



**The European Technology Platform on Smart Systems Integration (EPoSS)**

**TERMS OF REFERENCE**

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## **The European Technology Platform on Smart Systems Integration (EPoSS)**

Europe has developed strong resources in the microsystems sector over the last decade – by private and public initiative – and an encouraging position for building a competitive European innovation cluster has been achieved. Further progress, however, requires a change in paradigm in terms of aggregating the heterogeneous industry and research community and of developing new instruments for interdisciplinary R&D activities as well as new models and formats of policy support for a fast transfer of research into innovative products.

A group of major industrial companies intends to coordinate their activities and to set-up a vision for and a research agenda on Innovative Smart Systems Integration by applying the mechanism of a ‘European Technology Platform’. The platform is an industry driven policy initiative aiming at defining R&D needs, innovation and policy requirements in this case related to the particular field of Innovative Smart Systems Integration and Integrated Micro and Nanosystems. The initiative is of particular importance in view of defining research and technology priorities for the EU’s Framework Programme, for raising more critical mass and resources and for coordinating between different initiatives (national, regional, EUREKA, European public funding and industry).

### **1. Mission**

The European Technology Platform on Innovative Smart Systems Integration will bring together European private and public stakeholders in order to create an enduring basis for structuring initiatives, for co-ordinating and bundling efforts, for setting-up sustainable structures, and so to help to realise a European Research Area on Smart Systems technologies. This industry-driven initiative embraces the key players, public and private, in the value chain so as to:

- provide a common European approach on Innovative Smart Systems Integration from research to production outlining the key issues for a strategic European innovation process
- formulate a commonly agreed roadmap for action (updating, assembling and completing existing material and approaches) and provide a Strategic Research Agenda (SRA)
- mobilise public and private human, infrastructural and financial resources, and
- define priorities for common future research and innovation as well as infrastructure activities.

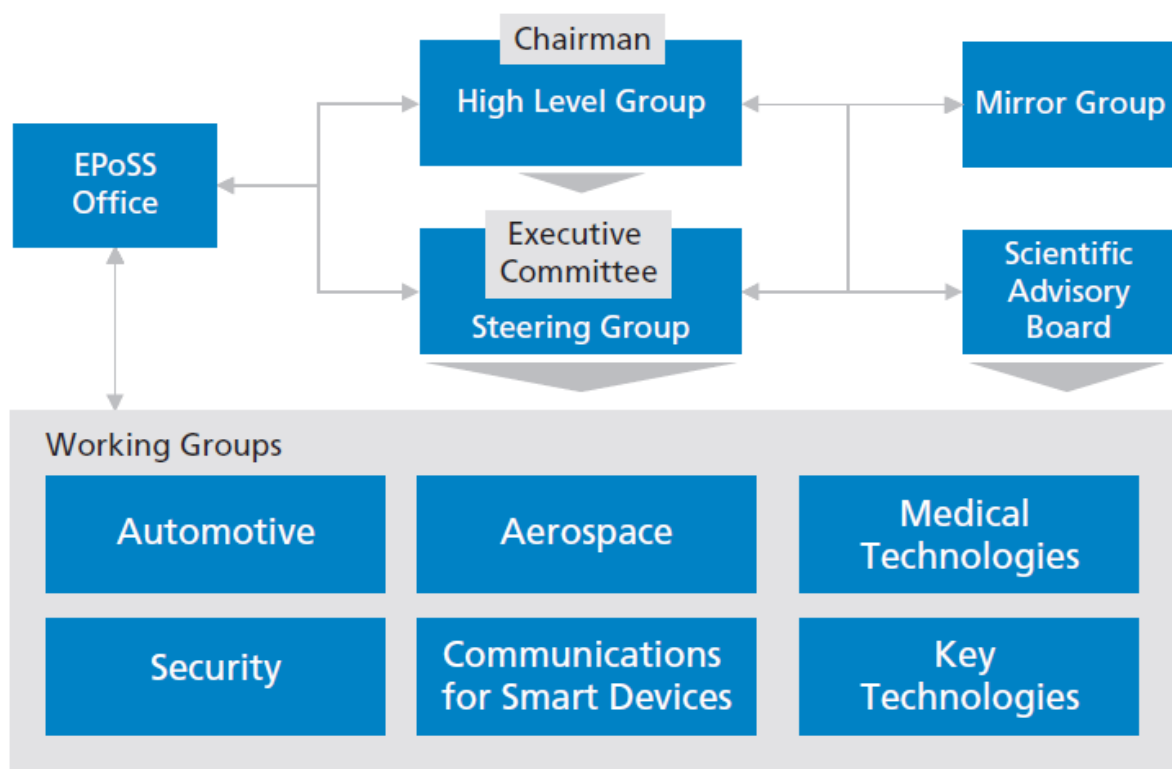
The European Technology Platform on Smart Systems Integration (EPoSS) will constitute a decisive link between the technology platforms at component level – as ENIAC, Photonics21 - and the application platforms ACARE, ERTRAC, eMobility etc.

## 2. Structure and Governance

The main structural elements of the EPoSS are the following:

- The Chairperson elected by the EPoSS members
- A High Level Group
- A Steering Committee involving the main stakeholders
- An Executive Committee recruited from the Steering Committee
- A Scientific Advisory Board
- A Mirror Group involving national policy stakeholders
- The working groups, and
- The members (general assembly)

The EPoSS Office is the “back bone” for operational issues



### 2.1. The High Level Group (HLG)

- a) The mission of the High Level Group (HLG) consists of taking forward and consolidating the “vision” of Smart Systems Integration and of ensuring the Platforms strategic relevance within a global context and within the European Union policy.
- b) In guiding the implementation of the European Technology Platform on Smart Systems Integration, the High Level Group will set the overall scope, the strategic goals and targets for the platform. The High Level Group will also act as a focal point for developing a policy interface between the EPoSS operations and policy-making bodies.

- c) The High Level Group will seek to ensure that EU policy objectives, principles and values are fully reflected in target setting and implementation of platform operations. To enable the platform to realise its full potential, the High Level Group will support the development of an integrated EU strategy for technology development in the area of smart systems integration, stimulating the mobilisation of all major stakeholders.
- d) The HLG will be composed of a maximum of 27 voting members including one delegate from the Scientific Advisory Board. A balanced composition of the HLG should be reached with regard to nationalities, industrial sectors, etc., in accordance with the interests of developing the competitiveness of the dynamic, knowledge-based European economy.
- e) The Chairperson and five Vice-Chairpersons will be selected by the EPoSS members. They will serve for a two-year period and may be re-appointed. In line with the industry-driven character of European Technology Platforms, the Chairperson and the Vice-Chairpersons have to be from industry.
- f) Members of the HLG may terminate their membership at any time, by informing the Chairperson in writing. Wherever possible, sufficient notice should be given to allow a suitable replacement to be found, in principle from the same organisations.
- g) Members who leave the HLG may be replaced by new candidates who can be taken on board of the HLG by two-third majority vote of the existing HLG members. As a general rule, the industry or technology sectors represented by departing members will need to be represented by the incoming members.
- h) The HLG will normally meet once per year. The HLG Chair and the EPoSS Office shall be responsible for the organisation of meetings.
- i) In the event the HLG remains divided on an issue decisions will then be the subject of a simple majority vote, with the Chairperson holding the casting vote in the event of a stalemate. If necessary, the HLG's opinion may be obtained by a written procedure. To allow adequate preparation of decisions, decision points and accompanying documents will be distributed at least one week in advance.
- j) The High Level Group's chairperson is delegated to interface with the other internal structural elements of EPoSS and with the outside world.

## 2.2. The Steering Group (SG)

In the interest of dynamic and efficient management and internal communication, a Steering Group (SG) shall be set up. It will particularly be responsible for the internal coordination and overall day-to-day management of the platform operations and the preparation of the meetings and decisions of the HLG. The Steering Group constitutes the key element of EPoSS in putting concepts and strategies into practice.

- a) The SG will have a key role in assisting the chair, proposing initiatives to the High Level Group and developing operational mechanisms. It will closely work together with the Office, and other platform entities, in order to ensure the implementation of activities.
- b) As the Steering Group constitutes the transmission belt between the EPoSS members and the EPoSS High Level Group, in order to facilitate decision making the companies and organisations represented in the SG have to be equally represented in the High Level Group. The High Level Group members therefore shall appoint from their companies the persons who will form together the Steering Group. A max. of 3 representatives of public authorities from the member states (as spokespersons of the Mirror Group) should be part of the SG.
- c) One of the key issues for the SG to deal with is quality assurance for decisions and documents. The SG therefore shall review the quality and timely preparation of the reports and specific deliverables to be presented to the HLG.
- d) Liaisons should be established with relevant bodies, institutes and networks. Identify and specify requirements for key strategic studies needed to support technical and non-technical actions, and/or respond to emerging political issues.
- e) The Steering Group will meet at least twice per year.
- f) The chairperson of the Steering Group will also act as the chair of the Executive Group.
- g) The Steering Group will establish a regular exchange on technological priorities and activities with other technology platforms, particularly with ENIAC, ARTEMIS and Photonics21. Therefore they invite representatives of other platforms to their meetings, take part at the meetings of other platforms, and inform on up-coming projects. The SG - together with the Office - will set-up a concept for a regular annual consultation meeting involving the mentioned IST technology platforms.
- h) The Steering Group will deliver - with the assistance of the Office - the following elements:

- i. The main EPoSS deliverables which consist of:
  - (1) strategic research agenda
  - (2) lighthouse projects
  - (3) policy interface, or framework, and business development initiatives
  - (4) action plans for the various technical and non-technical issues.
- ii. Proposals for an efficient platform governance structure and its implementation, showing the inter-relationships, traceability and accountability between the various constitutional elements and other activities being carried out under the platform operations and links with complementary initiatives.
- iii. An action plan defining the scheduling of main lines of activity and indicative timing of the platform deliverables.
- iv. Procedures for monitoring and quality assurance of platform operations.
- v. Annual reports on platform progress, including a non-technical section to inform policy-makers and the general public.

### **2.3. The Executive Committee (EC)**

The Executive Committee's (EC) is to be considered the core of the EPoSS Steering Group. As such the Executive Committee acts as the pacemaker of the Technology Platform and the central coordinating entity of EPoSS. Its primary objective is to suggest new initiatives, implement activities within EPoSS, co-ordinate the preparation of documents to be agreed at SG or HLG level.

- a) The EC has an initiative and coordination role related to the deliverables as outlined under 2.2. h).
- b) The EC will propose structures and activities that make up the European Technology Platform on Smart Systems Integration – e.g. initiate specific steering panels, initiative groups on key themes/issues, suggest working groups.
- c) The EC makes suggestions for policy development: Where appropriate, contribute objectively to policy development through providing advice, representation and reporting on key issues (legislation, fiscal issues, non-fiscal incentives, financing research) that affect development and commercialisation of smart systems.
- d) The EC proposes scope and content of the periodic technical reports, the political interface, and reports to the general public.

- e) The EC initiates processes for reporting and assessing technology breakthroughs.
- f) The EC will propose key persons responsible for interfacing with other platforms.
- g) In order to ensure the effectiveness and efficiency of the EC the number of its members shouldn't exceed 10 - excluding the Chairperson. The Executive Committee - of which a majority has to be from industry - is recruited from the Steering Group and is composed by the working group leaders and further key members.
- h) The EC meets three times per year and (also in variable configuration) whenever this appears to be necessary or appropriate.

## **2.4. Working Groups (WGs)**

For specific predefined tasks, the Working Groups (WGs) shall establish - permanent or ad-hoc - as it appears necessary. A particular role in initiating WGs is attributed to the Steering Group and the Executive Committee. The mandate of such Working Groups shall be decided by the HLG.

- a) The composition of a Working Group will be established under the responsibility of its Chairperson, who will report back to the HLG and seek their advice where appropriate. Chairpersons of Working Group are Steering Group members and automatically members of the Executive Committee.
- b) The WG are widely free to choose their internal structure and processes. However, they have to elect a chairperson for interfacing and reporting mechanisms as well as for communicating the WG results.
- c) The activities of the Working Groups may include:
  - i. the drawing-up of roadmaps on Smart Systems in the various application areas
  - ii. the supply of the input to the Strategic Research Agenda as constitutional elements of the SRA process
  - iii. the assessment of options for funding instruments, mechanisms and structures under the FP including the suggestion of projects
  - iv. the addressing of issues related to the research infrastructure, including centres of excellence/competence
  - v. the focus on the various non-technical aspects of innovation, standardisation, IPR, commercialisation, SME-specific issues and other horizontal aspects
  - vi. human resources issues.

- d) The following WG covering priority application areas of smart systems are established:
- i. Automotive
  - ii. Aerospace
  - iii. Communications for Smart Devices
  - iv. Medical Technologies
  - v. Security
  - vi. Key Technologies
- e) Regular meetings will be held involving members of the other Working Groups to report on specific issues and to set-up R&D projects on specific issues related to common (inter-sectoral) problems.

## **2.5. Scientific Advisory Board (SAB)**

The Scientific Advisory Board's objective is to bring forward the scientific dialog on Smart Systems Integration and technologies, and to interface between the world of public research and industry in EPoSS.

- a) The Scientific Advisory Board (SAB) delivers scientific input to the Technology Platform for long term research strategies.
- b) The SAB is dealing with the definition of common technology issues among the various application areas.
- c) The SAB consist primarily of public research representatives from basic and applied research organisations.
- d) The SAB Chairperson is representing positions and interests of the research community and of the SAB in the EPoSS High Level Group.
- e) The SAB Chairpersonship is rotating in a two years rhythm.

## **2.6. Mirror Group (MG)**

The Mirror Group's mission consists of bringing forward and consolidating the vision of the Smart Systems Integration by deepening co-operation among member states and with the European activities on technical and non-technical matters relating to the Smart Systems Integration issue, with a view to promoting a European Research Area, facilitating public/private partnerships and removing national barriers to commercial development and exploitation and by contributing to the realisation of a consistent European policy framework.

The Mirror Group acting in co-operation with the EPoSS's organisational entities has a crucial role to play in goal and target setting, proposing actions and providing opinion and feedback on strategies, activities and results generated through the platform operations.

- a) It provides information and advice on policies and programmes in the Member States that are relevant to realising the goals and deliverables of the technology platform.
- b) It promotes an enhanced co-operation and co-ordination among Member States and European activities: Explore mechanisms for developing synergies and reinforce the co-operation among national initiatives, programmes and projects, including information exchange, co-ordination in programme development and possibly joint implementation of programmes and other initiatives.
- c) The mirror group contributes to building a coherent EU strategy on smart systems research and exploring possible mechanisms for achieving greater integration, such as Art. 169, Art. 171 or other instruments of the EU treaties.
- d) It proposes actions to the ETP.
- e) The MG acts as a body representing collectively and individually the interests and views of the Member States and provides responses from a member state perspective to the recommendations and actions of EPoSS and assist in the dissemination of results of Platform Operations.
- f) The MG should consist of one representative from each interested Member State, Associated Candidate Country and of FP Associated State with a senior administrative level (e.g. Programme Managers). Interested Member States should have active and ambitious policies and programmes to develop and deploy smart systems integration technologies.
- g) The Member State Mirror Group will define at least one chairperson.

## 2.7. The EPoSS Office

- a) The main activities of the EPoSS Office consist of:
- i. Providing organisational support, secretarial and operational support to the High Level Group, Steering Group, Executive Committee, Panels, Initiative Groups and General Assembly, as required – keep electronic diaries, organise meetings, receive and distribute documents, prepare minutes etc.;
  - ii. Acting as an Information and Communication centre for the technology platform, including the maintenance of a dedicated web-site. The Office will be responsible for implementing the platform's I&C strategy, once developed;
  - iii. Providing an IT support service for the technology platform – electronic communication and document handling will be the norm for the platform as well as develop and ensure the implementation of a communications strategy based on internet and other media. The Office must put into place an efficient information handling system to optimise the working of the various bodies;
  - iv. Handling financial matters pertaining to the operations of the platform.
  - v. Organising an annual event which will provide the means to interact with all stakeholders in the platform and beyond, to ensure shared ownership and a common vision. Organised in the format of plenary meetings and parallel workshops it will allow individual RTD projects to exchange information and results. Virtual events and internet-based collaborative activities could be used to supplement the regular physical events.

The above activities of the Office will ramp up gradually commensurate to the activities of EPoSS and its progress.

- b) The Office should be a body facilitating the various processes of EPoSS and providing its management, administration and information and communication functions. Reflecting the private-public partnership nature of EPoSS, it should preferably be financed by both public and private funds.
- c) The overall management of the Office could be provided by an independent organisation satisfying the criteria of credibility and acceptability (in terms of neutrality, objectivity and absence of a potential conflict of interest) to the stakeholders of EPoSS. It should also possess a solid financial structure and administrative experience in order to guarantee a sound and efficient management of the funds provided by both public and private institutions. The managing organisation could also provide, directly or through subcontracted work, studies and deliverables needed by the EPoSS in some of the more general horizontal issues (i.e. business initiative, education and awareness).

### 3. EPoSS Membership

- a) Members will normally be of sufficient international standing and key actors in the area of smart systems technologies, microsystems and/or nanotechnologies or in a related applications area. EPoSS members will be able to provide substantial advice and be in a position to influence stakeholders in planning research and deployment programmes, fostering partnerships and leveraging resources.
- b) New members will have to accept these Terms of Reference, as well as agree to the vision outlined in the EPoSS Strategic Research Agenda.
- c) Although EPoSS essentially is open for everybody, members should predominantly be industry representatives. SMEs are particularly welcome. Furthermore public research organisations, industry associations and other organisations able to further develop the vision of Smart Systems are welcome. However, the number of non-industry representatives shouldn't exceed one third of the total membership.
- d) Members are entirely part of the EPoSS information flow and have the possibility to join the EPoSS working groups at any time.
- e) They meet once a year in the EPoSS General Assembly which is carried out in conjunction with the EPoSS Annual Conference.
- f) They have access the internal area of the EPoSS web portal and may participate in the web forum for positioning and exchanging ideas and they will receive the EPoSS electronic NEWSletter
- g) They have access to the EPoSS Working Groups and will receive first hand information from Working Group and the Steering Group sessions
- h) The membership will facilitate access to European projects and funding and members will receive earliest information on Commission decisions
- i) They qualify to participate at EPoSS internal meetings free of charge, i.e. meetings of the working groups, open Steering Group meetings and at least one general meeting per year
- j) They will obtain a reduced participation fee for the annual EPoSS conference
- k) They will have privileged access to other smart systems events connected to EPoSS
- l) Members are requested to contribute to the financing of the EPoSS Office according to the type and size of their respective institution. The following amounts have been fixed by a decision of the Steering Group:

|  |        |
|--|--------|
| Large Companies (>250 employees):      | 6000 € |
| SMEs and public research institutions: | 3000 € |
| Universities:                          | 1500 € |

- m) The contribution to financing of the EPoSS Office formally is a remuneration for the services to be provided (i.e. participation at the costs for maintaining the organisational structure and for the activities of the EPoSS Office).
- n) The contribution will be paid to the organisation providing the office services. Payment will be made one time per year per member-institution.
- o) There will be a twelve-month activity reporting and financial control (rendering account to the EPoSS members after approval by the Steering Group).