

ACTIVITIES OF ETSON

ETSON WORKSHOPS

The partners organized the following workshops

- 2012, November – ETSON Workshop on EU Stress Tests
- 2011, June - ETSON Workshop on the Fukushima NPS accident where they had a technical exchange and agreed on closer co-operation e.g. in the field of crisis management and emergency preparedness.

JUNIOR STAFF PROGRAMME

The ETSON Junior Staff Programme (EJSP) brings together young experts from all ETSON members and associates. The EJSP aims at improving the long-term partnership of the member TSOs, establish a network for cooperation between young expert from different countries, and to encourage intercultural interaction. The main yearly events within this framework are the “ETSON Junior Staff Summer Workshops” successfully held in

- 2012 in Leuven, Belgium
- Radioactive Waste Management
- 2011 in Rez, Czech Republic - Fukushima NPP Accident and Consequences
- 2010 in Garching, Germany
- The future challenges for TSOs
- 2009 in Cadarache, France - Methodologies and Technical Aspects in Nuclear Safety Assessment
- 2008 in Garching, Germany
- Nuclear Reactor Safety Assessment

IAEA TSO CONFERENCES

Together with various IAEA departments ETSON partners initiated the first IAEA conferences on TSOs.

- 2010: International Conference on Challenges Faced by Technical and Scientific Support Organisations (TSO) in Enhancing Nuclear Safety and Security – Tokyo, Japan
- 2007: International Conference on the Challenges faced by Technical and Scientific Support Organisations in Enhancing Nuclear Safety – Aix-en-Provence, France.

THE CREATION OF ETSON

Since 2000 the TSOs Bel V (former AVN), GRS and IRSN (former IPSN) have been involved in the development of the EUROSAFE Approach (www.eurosafe-forum.org) and have thus been working together with the regulatory authorities of Spain, Sweden and the UK in the EUROSAFE Programme Committee (EPC).



Fig.1

In 2006, the TSOs involved in the EUROSAFE Approach decided to go beyond the existing approach in a more officially binding way. This was to be done through a contractual agreement, to which, however, the representatives of the Regular Authorities in the EPC could not take part because the envisioned activities were to concern mainly TSO core activities. In line with this orientation, Bel V, GRS and IRSN signed a Memorandum of Understanding (MoU) on the creation of ETSON at the end of May 2006.

THE OBJECTIVES

In line with the intention to share knowledge, tools and experiences and to harmonize safety practices the ETSON partners have formulated the following objectives for their co-operation:

- form a suitable forum for voluntary exchanges on analyses and R&D in the field of nuclear safety by sharing experiences and exchanging technical and scientific opinions,
- contribute to fostering the convergence of technical nuclear safety practices within the European Union and beyond,
- further, the planning of nuclear safety research programmes and facilitate their implementation,
- facilitate the application of the European directive on nuclear safety,
- work together in safety assessment and research projects funded separately and organized by the respective members in dedicated consortia.

ACTIVITIES OF ETSON

(cont'd)

ETSON partners were involved in the scientific and organizational preparation of the conferences, speeches and discussions as well as in the evaluation and implementation of its recommendations

IAEA TSO FORUM

The IAEA TSO conference in Japan concluded that the IAEA should foster the establishment of a forum dedicated to nuclear safety infrastructure development issues related to scientific and technical support. The recommendation led to the founding of the TSO Forum (TSOF) in January 2012. The forum is part of the IAEA Global Nuclear Safety and Security Network (GNSSN) which is open to TSOs of all IAEA member states. The objective of the TSOF is to encourage an open dialogue and the sharing of scientific and technical information among TSOs worldwide. It promotes co-ordination and collaboration among the TSOF Member States to contribute to the worldwide harmonization of practices.

ETSON was involved in the preparatory work for the establishment of the TSOF, provided the first president and committed itself to contribute intensively to further development and collaboration.

EUROPEAN SAFETY RESEARCH

ETSON is engaged in the Sustainable Nuclear Energy Technology Platform (SNETP) and represents the TSOs in the platform. In consequence of the ETSON contributions, safety questions are now dealt with in a manner adequate to their importance. ETSON members drafted a position paper aimed at presenting their views on safety issues associated with the different generations of nuclear power plants and defined relevant priorities for future research programmes through an input to the SNETP Strategic Research Agenda (SRA) dealing with safety issues. TSOs are well represented in the governing bodies. In the Governing Board (GB) there are two TSO representatives.

THE TRANSITION TO A LEGAL ENTITY

By signature of the statutes of the "ETSON Association" on 23 August 2010, the ETSON partners prepared the transition to a legal entity. By its registration in Paris, ETSON became an "Association" according to French law with registered office in Châtillon near Paris. In accordance with the statutes, the governing bodies of the Association are the General Assembly, where all members are represented, and an elected Board consisting of the president, vice president, secretary and treasurer.

THE MEMBERSHIP

Membership is by invitation and application by the current members and is restricted to organizations which perform safety assessments in support of their national nuclear safety authorities or in that role, with a global regulatory vision, on a regular basis and with a broad scope. Membership is open to organizations from the European Union and from the European Free Trade Association (e.g. Switzerland, Norway) provided that they fulfill the requirements for membership defined by the ETSON partners and laid down in their Statutes. Other organizations that are not part of the geographical zone mentioned above may apply to act as associate members. All the applicants have to present an application file with a justification of their conformity with the characteristics of a TSO defined in the ETSON Statute.

From the beginning, the network intended to expand to new members. Since 2006, VTT (FIN), ÚJV (CZE) and LEI (LTU) have joined ETSON as members and SSTC (UKR) as an associated member when ETSON went ahead to become a legal entity in 2010.

Since then, the membership has extended to VUJE (SVK) and PSI (CHI), and the associated membership has been granted to JNES (JPN) and SEC NRS (RUS). Further TSOs have applied for a membership.

THE FIELDS OF ACTIVITIES

The activities of ETSON since its founding concentrated on networking and exchange between the partners, networking and exchange with technical and scientific organisations as well as authorities, and the contribution to the activities of international organisations in the nuclear field. Examples are given in the box.

ETSON GROUPS:

ETSON activities are prepared in groups working on different levels in the hierarchy. Reporting directly to the Board are the groups dealing with

- Research,
- Knowledge Management ,
- Project Initiation.

On the same level acts the

- Technical Board on Reactor Safety

which coordinates thirteen Expert Groups on different technical issues (see figure 2). The Expert Groups are the technical and scientific base of ETSON, bringing together leading experts from all ETSON members and thereby contributing to the harmonization of safety standards and to the strengthening of nuclear safety practices in Europe.

ACTIVITIES OF ETSON (cont'd)

NUCLEAR SAFETY ASSESSMENT

In 2004 a common "Safety Assessment Guide" (SAG) was published (by AVN (now Bel V), GRS and IRSN) which sets down harmonized principles to ensure that safety assessments by the TSOs are done according to the same lines and can therefore be used with the same confidence. The present ETSON member organizations issued an updated version of this SAG in 2012. The SAG will be complemented by "Technical Safety Assessment Guides" (TSAGs) on issues like Incidents and precursor analysis, Severe accidents, Safety systems (fluid and auxiliary systems) and Human and Organizational Factors (and additional topics later on). The TSAGs provide guidance and offer helping questions and statements for reviewing. They are not a compilation of requirements. They are living documents which will be updated periodically.

THE ORGANISATIONAL STRUCTURE OF ETSON is shown in the chart below:

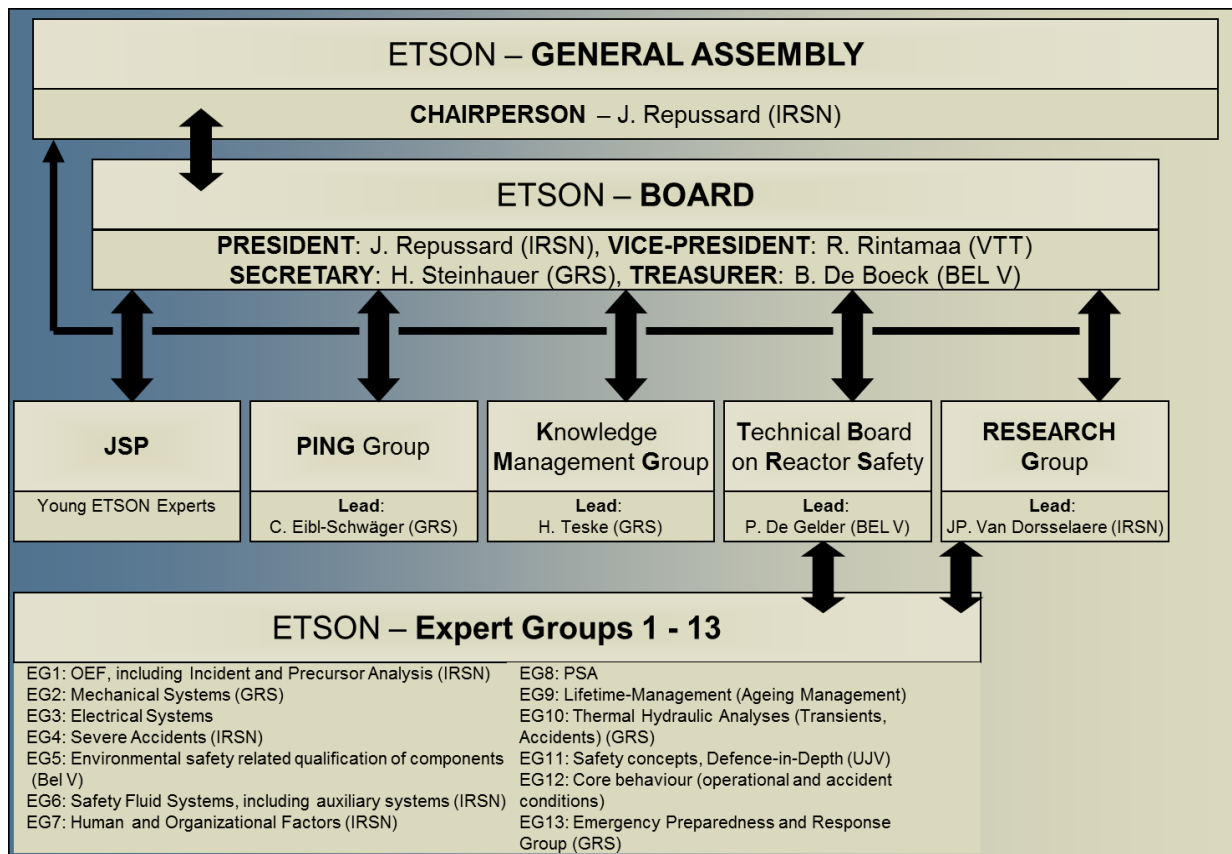


Fig.2

ETSON MEMBERS:

BELGIUM– Bel V
Walcourtstraat 148, B-1070 BRUSSELS, BELGIQUE
www.belv.be

CZECH REPUBLIC - UJV
Nuclear Research Institute REZ plc
Husinec - Rez 130, 250 68 REZ, CZECH REPUBLIC
www.nri.cz/web/ujv

FINLAND - VTT Business solutions
Vuorimiehentie 5, P.O. Box 1000, FI – 02044 VTT, FINLAND
www.vtt.fi

FRANCE – IRSN
Institut de Radioprotection et de Sûreté Nucléaire
BP 17, 92 262 Fontenay-aux-Roses Cedex, FRANCE
www.irsn.fr

GERMANY - GRS
Gesellschaft für Anlagen- und Reaktorsicherheit mbH
Schwertnergasse 1, 50455 Köln, GERMANY
www.grs.de

LITHUANIA - LEI
Lithuanian Energy Institute
Breslaujos 3, LT-44403 KAUNAS, LITUANIA
www.lei.lt

SLOVAKIA – VUJE
VUJE TRNAVA Inc.
Okružna 5, 91864 TRNAVA, SLOVAKIA
www.vuje.sk

SWITZERLAND – PSI
Paul Scherrer Institut
CH-5232 Villigen PSI, Switzerland
www.psi.ch

ETSON ASSOCIATED MEMBERS:

JAPAN – JNES
Japan Nuclear Energy Safety Organization
Tokyu Reit Toranomon Building
17-1. 3-chome Toranomon, Minato-ku, Tokyo 105-0001, JAPAN
www.jnes.go.jp

RUSSIA - SEC NRS
Scientific and Engineering Center for Nuclear and Radiation Safety
ul. Malaya Krasnoselskaya 2/8 - building 5 – Moscou – 107140 - RUSSIA
www.secncrs.ru

UKRAINE- SSTC
State Scientific and Technical Center
35-37 Radhospna Str., 03142 KIEV, UKRAINE
www.sstc.kiev.ua

GRS

Forschungszentrum, Boltzmannstr. 14,
85748 Garching, Germany

ETSON

Association n° W921001929
www.eurosafe-forum.org/etson
etson@grs.de

ETSON

EUROPEAN
TECHNICAL SAFETY
ORGANISATIONS
NETWORK