THE SUSTAINABLE NUCLEAR ENERGY TECHNOLOGY PLATFORM

Organisation and structure

Version 7.5 – 7th July 2008

OVERVIEW

The European Commission has facilitated the establishment of a European Sustainable Nuclear Energy Technology Platform (SNE-TP) aimed at accelerating the research and development and deployment of fission technologies in Europe. The platform will assist in the efficient co-ordination of European, national, regional and local research, development and deployment programmes and initiatives and ensure a balanced and active participation of the major stakeholders (i.e. industry, scientific community, technical safety organisations, public authorities, users, civil society). It will help to develop awareness of the role that nuclear fission energy plays in Europe's current energy mix, and could play in Europe's future low Carbon energy mix. It will help foster future co-operation, both within the EU and at global scale.

The technology platform will be instrumental in structuring technical and socio-economic research on nuclear fission energy at European level, as well as for stimulating increased public and private investment in research and development. The platform will also help to identify and to promote deployment opportunities both for nuclear energy infrastructure and services. The platform will build upon ongoing and new projects, clusters and networks of the Commission's Framework Programme, of Member States' programmes and activities, and of other relevant initiatives (such as other technology platforms). It will include a number of specific working groups as may be necessary to optimise its functioning and realise the platform's overall goals. These activities will be complemented by new initiatives for public-private partnerships, linked to industry projects, when appropriate.

The platform governance structure will play a crucial role in target setting and assessment. Regular general assembly meetings of the platform's participants will ensure shared ownership and a common vision. The results of activities, including research and demonstration projects, undertaken under the auspices of the platform will be widely disseminated and communicated.

The technology platform and all its activities should contribute together with other technology platforms in the field of energy (biofuels, hydrogen, wind, solar thermal, photovoltaic, zero emission fossil fuel) to an integrated strategy to accelerate the transition of Europe's energy mix to a low carbon energy mix, which would include a significant share of nuclear energy. The SNE-TP will also interact whenever appropriate with the waste agencies and other stakeholders dealing with geological disposal of nuclear waste.

1. BACKGROUND AND RATIONALE TO THE SUSTAINABLE NUCLEAR ENERGY TECHNOLOGY PLATFORM

1.1. The drivers for Nuclear Energy Development

In 2007, the European Commission put forward the principles of a new energy policy for Europe, able to address the three major challenges that are:

- Improving the security of energy supply;
- Reducing the emission of greenhouse gases;
- Improving economic competitiveness through reliable, low-cost energy supply to industries and citizens.

Clearly, nuclear fission energy, which provides today 31% of EU-27's electricity, will play a role in the development of a low carbon energy system in Europe. The Sustainable Nuclear Energy Technology Platform (SNE-TP) is the main tool to promote and coordinate Research and Development in this field, and further on, deployment of R&D results.

1.2. The SNF-TP project and Preparation of the Vision Report

R&D to maintain the safety and competitiveness of existing nuclear plants and to develop the next generation of reactors (Gen. IV) and associated fuel cycle infrastructures will require large capital investments, as well as major efforts in promoting or funding research infrastructures, education and training. Furthermore, there is a clear need to better coordinate national research policies beyond the European Euratom research framework programmes, or the participation of Euratom in international initiatives such as the Generation IV International Forum.

Recognising this, the Commission encouraged the set up of two successive coordination actions in the 6th Framework Programme (ENFTP and then SNFTP), aimed at preparing the ground for the establishment of a Technology Platform dedicated to nuclear fission energy. An additional Coordination Action (PATEROS) focusing on ways to handle spent nuclear fuel (partitioning and transmutation) will also play an important role. The mandate of the above mentioned projects was to contribute to a vision on sustainable nuclear energy able to address Europe's energy challenges and to identify the preliminary research road-maps required to achieve this vision.

In the process leading to the launch event of the Sustainable Nuclear Energy Technology Platform, the SNFTP group comprising 24 industrial partners (utilities, vendors) and research organisations was extended to include other industrial partners (utilities, technology suppliers), technical safety organisations (TSO), and European associations such as Foratom (representing over 800 industrial companies), the European Nuclear Society (ENS) and the European Nuclear Education Network (ENEN). This was done to broaden the support base for a common Vision Report.

This Vision Report was presented at the SNE-TP Launch Conference on the 21st September 2007. The conference brought together around 300 participants representing high-level policy and decision makers from public administrations and from the industrial, financial, scientific,

educational and research communities as well as representatives of civil society. The Vision Report and recommendations were presented, discussed and largely supported by the conference participants. The vision report is available for download at www.snetp.eu.

The Vision Report constitutes the base document of the Platform. By endorsing this document, organisations express not only the fact that they share the strategic vision developed in the document, but that they are also willing to contribute to the activity of the Platform in order to reach its objectives.

1.3. The Policy Context

The establishment of the Sustainable Nuclear Energy Technology Platform will contribute to the goal set for 2010 at the European Council in Lisbon in March 2000 of a leading **competitive and dynamic knowledge-based economy**, capable of sustainable economic growth with more and better jobs and greater social cohesion. By promoting and helping develop sustainable nuclear energy alongside renewable energy sources, it will also contribute to the goals of the Energy Policy for Europe (EPE) set at the European Council in Brussels in March 2007, which aims to create a highly **energy-efficient and low greenhouse-gas-emitting economy** by 2050. The platform will also be a key element in developing the **European Research Area** in this field, which is a key EU research policy objective set in 2003.

In November 2007, the European Commission issued its Strategic Energy Technology Plan (SET-Plan) setting priorities for action in the coming years, at European level, to tackle the energy challenges associated with the perspectives of a Low Carbon Economy. Nuclear Fission is one of the priorities and the SNE-TP is expected to contribute to the definition and implementation of a major European Industrial Initiative to pave the way to this Low Carbon Economy.

Besides the launch of the SNE-TP and the publication of the Commission's Strategic Energy Technology Plan, 2007 will also have seen the launch of the European Nuclear Energy Forum in Bratislava and Prague (the first meeting of the forum took place in Bratislava on the 26th and 27th November 2007), and the establishment of the High Level Group on Safety and Waste which held its first meeting on the 12th October 2007.

1.4. The Benefits and Added-value of the Platform

In order to realise its full potential, the Sustainable Nuclear Energy Technology Platform will require the active participation of all the major stakeholders – not only as partners to research projects, but also as participants to the Platform's working groups.

By mobilising all relevant stakeholders towards a common goal, the SNE-TP is expected to deliver substantial benefits, including:

– Maintaining and enhancing over the longer term the safe and efficient operation of Generation II reactors while fostering the deployment of Generation III reactors and their fuel cycle to support carbon emission reduction targets while maintaining competitive electricity prices and contributing to waste minimization;

- Accelerating the development and introduction of fast neutron reactors of Generation IV with closed fuel cycle, to achieve sustainable and even safer energy systems, whilst securing economic prosperity and creating new employment opportunities;
- Exploring the non-electricity-generation use of nuclear energy, such as high temperature processes for production of hydrogen, desalination and other industrial applications;
- Fostering synergies between national nuclear research programmes and the Euratom Framework Programme;
- Improving the effectiveness of European, Member State and private R&D investment in the nuclear sector, through a common vision and a consistent strategic framework at EU level for both R&D funding and deployment initiatives. This common vision/path will help concentrate efforts and resources and avoid fragmentation, thus contributing to restructuring and optimising research in Europe and building the ERA;
- Accelerating the generation of new knowledge, innovation and the uptake of research and technologies, improving competitiveness and productivity;
- Supporting the development and networking of regional clusters in research and demonstration will help regions to identify and address their own particular challenges and opportunities and enhance technology to meet these specific needs;
- Developing a policy interface will help market penetration of new technologies at EU, national and regional levels. Technology demonstration will form an important element in this process and should lead to early deployment initiatives;
- Maintaining an appropriate balance between innovative and policy oriented research while contributing to aligning in a coherent and consistent way research and technology developments with European policy and regulatory frameworks;
- Making the EU more attractive both for researchers and industrial investment;
- Informing policy makers about market trends, the changing needs of the sector and the consequences for society, for example in terms of knowledge management, skills and research infrastructure needs;
- Increasing public awareness, understanding and acceptance of the technologies concerned and other related nuclear technologies and the research policy choices necessary to maximise the benefits for all stakeholders.

2. OBJECTIVES AND GUIDING PRINCIPLES OF THE SUSTAINABLE NUCLEAR ENERGY TECHNOLOGY PLATFORM

2.1. Scope

The European Sustainable Nuclear Energy Technology Platform will aim: (1) to promote Research and Development to support the long term safe and competitive operation of Generation II and III reactors and their fuel cycle facilities, (2) to support the coordinated use of and investment in new research infrastructures, (3) to help maintain and develop the human competence base by coordinated education and training, (4) to promote Research, Development, Demonstration and Deployment of Generation IV fast reactors with closed fuel cycle.

The scope and operational structure of the Platform should be such as to ensure a balanced and

active participation of the major stakeholders at the appropriate levels, as well as to allow efficient co-ordination of the European, national, regional and local research, development, demonstration and deployment programmes and initiatives. It should help to develop awareness of the role of nuclear fission energy in Europe's low carbon energy mix and foster co-operation, both within the EU and at global scale. On the latter aspect, SNE-TP should contribute to the necessary co-ordination for optimising synergy between European strategy and international initiatives, such as the Generation IV International Forum (GIF) and the Global Nuclear Energy Partnership (GNEP).

The Platform will act as a catalyst for establishing effective public-private partnerships and provide an interface between the EU and Member States for coherent research policy development and consistent programme planning and implementation.

2.2. Objectives

The SNE-TP will establish operational approaches and procedures reflecting the following basic values and principles:

- *Providing overall direction (vision) and objective setting:* responding to the European Union's aspirations to sustainable development, world-class industrial competitiveness, and a global, knowledge-based society underpinning wealth creation and equal opportunities for Europe's citizens.
- *Proving sustainable solutions:* assessing the potential of fast neutron reactor systems with closed fuel cycle to contribute cost-effectively to these aspirations, and in particular to future energy and environmental goals such as security of supply, mitigating climate change and improving air quality.
- *Acquiring world-class technology:* seeking to ensure that appropriate public and private European entities, representing research, industrial and commercial interests, are engaged, mobilised and co-ordinated on a sufficient scale to maintain world leadership and technical capability in developing and operating Generation II, III and IV systems and associated fuel cycles.
- *Developing an exploitation strategy:* fostering the emergence of a favourable business development environment by helping to select the most promising solutions and by addressing the reduction of technical and non-technical barriers to investment and commercialisation, including public acceptability issues. Identifying opportunities for public/private partnerships for demonstration plants based on the most promising technologies;
- *Providing human capital:* stimulating the development of human resources at all levels and in all relevant skills, by promoting education and training, as well as the development of research infrastructures.
- *Dissemination and Communication:* promoting public awareness and understanding through information, education and training.
- *Fostering international cooperation:* developing international research co-operation as appropriate to meeting the global requirements for development and deployment of nuclear fission energy worldwide.

2.3. Activities and Deliverables

In order to contribute to the formulation and implementation of an integrated strategy for nuclear energy in Europe, the SNE- TP will foster a number of initiatives, including:

- a *substantial increase in technical research and development efforts and budgets* in fission technologies, from fundamental science to validation programmes, by promoting and co-ordinating efforts at EU and Member State level and reinforcing synergies;
- the *effective sharing and use of existing and future research infrastructures* in support of programme aims as well as education and training;
- *demonstration and pilot programmes (i.a. fast neutron and fuel cycle facilities, other applications of nuclear such as hydrogen production using nuclear heat)* to extend the technology validation exercises into the market deployment arena;
- an *integrated socio-economic research programme* to complement and steer the technical support and promote public awareness and understanding, in order to provide a rational basis for guiding policy decisions;
- a *business development initiative*, bringing together different investor organisations to provide financing solutions for technology demonstration and exploitation;
- a *Europe-wide education and training programme*, from schools to world-class research, to help secure the required long term competence needed for the research and development in the field and the further industrial deployment.
- *enhanced international co-operation*, working in partnership with international initiatives such as the Generation IV International Forum, to speed up the introduction of safer, proliferation-proof and sustainable nuclear energy technologies;
- a *communication and dissemination action* for all these initiatives.

Following the recommendations made in the Vision Report, specific deliverables of the Platform in the short to medium term will include:

- a **Strategic Research Agenda (SRA)** to define the research programme, performance targets, priorities, timelines and budget needs for industry and publicly funded research and development;
- a **Deployment Strategy (DS)** for the implementation of the SRA, including for example recommendations on policy measures needed for demonstration and deployment projects up to prototypes, measures for enhancing networking and clustering of the R&D capacity in Europe, and ways for leveraging public and private investment in R&D;
- an **Education, Training and Knowledge Management Strategy** to ensure that knowledge and experience is properly maintained and used, and that the transfer of knowledge between generations is properly ensured;
- a **Strategy on Funding Mechanisms, including public-private partnerships** leading successfully to commercialisation of fission technologies;
- a **policy interface, or framework,** to promote interaction between the Platform and the political institutions and policy makers, eg through the European Nuclear Energy Forum or Permanent Representations;
- a strategy to develop and implement cooperation with other relevant **European Technology Platforms** and **co-operation at international level.**

3. THE STRUCTURE AND OPERATION OF THE SUSTAINABLE NUCLEAR ENERGY TECHNOLOGY PLATFORM

The Technology Platform will be an autonomous forum, independent from the European Commission or any other organisation. It will develop its own methods of working and establish interfaces with appropriate institutions, bodies, forums and initiatives.

3.1. Participants in the SNE-TP

The SNE- Technology Platform will have an open and accessible structure allowing the participation of all active stakeholders who support the aims of the Platform. However, involvement in the Platform, especially its support mechanisms, will require a level of commitment appropriate to the level of participation, so as to ensure that initiatives are taken forward in an active and dynamic manner. Participation in one of the working groups of the platform would clearly require a higher level of commitment.

The Technology Platform is built upon the foundations of existing European initiatives, networks and structures. Participants in the Technology Platform should represent a balance of expert knowledge and stakeholder interests.

Stakeholders could include, for example, energy companies and utilities, suppliers, research organisations, technical safety organisations, education and training organisations, financial institutions, regional and national public authorities, non-governmental organisations and representatives of civil society.

The Technology Platform will be steered and monitored by a Governing Board, which will provide guidance on how to initiate and push forward the Platform's work programme. This and other support mechanisms are described in section 3.3 below.

Proposal: Procedure for becoming a member of SNE-TP:

An organisation wishing to become a member of the Platform and to participate in its operations has to send a formal letter (template available on the web site) to the Chair of the Platform's Governing Board explaining its motivation and how it intends to contribute to the objectives of SNE-TP. The Chair will submit the application letter to the Executive Committee for advice, and the Governing Board will make a decision based on consensus via a tacit approval procedure.

3.2. The Core of the SNE- Technology Platform: the Platform Operations (PO)

The operation of the Platform is based on voluntary information provided by individual members of the Platform (eg organisations) or groups of members (eg FP project consortia). For this reason, the members are encouraged to provide information to the Platform working groups. In all cases, this exchange of information will be governed by the Intellectual Property (IP) rules of the contributors and/or projects.

This information will be used to develop the SRA and the DS and to monitor their

implementation. The platform may also provide a good basis for effective dissemination of information on nuclear related research at EU level. It will foster additional and new research required to reach the objectives of sustainable nuclear energy through available funding tools (FP, national, bilateral projects).

In particular, the Executive Committee – under instructions from the Governing Board, may initiate research projects, including very large "infrastructure" projects which could take the form of Joint Technology Initiatives (e.g. Joint Undertakings under the Euratom Treaty) and address funding and legal issues to facilitate the set up of such projects.

3.3. The Organisation of the SNE-TP

An illustrative diagram of the SNE Technology Platform is shown in Annex I and the various component bodies are described in outline below. These bodies provide a structure to the platform to "make things happen" and optimise its functioning. For details, the Terms of Reference for the Governing Board and Executive Committee are provided in Annex II.

Governing Board (GB)

Comprising about 30 members representing the stakeholders, the Governing Board provides guidance, stimulates initiatives, monitors progress and when required, takes decisions. The Governing Board will operate on the basis of consensus (or simple majority vote of the participants if necessary) and is expected to meet at least once a year. It will provide guidance/advice to and get input/advice from the different working groups established in the frame of the Platform.

The Chair of the Governing Board will report to the General Assembly (every two years). The Governing Board will comprise organisations that have endorsed the Vision Report and will consist of about 10 industrial organisations (vendor and utilities) including FORATOM, about 10 research organisations, 2 representatives from the European Technical Safety Organisations (ETSON), a representative from the Waste Agencies, and representatives from European organisations for science and engineering (ENS) and nuclear education (ENEN). High-level EC officials from DG Research and DG TREN will also participate in the Governing Board.

The chairmanship, vice-chairmanships and membership (of the 10 industrial and 10 research organisations in the Board) will be open for rotation every two years. The representatives of the TSO may also rotate every two years.

Proposal:
Every two years, the co-chairs from Industry and Research respectively, will propose a new list of members for the (approximately) 10 members from industry and (approximately) 10 members of research organisations, taking into due consideration formal applications received (template available on web site). These lists may include existing and/or new members of the Board. The lists will be approved by the outgoing Board. The Chair will then consult the General Assembly

concerning the composition of the new Governing Board.

The first composition of the Governing Board, for an initial start-up period of 2 years, is crucial to the success of the Technology Platform and needs to be carefully worked out in terms of commitment to the process, transparency and balance. The European Commission made a proposal on the basis of the list of organisations having contributed and formally endorsed the Vision Report prior to the Launch Conference on the 21 September 2007, and additional criteria ensuring an appropriate balance of the membership. This proposal was presented during the launch meeting of the Board, assembling the organisations to which membership will have been proposed. The Governing Board was created on the 30 October 2007, with the membership proposed by the Commission.

Executive Committee (ExC)

The Executive Committee is a smaller group to be appointed by the Governing Board. It will meet more often (probably every 4 months) and will be responsible for steering the activities of the platform. The ExC will be made up of around 5 members from Industry (including FORATOM), around five from Research, 1 representative of the TSO, 1 representative from ENEN and the leaders of the different Working Groups (Strategic Research Agenda, Deployment Strategy, Funding Mechanisms, etc). A representative from the Commission (DG RTD) will also be a member of the Executive Committee.

A Scientific Advisory Committee (SAC) may also be set up, if agreed by the Governing Board, to provide advice on scientific and technological matters to the Executive Committee, and to monitor "state of the art" knowledge in the areas covered by the platform. The SAC would be made up of individual experts, chosen by the Executive Committee for their outstanding scientific stature. They would need to respect independence of judgement by not reporting on activities to which they have contributed.

The members of the ExC will be proposed by the Chair and co-chairs of the Gov Board, to the Gov Board for approval. The ExC will be open for rotation every two years, but every other year compared to the rotation period of the Board (the first ExC will therefore be installed for three years, the second for two years). Thus, continuity in the management of the Platform's operations will be ensured by alternating changes in the Governing Board and Executive Committee.

For the first ExC, the Commission made a proposal to the Board. The proposal was approved at the first meeting of the Governing Board.

Technical Safety Organisation Group (TSOG)
The Technical safety Organisation Group is the group representing the technical safety organisations in Europe, consisting of members of the European Technical Safety Organisation Network (ETSON) and other European TSOs. Its organisation and rules will be determined by the TSOs. On request from the Governing Board, or at its own initiative at the level of Executive Committee, it will provide advice on safety-related R&D priorities with the objective to harmonise safety standards and methodologies in Europe. Its chairman will be a member of the Executive Committee.

TP Secretariat (PS)

The PS will provide secretarial and organisational support to the Governing Board, Executive Committee, Working Groups and the General Assembly. It will also provide an information base and IT support service. The Secretariat is expected to be funded through an FP7 Support Action for a limited period of operation. Prior to that time, secretariat support will be provided by a limited number of organisations under their own funding. The Commission will provide a liaison person. Annex III describes the possible scope of activities of the Secretariat.

General Assembly (GA)

The General Assembly is a biennial (once every two years) forum for all members of the Technology Platform, to ensure shared ownership and a common vision, and to allow an opportunity for presentation of the work of the Platform and discussion on future orientations. The General Assembly will be chaired by the Chair of the Board and co-chaired by the Chair of the ExC. The Chair of the Board will report to the General Assembly on the work performed in the Platform such as the Strategic Research Agenda and Deployment Strategy. The Chair of the Platform may rely on the Executive Committee to report some of these activities. The Chair will also consult the General Assembly concerning the composition of the new Governing Board approved by the outgoing Board.

The General Assembly will be organised in a conference and workshop format, with plenty of opportunities for networking and information exchange, including upon invitation for non-members of the Technology Platform as appropriate.

Virtual events and internet-based collaborative activities could be used to supplement the regular physical events.

Working Groups (WGs)

These groups will take responsibility for the detailed work defined by the Board and the ExC e.g. the Strategic Research Agenda, Deployment Strategy, Funding Mechanisms, Education, Training and Knowledge Management, etc. These WGs will report to the Governing Board via the ExC.

The chairmen of these WGs should be recognised "movers" or "champions" selected out of the members of the Platform. The Working Groups will be organised so as to involve a large representation of the members of the platform (beyond the organisations of the members of the Governing Board and the ExC) while ensuring the maximum efficiency.

Member States' Mirror Group (MG)

Actively involving the representatives of Member States (and Associated Countries) national programmes and activities in the Technology Platform is essential to generate the leverage associated with drawing national, regional and local research programmes, projects and initiatives into the Platform.

There will be a close interaction between the Governing Board and the Mirror Group to ensure that the Platform's operation can take full benefit of the work and activities performed at national

level. For this purpose, the Chairman and Deputy Chairman of the Mirror Group will be invited to be members of the Governing Board.

The Mirror Group has a key role to play, particularly with regard to the development of the ERA in nuclear fission technologies. The Chairman would need to be a strong promoter of co-ordination and co-operation between EU, Member State and regional research programmes and the members should be high level representatives of the relevant parts of the Member State national programmes (e.g. government programme managers). The Group will establish its own provisions for rotating the chairmanship and membership, as appropriate.

The Chairs of the Governing Board and the ExC, using informal contacts with their members, will propose the role and functioning of the Mirror Group in discussion with representatives of the national programmes of the Member States. The Commission liaison person may help in this process, leading to the establishment of the Mirror Group. The terms of reference of the Member State Mirror Group will be described in a separate document.

Annex I – Illustrative Diagram of the SNE-TP
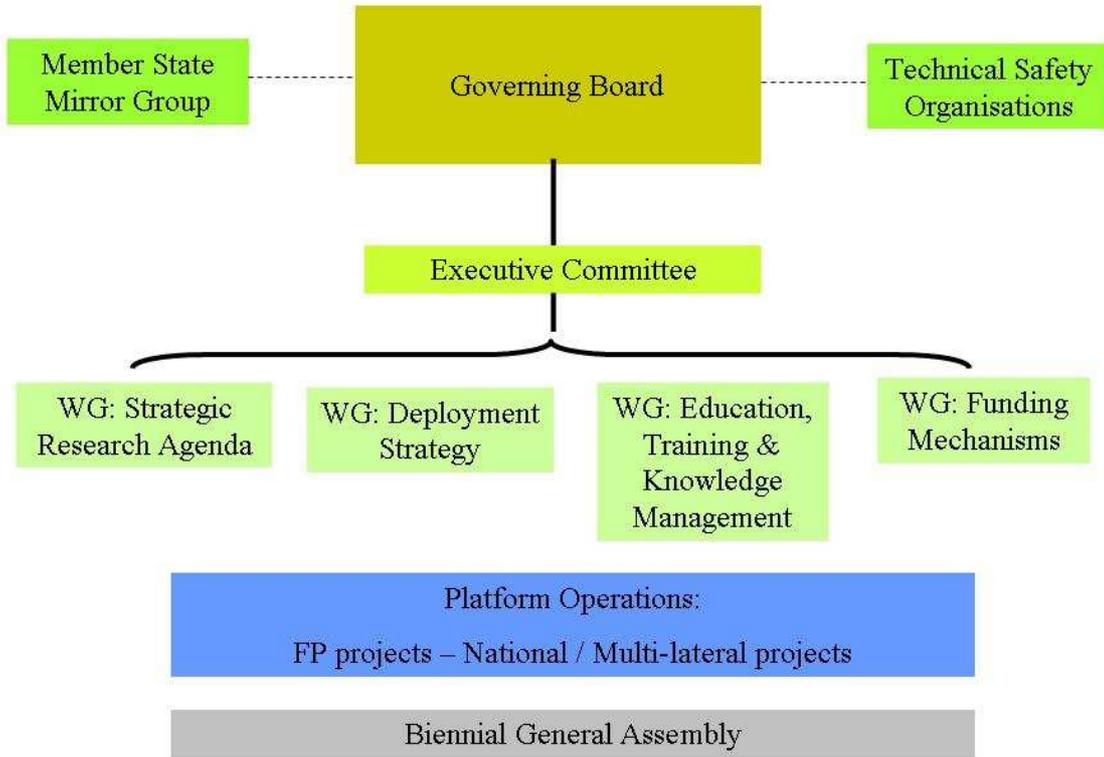
Annex II: Terms of Reference for the Governing Board

1. Governing Board Mission

To take forward and consolidate the recommendations of the endorsers and contributors of the SNE-TP Vision Report and to facilitate the smooth and efficient running of a European Sustainable Nuclear Energy Technology Platform, ensuring its strategic relevance within the global context and in consistency with European Union policies.

2. Role of the Governing Board

In guiding the implementation of the Sustainable Nuclear Energy Technology Platform, the Governing Board (GB) will take into account and further develop the recommendations as set out in the Vision Report. It will:

- set overall scope, strategic goals, performance targets and deliverables for the Platform;
- steer the Platform's technical and non-technical operations, by proposing efficient organisational structures and implementing procedures aimed at meeting the goals and deliverables and for monitoring progress and quality;
- seek to advise on public private partnerships and initiatives that are mutually beneficial;
- act as a focal point for developing a policy interface between Platform operations and policy-making bodies;
- report to all the members of the Platform at the occasion of the biennial General Assembly.

3. Objectives of the Governing Board

The Governing Board 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 Governing Board will support the development of an integrated EU strategy for nuclear fission technologies research, stimulating the mobilisation of all major stakeholders – as partners to research and demonstration projects, or as participants to Working Groups.

The Governing Board will ensure that the results of target-driven research and demonstration projects undertaken as part of the Platform operations will be widely disseminated to maximise transparency and encourage inclusion, with due respect paid to intellectual property rights.

This will include reviewing existing activities and recommending and undertaking, with the assistance of the Secretariat, or other such bodies as may be established, the creation of working groups, as well as fostering the setting up of projects, clusters and networks (for the operational part of the Platform). These groups and activities will complement the steering functions of the Governing Board and will be charged with defining and implementing specific activities and deliverables to steer the Platform towards its goals.

4. Deliverables

The Governing Board will deliver, with the assistance of the Executive Committee and the Secretariat established for the purpose:

- Proposals for an efficient Platform governance structure and implementation, showing the inter-relationships, traceability and accountability between the Governing Board, Working Groups and other activities being carried out under the Platform operations and links with complementary initiatives.
- An action plan defining the scheduling of main lines of activity and indicative timing of the Platform deliverables.
- Procedures for monitoring and quality assurance of Platform operations.
- Annual reports on Platform progress, including a non-technical section to inform policy-makers and the general public. A formal reporting to the General Assembly will be carried out every two years.
- A Strategic Research Agenda;
- A Deployment Strategy and demonstration projects;
- A policy interface, strategy for funding mechanisms, and business development initiatives;
- A strategy for cooperation with other Technology Platforms as well as cooperation at international level;
- An action plan for knowledge management, education and training
- An action plan for communication and public information.

5. Scope of activities of the Governing Board

The Governing Board will ensure the following activities are fully addressed, by means of its own resources (stakeholder organisations), with the support of the Executive Committee and the Secretariat, or through other means of support, such as may be defined.

- Structuring: develop and evolve the structure of the activities that make up the European Sustainable Nuclear Energy Technology Platform – e.g. initiate specific working groups on key themes/issues;
- Monitoring: regularly review progress on Platform activities and deliverables, identifying strengths and weaknesses from both technical and socio-economic points of view;
- Quality assurance: the Governing Board shall assume responsibility for reviewing the quality and timely preparation of the annual reports and specific deliverables.
- Recommendations for policy development: where appropriate, contribute objectively to policy development by providing advice, representation and reporting on key issues (e.g. financing research) that affect development and commercialisation of nuclear systems.
- Reporting: define the scope and content of the periodic technical reports, the political interface, and reports to the general public. These will include a technical section covering EU and MS programmes and initiatives and report on progress towards the European Research Area. To assist with the compilation of these reports, managers of Platform

operational activities and steering activities will be invited to contribute.
  – Communication: develop and ensure the implementation of a communication strategy based on internet and other media.
  – Cooperation with other Technology Platforms and cooperation at international level: ensure the necessary co-ordination for optimising the interface between European strategy and international initiatives, such as the Generation IV International Forum or Global Nuclear Energy Partnership. Report on international competitiveness issues.
  – Technology watch and strategic studies: ensure a process for reporting and assessing technology breakthroughs – liaison 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.

6. Governing Board Composition and Membership

6.1 Composition of the Governing Board

The Governing Board will be composed of about 30 appropriate members, as deemed necessary to carry out its mission. They will be drawn from a range of relevant stakeholders wishing to contribute to the goals of the Platform and will include, not exclusively, the following:

  – Technology suppliers
  – Utilities or other energy companies
  – Research organisations and academic bodies
  – Technical safety organisations
  – Representatives of Regions and Member States (*eg. the chairman of the MS mirror group, once this is set up*)
  – European Commission
  – Financial institutions involved in funding of nuclear infrastructures
  – Members of civil society represented by non-governmental organisations.

The range of stakeholders will reflect the need for maximum efficiency and transparency. As far as possible, a balanced representation will be sought with regard to nationality, gender, sector (industrial/research), company and other organisation.

The Governing Board will appoint its Chairperson and two Vice- Chairpersons.

6.2 Selection of Governing Board Members

The Governing Board will comprise organisations that have endorsed the Vision Report and consist of about 10 industrial organisations (vendors and utilities), about 10 research organisations, 2 representatives from the European Technical Safety Organisations (ETSON), a representative from the Waste Agencies, representatives from European organisations for science and engineering (ENS), nuclear education (ENEN) and nuclear industry (FORATOM). High-level EC officials from DG Research and DG TREN will also participate in the Governing Board.

The chairmanship, vice-chairmanships and membership (of the 10 industrial and 10 research

organisations in the Board) will be open for rotation every two years. .

6.3 Replacement of Departing Members of the Governing Board

Should a member of the Governing Board leave during his/her mandate, the Co-Chairs from industry and research will consult and make a nomination for approval by the board.

6.4 Initial Selection to Start the Process

To ensure rapid progress, the Commission proposed the initial members of the Governing Board as well as the chair and co-chairpersons. These were taken from organisations that have endorsed the Vision Report and shown a high level of commitment in the setting up of the Technology Platform.

6.5 Declaration of Commitment

Members of the Board will be required to demonstrate a high degree of commitment to promoting research and training on nuclear fission systems as set out in the Vision Report, in accordance with the participation rules described in 6.2.

6.6 Member Profile

Members of the Governing Board will normally be of high international standing and key actors in the European nuclear fission energy community or related areas of application. Members of the Governing Board should be able to provide advice and be in a position to influence stakeholders in planning research and deployment programmes, fostering partnerships and leveraging resources.

The appointment of substitutes is not excluded but considered undesirable.

6.7 Chairperson and Vice-chairpersons

The members will select a Chairperson and two Vice-Chairpersons from their number. They will serve for a 2-year period. One of the Vice-chairs may be elected as Chair of the next Board.

6.8 Invited Participants

The Governing Board may invite other participants to its meetings, as appropriate, e.g. in cases where specialist expertise is required to deal with specific issues.

6.9 Procedures for Decision-Making

The Chairperson shall make every reasonable effort to facilitate consensus among Governing Board members. In the event the Board remains divided on an issue, the Chairperson may exceptionally request members to vote. Simple majority vote of the participants will be the rule.

6.10 Meeting Frequency

Plenary sessions of the Governing Board will normally be held at least once a year, or as determined by the Board itself.

7. Method of Working

The Governing Board will maintain a vision and direction for the safe and competitive long term operation of existing nuclear fission installations and the development of future nuclear fission technologies, especially related to fast neutron reactors with closed fuel cycles, as a means of achieving sustainable (and safe and competitive) production of electricity.

Periodic reports together with Platform deliverables, position papers, opinions, and recommendations as necessary will be communicated to the Member States through the Council Bodies, the European Nuclear Energy Forum, the European Institutions, relevant non-governmental organisations and stakeholders. Copies of these documents will be made available to the public (e.g. through the web site).

An annual executive summary will be sent to appropriate committees of the European Parliament, and other European Institutions.

7.1 Quality assurance

The Governing Board shall take responsibility for reviewing the quality and timely preparation of the annual reports and specific deliverables listed in section 4 of this annex.

In the event that contributions from working groups are not of a sufficient standard, the Governing Board will indicate in writing the items that need to be improved.

7.2 Secretariat

A Secretariat will assist the Technology Platform, including its Governing Board and Executive Committee. The Secretariat will be responsible for the organisation of meetings, the execution of the Governing Board's agenda, the preparation of minutes of the meetings, and the publication of annual reports and maintenance of an internet site.

The Secretariat will also support the organisation of the working groups, by acting as the focal point for collecting and disseminating their reports. Working groups are however expected to be self-supporting in terms of progressing work, scheduling and organising meetings and in the preparation and delivery of reports.

Annex III: Terms of Reference for the Executive Committee

1. Executive Committee Mission

To support the Governing Board in its mission (described in Annex II), to monitor and steer on a daily basis the activities of the different working groups of the Platform and to ensure that the deliverables (described in section 4 of Annex II) are delivered on time.

2. Role of the Executive Committee

In the interests of maintaining dynamics and efficiency, the Governing Board shall appoint a limited number of highly committed stakeholders, who will form an Executive Committee with a two-year mandate. The Executive Committee will have a key role in assisting the Governing Board chair in implementing the decisions of the Board, proposing initiatives to the Governing Board and developing operational mechanisms. It will undertake to liaise closely with the Secretariat and working groups, to ensure the implementation of activities recommended by the Governing Board.

3. Executive Committee Composition and Membership

3.1 Composition of the Executive Committee, Chairpersons

The Executive Committee will be composed of 5 representatives from industry, 5 representatives from the research organisations, 1 representative from the TSOs, 1 representative from ENEN and 1 representative from DG RTD. The leaders of the different Working Groups will also be members of the Executive Committee.

The Executive Committee will appoint a Chairperson and 2 Co-Chairpersons. The Chairperson of the Executive Committee, if not a full member of the Governing Board, will be invited to all meetings of the Board.

The chairmanship, co-chairmanships and membership (of the 5 industrial and 5 research organisations in the Executive Committee) will be open for rotation every two years. The leadership of the different Working Groups will also be up for renewal at the same time as the other members of the Executive Committee.

The first Executive Committee will serve for a three year mandate.

3.2 Replacement of Departing Members of the Executive Committee

Should a member of the Executive Committee leave during his/her mandate, the Co-Chairs from industry or research will consult and make a nomination for approval by the Board.

3.3 Chairperson and Co-chairpersons

The members of the Executive Committee will select a Chairperson and two Co-Chairpersons from their number. They will serve for a 2-year period, except for the Chair and Co-Chairs of the 1st Executive Committee whose mandate is for three years.

3.4 Invited Participants

The Executive Committee may invite other participants to its meetings, as appropriate, e.g. in cases where specialist expertise is required to deal with specific issues.

3.5 Procedures for Decision-Making

The Chairperson shall make every reasonable effort to facilitate consensus among Executive Committee members. In the event the Committee remains divided on an issue, the Chairperson may exceptionally request members to vote. Simple majority vote of the participants will be the rule.

3.6 Meeting Frequency

The Executive Committee will meet about 4 times a year.

4. Method of Working

The Executive Committee, acting through the Secretariat, shall also be responsible for proposing the agenda and assembling the necessary documentation for the Governing Board meetings. The Secretariat will provide the same support to the Chair of the Executive Committee for the meetings of that body.

The Executive Committee will, at its discretion, convene such meetings as needed to progress initiatives and Platform operations, and shall maintain a record of these meetings, to be circulated within two weeks to the full Governing Board for its information, approval and endorsement of any proposed actions, as appropriate.

4.1 Quality Assurance

The Executive Committee shall take responsibility for reviewing the quality and timely preparation of the annual reports and specific deliverables listed in section 4 of annex II, before submitting them to the Governing Board.

The Executive Committee will take appropriate action to ensure that the Platform deliverables are of adequate quality.

4.2 Secretariat

A secretariat will assist the Technology Platform, including its Governing Board and Executive Committee. The Secretariat will be responsible for the organisation of meetings, the execution of the Governing Board's agenda, the preparation of minutes of the meetings, and the publication of annual reports and maintenance of an internet site.

The Secretariat will also support the organisation of the working groups, by acting as the focal point for collecting and disseminating their reports. Working groups are however expected to be self-supporting in terms of progressing work, scheduling and organising meetings and in the preparation and delivery of reports.

Annex IV: Possible Scope of Activities and Structure of the Technology Platform Secretariat

The main activities of the Technology Platform Secretariat should be to:

- Provide **organisational support** to the Governing Board, Executive Committee, Working Groups and General Assembly, as required – keep electronic diaries, organise meetings, receive and distribute documents, prepare minutes etc.
- Support **Information and Communication actions** for the Technology Platform, including the maintenance of a dedicated web-site. The Secretariat will be responsible for implementing the Platform's I&C strategy, once developed.
- Provide an **IT support service** for the Technology Platform – electronic communication and document handling will be the norm for the Platform. The Secretariat must put into place an efficient information handling system to optimise the working of the various bodies.

Possible structure for the SNE-TP Secretariat

The Secretariat should be a consortium facilitating the various processes of the Technology Platform and providing its management, administration and information and communication functions.

Reflecting the private-public partnership nature of the TP, it should preferably be financed by both public and private funds. In the start up period, each participant to the Secretariat will be funded by his/her own organisation. From the end of 2008 onwards, support from the Commission is expected through a Support Action type funding instrument under FP7 Euratom programme.

The expected duration of a possible Support Action would be 2 years.

The overall management of the Secretariat could be provided by a large organisation able to deliver a strong professional management expertise, whilst at the same time satisfying the criteria of credibility and acceptability to the stakeholders of the TP. It should also possess a solid financial structure and administrative experience. The managing organisation could also provide, directly or through subcontracted work, studies and deliverables needed by the TP in some of the more general horizontal issues identified in the Vision Report.

In addition to the managing organisation, the consortium could associate one or more other organisations having technical competence in specific fields and the motivation to ensure the secretariat functions of the envisaged working groups to be created under the orientations of the Governing Board. These partners should also be able to collect, convey and digest from the Platform operations any results or deliverables of relevance to the working groups.

The consortium could also incorporate a partner to carry out the information and communication functions of the TP (alternatively this might be provided by the managing organisation or one of the other partners having the relevant background and experience in these aspects).

Abbreviations

DG RTD	Directorate General for Research
DG TREN	Directorate General for Transport and Energy
DS	Deployment Strategy
EC	European Commission
ENEN	European Nuclear Education Network, http://www.enen-assoc.org/
ENS	European Nuclear Society
ENFTP	European Nuclear Fission Technology Platform, Concerted Action of the 6th FP, which prepared the groundwork for SNF-TP
ERA	European Research Area
EU	European Union
ExC	Executive Committee
GB	Governing Board
I&C	Information and Communication
PATEROS	Concerted Action dedicated to research road-map for the fuel cycle
R&D	Research and Development
SET - P	Strategic Energy Technology Plan (COM(723)2007)
SNFTP	Sustainable Nuclear Fission Technology Platform, Coordination Action of the 6th FP, which helped set up the SNE-TP
SNE-TP	Sustainable Nuclear Energy Technology Platform
SRA	Strategic Research Agenda
TP	Technology Platform
TSO	Technical Safety Organisation