ETSON Strategy

Version of September 2017

I. EXECUTIVE SUMMARY

VISION

Our aim is to be the sustainable and leading European expert association in the field of nuclear safety and security.

MISSION

With the agreement of the respective national Regulatory Bodies, ETSON is supporting the EC and IAEA, collaborates with other international organizations and associations (e.g. FORO) and contributes to enhancing and harmonizing safety assessment practices and regulations in Europe and beyond through technical expertise, safety assessment and research.

STRATEGY

In order to bundle this sustainable commitment and to achieve strategic alignment, the ETSON members focus on the following objectives and actions:

- Recognition at the international level for greater visibility and stronger impact
- Enlarge the membership and partnership for all European countries
- Develop ETSON production for enduring utility
- Specific programme / budget for ETSON with priority on the technical nuclear safety expertise

MEMBERS

BELGIUM – Bel V (www.belv.be)
CZECH REPUBLIC – CV REZ (UJV) (www.cvrez.cz)
FINLAND – VTT Technical Research Centre of Finland (www.vtt.fi)
FRANCE – IRSN (www.irsn.fr)
GERMANY – GRS (www.grs.de)
HUNGARY – MTA EK (www.energia.mta.hu)
ITALY – ENEA (www.enea.it)
LITHUANIA – LEI (www.lei.lt)
ROMANIA – RATEN-ICN (www.nuclear.ro)
SLOVAKIA – VUJE (www.vuje.sk)
SLOVENIA – JSI (www.ijs.si)
SWITZERLAND – PSI (www.psi.ch)
UNITED KINGDOM – AMEC (www.amecfw.com)

ASSOCIATED MEMBERS

JAPAN – NRA (www.nsr.go.jp)
UKRAINE – SSTC (www.sstc.kiev.ua)
RUSSIA – SEC NRS (www.secnrs.ru)

1. General context

ETSON was founded in 2006 by three national TSOs. In the meantime, ETSON has expanded to currently 16 members, mainly from the European Union, supporting their national Regulatory Body. Considering this development, the objectives of ETSON - as laid down in the contract “Creation of the European TSO Network (ETSON) Association” - need to be discussed and, as the case may be, reconfirmed or amended.

2. Aims for a new alignment of ETSON - European added value

Currently ETSON can be considered as a European TSO networking group with 16 member organisations. The documents produced by ETSON’s technical groups, known as technical safety assessment guides, are earning ever-greater recognition and wider use. The expertise and the contacts consolidated within ETSON contain a very high potential to achieve the best technical results in the interest of safety and support harmonisation. Broadened contribution of ETSON and its members to nuclear safety in Europe would facilitate much better use of ETSON’s potentials, help significantly to achieve the network’s scientific and technical goals and improve visibility.

2.1. Spell out vision statement

From this perspective, the vision of ETSON can be stated as follows.

Firstly, ETSON contributes to enhancing and harmonizing safety assessment practices and regulations in Europe through technical expertise, safety assessment and research. More specifically, ETSON wants to:

- Be the major cooperative workplace for technical safety issues in Europe;
- Be a source of technical reflections on safety issues;
- Produce R&D results and positions that foster the enhancement and harmonization of safety practices in Europe.

Secondly, individually and collectively, ETSON members represent the major source of technical expertise in safety assessment. This expertise may be more widely used as the basis for strategic and operative decisions at the EU level, in accordance with the Article 3 of the Statutes of ETSON: "*In order to reach its objectives, the Association exercises activities such as: […] develop […] its promotion to the Member States of the European Union and the European Community*."

In order to achieve these goals, ETSON produced a roadmap with technical objectives and actions. The technical part of the road map aligns along two major lines:

- Safety assessment;
- Research and development.

The roadmap includes another section specifying the way ETSON plans to increase both its visibility and its contribution to the decision making at the EU level.

2.2. Recognition at the international level for greater visibility and stronger impact of ETSON

ETSON strives for much stronger impact at the EU level. If needed, ETSON should develop from a pure European TSO network to a European Association widely respected and influential. This would result in stronger, more sustainable and harmonised support to national competent authorities/regulators by the recognised TSOs within ETSON and further promote exchange on recent scientific findings. In the end, it would consequently have a

positive effect on nuclear safety and thus on the objective to preserve and protect the environment and human health.

ETSON also needs to be officially recognized by the IAEA, which already recognizes the role of TSOs (TSO Forum, TECDOC on TSOs). An agreement between the IAEA and ETSON has been signed in September during the IAEA General Conference, which allows ETSON to participate as an associated organisation to the IAEA works and deliverables. This could take several forms, including through the work of the TSO Forum and IAEA review missions. In particular, the creation of a working group to draft the guides and procedures on how to conduct and what to review in the course of IAEA missions on the assessment of technical and scientific capabilities in embarking countries could be considered, and ETSON could support the IAEA in conducting such missions.

At the European level, the next step is to be recognised officially by the EC, which could be achieved after the official recognition from the IAEA, in a two-steps approach.

Thus, the following actions could be developed to enhance the ETSON visibility and influence:

- Put in place a relationship with the EC with a mandate (including the JRC), as well as with the IAEA e.g. on safety assessment harmonization
- Promote network approaches: TSOs (ETSON), authorities (WENRA/ENSREG), industry (WANO);
- Enhance the relations with the targeted partners to expand ETSON influence, disseminate views, conduct joint activities;
    - Targeted partners: EC, IAEA, NEA, FORO, WENRA, industry associations (FORATOM, CORDEL, WNA, …), important stakeholders (US NRC, …);
- Improve the coordination between TSOs proposal to any EC call for tender ;
- Collaboration with WENRA, based on mutual improvement through the discussions between common/complementary ETSON and WENRA working groups;
- A real communication strategy should be put in place to remedy ETSON's current lack of visibility with actions like :
    - Update and enrich the website by publishing articles on ETSON activities, projects and achievements, ETSON's position on it, etc. This would

demonstrate the added value of ETSON to the public and above all to the European Institutions.

- Daily actions for ETSON members can also contribute to enhancing visibility (communication using letters with ETSON logo, ETSON link on each TSO internet/intranet portal, translation of the TSAGs in the TSOs native language, reference to the TSAGs when used for safety reviews, presenting ETSON papers in international events, etc).

2.3. Membership and partnerships

In order to cover all European countries of the European Union and beyond, one of the first priorities is to expand membership to include all European TSOs - missing countries: Poland, Romania, Sweden, and Spain.

Some authorities have internal technical capability equivalent to that of a TSO. To federate nuclear safety assessment practices, ETSON needs to open the door to such participants in ETSON's activities (e.g. technical Expert Groups, EUROSAFE membership).

The JRC, as the scientific and technical wing of the EC, has a specific division dealing with safety and security. A specific partnership status for JRC should be proposed to involve the JRC in ETSON activities (Junior Staff Program, ETSON Research Group, technical expert groups, etc.). This action should make ETSON more visible to the EC as an expert player, in the EU and beyond. It would also enable ETSON to take advantage of JRC's infrastructure, as well as its training and tutoring programmes. At last, ideally recognizing this synergy effect, ETSON could be partially supported by the JRC.

Because each TSO is different and because the inclusion of non-European TSOs could modify the ETSON European vision and change the very nature of the association, the extension of ETSON beyond Europe should be examined with caution, on a case by case basis, avoiding any general rules. It should aim at strengthening the participation in technical activities while retaining the European focus of ETSON.

It is noted that the strength and sustainability of ETSON depends to a large extent on the strength and sustainability of individual ETSON members. ETSON therefore also strives to improve the strength and sustainability of the individual members.

Therefore, to comply with these new objectives, an update of the Statutes may be considered.

2.4. Develop ETSON production for enduring benefit

The benefit and influence of ETSON can only be based on the intense and sustained production of relevant outcomes. This production should be guided by a well-defined and explicit scientific strategy, specifying the priority areas for ETSON technical work. In addition, sustainability is an essential objective for a network like ETSON. Several options are proposed hereafter.

Technical activities and production should be strengthened as follows to develop an inclusive field of activities:

- Hold regular seminars – at least one every year, with a target of at least two;
- Produce technical documents: guides, conclusions of seminars, which could be in such areas as :
    - Defence in depth and the various lines of defence – post-Fukushima concepts,
    - Post-Fukushima issues, e.g. external hazards and levels,
    - Codes and standards,
    - Impacts and acceptability of non-conformities in operation,
    - Decommissioning and rehabilitation – use of clearance concepts in various countries and situations
        - Waste management;
        - Radioprotection, radioactive sources.
- Develop a specific scientific/technical strategy for production of ETSON guides.

In addition to purely scientific/technical subjects, in order to ensure its relevance to policy-level stakeholders, primary the EC, ETSON should deal with general technical issues having policy implications and with non-technical issues relevant to TSOs, e.g.:

- Implementation of the Nuclear Safety Directive (art. 8);
- Preventing conflicts of interest for TSOs serving both regulator and industry (see EU Com doc on the implementation of the NSD);

- As a beginning, it could be valuable to map precisely the differences in national frameworks and the responsibilities of ETSON members.

The Junior Staff Program (JSP) is also an excellent opportunity to guarantee ETSON sustainability. The young ETSON researchers participating in the JSP represent the future of nuclear safety activities in Europe. It is important to promote this action and to encourage the networking between these young researchers, and reinforcing contacts between them should be a major objective.

Finally, to implement effectively the long term ETSON vision, it is necessary to strengthen the management of ETSON activities in order to improve the operation of the association. In this perspective, ETSON members have to:

- Update the statutes if necessary in order to develop and link the Terms of Reference for the working groups with a set of reference documents.
- Prepare the ETSON strategy and road map according to the actions previously proposed. This should be approved by the GA, followed by Board, and updated regularly;
- For the secretary, to follow on a regular basis the advancement of actions in the road map;
- Manage the actions in the road map like projects: action officer, follow-up, reporting to the Board.

2.5. Specific programme linked to ETSON activities

The expected lifespan of nuclear power plants, including commissioning and decommissioning, extends well over a century. Disposal of radioactive waste from power and non-power applications may extend well beyond a millennium. Safe, competitive and sustainable use and development of nuclear technologies is therefore based on the long-term commitment of all stakeholders to vigorously participate in the quest for new and management of existing knowledge and expertise. Securing further and sustainable developments in education, training, skills, competences, attitudes and cultures of personnel

involved in industry, academia and regulatory organizations, is therefore at the core of the effort to maintain and further improve the safety of nuclear installations.

Assessment activities of TSOs are essential for the safety of nuclear installations. European TSOs, by supporting European regulators, contribute decisively to the creation and supervision of nuclear safety. All activities of European TSOs with relation to nuclear installations should only be led by considerations of nuclear and radiation safety, as well as security and safeguards. Other considerations, in particular short term and predominantly profit related market considerations might not be fully consistent with the long term commitment of all nuclear stakeholders and should therefore not have any influence on assessment activities.

Independent of ETSON's status, each member preserves the explicit and unchanged mandate to support its national Regulatory Body primarily, and to support the EC in all TSO relevant programmes.