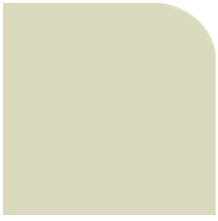




ETSON PROGRESS
REPORT

2011



FOREWORD

As safety and security are a growing concern to the public and to the international community, it is essential that the technical and scientific basis for regulatory decisions reach the highest level of quality and reliability. The development of Technical Safety Organisations (TSOs) contributes to this objective by providing regulators with a profound knowledge-based expertise in the field of nuclear and radiation safety and security.

The aim of the European Technical Safety Organisations Network (ETSON) is to promote the international exchange of safety assessments, methodologies and research in the field of nuclear safety and security. ETSON therefore contributes to the harmonisation of nuclear safety practices and initiates and carries out joint nuclear safety research programmes. The members of ETSON commit themselves to principles, values and practices that guarantee their independence of judgment in their technical work and the quality of their services.

An expanding network

European Countries and the European Union have made significant efforts over the last decades in order to build up a sustainable TSO capacity. The creation of ETSON in 2006 through a Memorandum of Understanding emphasised the contribution of this network to the harmonisation of nuclear safety assessment practices in Europe and encourages initiatives to define and implement coherent European research programmes. In February 2011, ETSON became an Association according to French law and consists of eight members and three associated member organisations.

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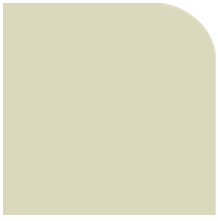
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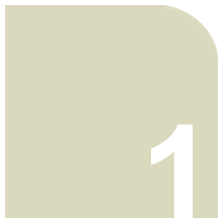
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ORGANISATIONAL MATTERS

1.1 ETSON network extension

Since the publication in the French Official Journal of the Associations on the 17th February 2011, ETSON officially became an association according to French law. The ETSON association statutes provide the general guidelines of co-operation between the partners in different activities.

During the General Assembly meeting on the fringe of the EUROS SAFE Forum 2011, the Japanese TSO JNES signed an annex to the ETSON statutes and thus joined ETSON as an associated member.

Further applications have been submitted by SEC-NRS (Russia), PSI (Switzerland) and NCBJ (Poland). JSI (Slovenia) also expressed his interest in the association.

1.2 General Assembly and Board meetings

The year 2011 was an opportunity to establish and strengthen the overall functioning of the association. Two General Assembly meetings and two board meetings were held :

- On the 5th July 2011, in Cologne (Germany);
- On the 9th November 2011, in Paris (France), in the framework of the EUROS SAFE Forum.

1.3 Accounting and fee payment

The ETSON General Assembly (EGA) decided to implement an annual fee of 2000 Euros per year for all ETSON members in order to finance the budget, starting 2012. So considered, in 2011, the association has received no contributions and had neither income nor expense for the year.

The money received from 2012 will be dedicated to the external promotion of ETSON, not for ETSON internal work.

As a consequence, the amount of the budget and the detailed incomes and expenses will be detailed in a specific annex of the next annual report.



ETSON President welcomes JNES as new ETSON Associated Member, © Antoine Devouard/IRSN

1.4 ETSON communication

The new ETSON logo has been created and provided, as well as the new ETSON letter and report templates. The letter templates are designed to be used by the Board members, who represent the association to the public.



A logo "Member of ETSON" is also available for ETSON members and can be used on their own business letter templates for international use in order to mention their ETSON membership.



A new ETSON website, separated from the EUROSAGE Forum website, is under construction. The website address will be www.ETSON.eu. The ETSON intranet will also be updated. Both projects will be presented to the General Assembly during the meeting in June 2012 in Helsinki.

1.5 Structure of ETSON Bodies

The EUROSAGE Programme Committee (EPC) agreed to the proposal of the EGA to include the EUROSAGE Working

Groups into ETSON. All EUROSAGE members are welcome to continue to participate in and to contribute to the groups.

The former managerial EUROSAGE Working Group (WG) 1 on Safety Assessment Guide (SAG) will be transformed into the Technical Board on Reactor Safety (TBRs) and act as a coordinating/steering group for the 13 ETSON Expert Groups.

It is planned to install a Technical Board on Waste management (TBWM) in the future. The EGA agreed to install the Expert Group 13 on Emergency Preparedness and Response, and to transform the former EUROSAGE WG 2 into the ETSON Expert Group on Research. The former EUROSAGE WG 3 on knowledge management will be transformed into the ETSON knowledge management group and will report directly to the ETSON Board.



ETSON ACTIVITIES

2.1 ETSON Expert Groups

All ETSON members stressed the importance of the ETSON expert groups. The ETSON General Assembly agreed on the necessity to adopt Terms of Reference for all expert groups.

Most expert groups have been meanwhile installed and first meetings have taken place. The priority has been the further development of the Technical Safety Assessment Guides (TSAG) for the ETSON Safety Assessment Guide (SAG). The ETSON General Assembly will be kept informed by the TBRS on the results of the groups work.

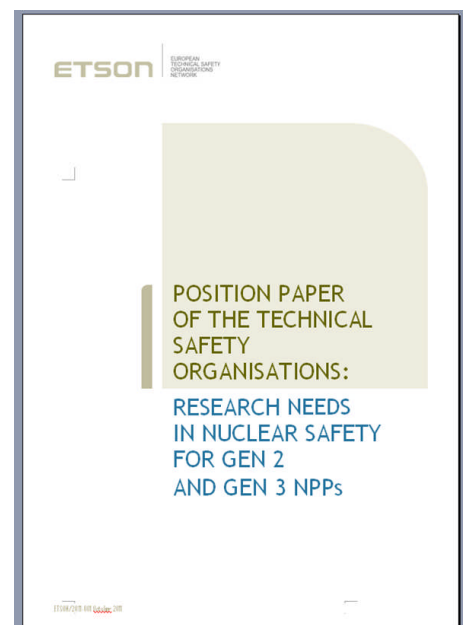
Team sites for all ETSON Expert Groups have been implemented to be used for communication and cooperation purposes.

ETSON Expert Groups exist for the following topics

EX N°	Technical issue
1.	OEF, including Incident and Precursor Analysis
2.	Mechanical Systems
3.	Electrical Systems
4.	Severe Accidents
5.	Environmental qualification
6.	Safety Fluid Systems, including auxiliary systems
7.	Human and Organizational Factors
8.	PSA
9.	Lifetime-Management
10.	Thermal Hydraulic Analyses (Transients, Accidents)
11.	Safety concepts, Defense-in-Depth
12.	Core Behavior (operational and accident conditions)
13.	Emergency Preparedness

2.2 ETSON Publications

The ETSON "Position Paper of the Technical Safety Organisations: Research needs in nuclear safety for Gen 2 and Gen 3 NPPs" (TSO Position Paper) is now printed as an ETSON report and has been sent to the Sustainable Nuclear Energy Technology Platform (SNETP), the European Commission and international ETSON's contacts, including the International Atomic Energy Agency (IAEA) and the Nuclear Energy Agency (NEA).



The TSO Paper is also available on the ETSON website.

2.3 ETSON PING

The ETSON General Assembly decided to implement the Project Initiation Group (PING) to support the establishment of ETSON members as international providers of nuclear safety, radiation protection, waste management, decommissioning and security expertise to national and international organisations. For cooperation and communication purposes a mailing list ETSON-ping@grs.de and an ETSON-PING team site have been implemented. The PING is designed as managerial group and reports to the ETSON Board.

2.4 ETSON JSP

The ETSON Junior Staff Programme (JSP) Summer Workshop 2011 took place at UJV in Rez (Czech Republic) from 27 August until 02 September 2011. The title of the workshop was "Fukushima NPP Accident and Consequences". 30 young experts from Czech Republic, Belgium, France, Slovakia, the Netherlands, Poland, Lithuania and Germany took part in the workshop.

The participants gained insight into the following fields:

- ETSON initiatives and activities
- The BWR safety concept with respect to the Fukushima Accident
- Consequences of Fukushima in the Czech Republic

- Radioactive release and dispersion simulation and emergency management
 - Communication to the public
 - Phenomenology of severe accidents
 - Stress test management
 - Safety assessment of new NPPs
- Bel V will host the ETSON JSP Summer Workshop 2012. The general topic will be Waste Management.

2.5 ETSON Workshop on Fukushima NPS accident

As a consequence of the Fukushima accident in Japan, ETSON decided to organize a dedicated workshop on the Fukushima NPS accident in order to share information and analysis and to launch future cooperation. The workshop took place at GRS in Cologne on 06 July 2011. In addition to participants from ETSON partners also participants from the Japanese TSO JNES were present. As a result it was decided to install a dedicated ETSON expert group on Emergency Preparedness.

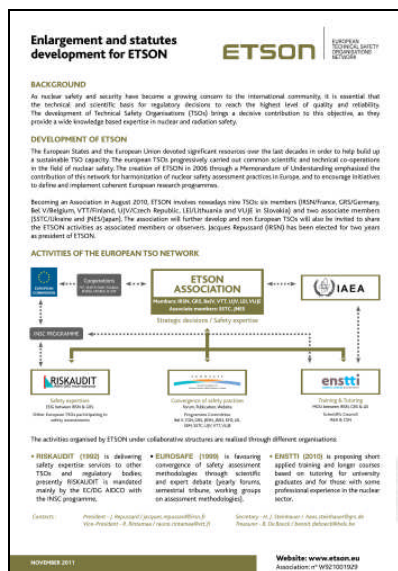
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ETSON INITIATIVES

As part of their activities, ETSON members have been involved in different initiatives in 2011.

3.1 EUROSAFE Forum

On 07 and 08 November 2011, the EUROSAFE Forum 2011 with the title "Nuclear Safety: New Challenges, Gained Experience and Public Expectations" was held in Paris with great success. ETSON members got highly involved in the preparation of the Forum.



ETSON Poster, EUROSAFE Forum 2011

If they presented a poster on ETSON Association, they also took part in the preparation of the Fukushima Seminar entitled "Experience Feedback on the Fukushima NPS Accident" with the preparation of five papers:

- Description of the accident scenarios, current status of the reactors (Reporting: LEI)
- Radioactive source term and release in the environment (Reporting: IRSN)
- Sanitary and environmental consequences (Reporting: GRS)
- Harmonisation of practices for emergency preparedness response (Reporting: IRSN)
- The evolution of the TSO programme of work after the Fukushima NPS accident (Reporting: Bel V)

The preparation of the Forum 2012 is underway. The 2012 Forum will be held in Brussels on 05 and 06 November 2012.

3.2 EUROSAFE Tribune

All ETSON members participated in the publication of two issues of the EUROSAFE Tribune in 2011:

- EUROSAFE Tribune #019 was published in July 2011. This issue assesses the presentations and themes addressed during the twelfth EUROSAFE Forum held in Cologne in November 2010. The overall theme adopted for this Forum dealt with "Innovation in Nuclear Safety and Security".
- EUROSAFE Tribune #020 was published in October 2011. This

issue focusses on "Establishing priorities for safety research" and Fukushima Daiichi Lessons.

The preparation of the EUROSAFE Tribune #021 of the Forum 2011 issue is in progress.

3.3

ENSTTI

In April 2011, the European Nuclear Safety Training and Tutoring Institute (ENSTTI) was officially registered as an EEIG (European Economic Interest Group) according to French law. The founding members were IRSN, LEI and UJV, both of them being ETSON members.

In November 2011, GRS joined ENSTTI as a new member. The documents were signed on the fringe of the EUROSAFE Forum 2011 in Paris. Bel V plans to join ENSTTI, a specific date has yet to be announced.

In 2011, the ENSTTI induction course was successfully carried out at GRS, Garching, from 27 June to 22 July 2011 with 15 participants. No funding was achieved from IAEA or the European Union.



ETSON EXTERNAL RELATIONS

4.1 SNETP

The European Technical Safety Organisations (TSOs) support the Sustainable Nuclear Energy Technology Platform (SNETP) with the objective to promote safety as a fundamental issue in any research and development on existing and future reactors.

TSOs are a minority among the more than 120 SNETP members, but they are well represented in the governing bodies. In 2011, the Governing Board (GB) of SNETP has been enlarged from 30 to 31 members to accommodate two TSO representatives from ETSON members. In 2011, the ETSON members participation in the Technical Working Groups (TWG) of SNETP have also been increased, in particular though the TWG on Generation-II/III Reactor Research and Development (Gen-II/III).

4.2 European Commission

ETSON President presented to the Directorate-General (DG) Energy of the European Commission ETSON association, as well as ETSON members contribution to the Stress tests conducted at national levels. DG Energy positively underlined the work of TSOs on the nuclear safety issues and supported ETSON involvement.

4.3 IAEA

ETSON was invited to the IAEA General Conference (19-23 September 2011) for the first time with the official status of an observer. ETSON will be given permanent observer status at the IAEA General Conference, which will contribute to its visibility and influence.

ETSON presented and promoted its activities on the fringe of the IAEA TSO General Conference on the occasion of the implementation and launching of the IAEA TSO Forum.

ETSON

EUROPEAN
TECHNICAL SAFETY
ORGANISATIONS
NETWORK

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