisions are needed as described above. If the platform is created, how would it stay 'alive and active' as an operational unit? What would a suitable operational framework for the Forum be?

The ECSS 2010 panel³ believed a (virtual, low-overhead) umbrella organization of qualifying societies would be adequate for the purpose. How might an organization like this be realized and sustained?

7.1 Scenarios

A number of possibilities for a (strong but) low-overhead cooperative organization may be considered. These are presented as separate 'scenarios'. The most lightweight scenario is scenario A, but several further scenarios can be distinguished.

Scenario A

'The platform is an independent virtual organization run by the Coordinating Committee, with responsibilities rotating periodically and no fixed location for its resources.'

This scenario is perfectly feasible in a virtual setting as long as responsibilities are clear and some local resources are available 'somewhere'. When positions on the Coordinating Committee rotate, the support should be taken over by the offices of the organizations or societies of the newly elected or appointed persons.

Because of the rotating scheme, costs are automatically divided between members over time (unless positions on the Coordinating Committee are often occupied by persons from only a few different organizations). Very little further overhead is needed.

Scenario B

'The platform is an independent virtual organization run by the Coordinating Committee, with responsibilities rotating periodically but with a fixed location for its resources.'

This is perfectly feasible in a virtual setting again, but now the infrastructure of the organization is founded at one place permanently. It means that the platform functions and operates completely independently as before, but now uses the 'services' of one organization or society (or institute) to support its infrastructure.

This organization or society in question may not be related at all to the organization or society to which the President or General Secretary belongs at any time and only serves as 'handling agent' for the Forum. As it is now permanently allocating some resources for the Forum and the costs of it are no longer temporary or rotating, this organization or society may have to be compensated for its services. Again, little further overhead is needed.

Scenario C

'The platform is an independent (virtual) organization run by the Coordinating Committee but implemented by an existing organization or society, with responsibilities rotating periodically (and a fixed location for its resources).'

³See http://www.cs.uu.nl/groups/AD/societies.html.

⁴Typically as part of the infrastructure of the President's and/or General Secretary's organization or society during their terms on the Coordinating Committee.

In this case the realization of the platform is delegated to an existing organization or society. This organization or society, say X, accommodates the platform purely organizationally, while guaranteeing that the platform viz. the Coordinating Committee can operate and carry out its mission independently, i.e. without interference of X. Members/participants of the platform do not have to be members of X and would normally confine their involvement to the platform. Clearly, in this set-up, the office of X will also handle the basic infrastructural issues of the platform.

Scenario D

'The platform is an independent (virtual) organization run by an existing organization or society which guarantees the continuity of the platform, with responsibilities rotating periodically as part of the organization or society's operations.

In an ultimate form of the previous scenario, an existing organization or society, say X, adopts the Forum as part of its own membership formula and proclaimed goals. X takes the responsibility for the Forum and guarantees its continuity and operation. The governance structure is or becomes such that it realizes the idea of a (virtual) umbrella organization ruled by the joint ICST organizations and societies. Clearly, in this set-up, the office of X will also be the office of the platform.

Other scenarios are possible.

7.2 Analysis

The realization of the platform requires a clear choice of scenario. Previous debates have mostly pointed in the direction of Scenario A, a virtual platform organization with very low overhead, and against Scenario D. However, alternatives can be imagined.

Scenarios A, B, and C differ mostly by the increasingly permanent central resources. For example, Scenario B allows the Forum to be independent and have its resources at one place permanently, whereas Scenario C envisages the Forum as an independent organisation with resources/office managed by one existing society permanently.

Any scenario has to be tested against the requirements on the platform as an operational organization. Examples are the scalability with increasing membership and the sustainability or, in plain words, the ability to allocate the required resources for running the platform as an effective and active virtual organization. For example, Scenario B will be more sustainable than Scenario A. In turn, Scenario C will be more sustainable than both Scenarios A and B.

No matter what model is chosen, the platform 'does not come for free and does not run by itself'. No scenario is free of some costs and commitments.

8 Creating the platform organization

If it is decided to establish the platform organization, the platform has to be effectively created and started. What is involved? The general principle may be to 'start slowly' and take up some concrete challenges. The organizational scenario should be facilitating, not leading.

8.1 Initial key platform problems

A (small) number of key problems must be defined that are recognized challenges now and that will act as 'binding forces'. These problems should give focus and 'quick wins' for the recognition of the Forum.

A first challenge may be to bring a non-trivial number of organizations and societies in ICST together and exchange information on strategies, aiming for synergy. Another may be to aim for a joint response to the new initiatives in the 'Innovation Union', providing a view on the necessary position and role of ICST research in it. See section 2.4 for other key platform problems.

8.2 Initial membership

It is advised to start with a small initial membership of say 7-10 members (including the member organizations and societies on the Extended Panel), perhaps growing to 10-20 members. The platform should be prepared to grow further, keeping sight of its mission and criteria for membership.

8.3 Initial Coordinating Committee

The starting phase of the Forum also includes:

- the appointment of an initial Coordinating Committee, and
- the election of a President of the Forum.

The initial Coordinating Committee could consist of the representatives of all initial members on the Extended Panel. Also, a General Secretary may have to be appointed.

The Coordinating Committee will be in charge of the further steps in the development of the platform and its infrastructure, depending on the chosen scenario. The Coordinating Committee has to make the platform real.

Aside from the formal structure, 'volunteers' must also participate. This requires an active mindset from the member societies. All should 'appoint' a number of volunteers to assist in the starting phase of the Forum.

8.4 Contact points

Once established, it should be clear where and how to reach the Forum at all times. This may be through the office of the President.

The Forum's President and the Coordinating Committee will most likely have to involve members in activities, triggered by internal or external causes. This means that an effective system should be in place to reach and communicate with (representatives of) member organizations and societies. One can think of email, wiki's, or other supporting (Web 2.0) technologies.

8.5 Website

For a virtual organization the website is crucial. The website will be a key factor for the Forum's visibility and success. Therefore the Forum must provide for the definition, creation, contents, maintenance, and hosting of the website.

It is proposed that (an institute of) one of the member organizations takes care of it. The creation of the website may require a small financial provision in the initial phase.

8.6 Finances

The virtual organization should basically run without the need for a central budget, i.e. with alle members carrying their own costs. If the platform responsibilities rotate, this may be adequate for the foreseen operations. (See section 6.5 for details.)

However, there may be initial costs (e.g. for creating a website) and costs for special tasks in the initial phase. The Coordinating Committee might request EC funding for this. To handle issues of finance the Forum needs to possess an *account* and a subsequent annual reporting process for its transactions.

8.7 Other

The Coordinating Committee may decide on any other steps to configure the European Forum for ICST and put in in place. The President reports annually to the members on the strategies and achievements of the Forum. Eventually the rules of operation for the Forum have to be described in Statutes.

9 Conclusion

The aim is to establish an effective and strong, but low-overhead platform organization to serve the interests of ICST in Europe.

The report describes a blueprint, and a series of issues that need to be decided in order to form a platform organization for the professional and scientific societies in ICST in Europe.

The Extended Panel is expected to consider the issues in this report and any other aspects involved in establishing a platform organization. The Extended Panel also has to decide how it envisions the concrete implementation of the platform: a 'scenario'.

9.1 Recommendation

The Task group recommends that the Extended Panel moves to establish a platform organization, and chooses a scenario to implement the steps outlined in Section 8.

It may be decided to create the platform initially for a trial period of (say) two years. Continuation may be subject to a positive evaluation during this period.

9.2 Possible outcome

Ideally agreement is reached among the leadership of the organizations and societies on the Extended Panel on the terms for establishing a platform organization. Possibly final approval is needed of the boards of the individual organizations and societies represented on the panel, before the decision to go ahead can be final.

In case no agreement is reached, either a renewed study is needed or grounds have appeared for discontinuing the process.

9.3 Bottom line

The bottom line is to just start with a simple scenario, show the potential and solve whatever issues arise along the way. After a trial period, a new scenario can be decided.

Utrecht, July 18, 2011