



The concept of TSO

1. Introduction

The concept of TSO (Technical Safety Organisation) has been used in Europe for many years. However a broadly accepted definition has never been available. Even today the TSO acronym is used by different people to cover different types of organisations. Now that a European TSO Network has been created, a clear definition of the concept is needed.

It is the purpose of this document to define the concept of TSO in Europe. This is done by proposing required characteristics of an organisation to be qualified as TSO.

It is important to use the concept of Technical **Safety** Organisation, to make the difference with other organisations which give support but not with a safety dedicated approach and regulatory vision.

2. Required characteristics

- A TSO is a public or a private non profit organisation, which has no stockholders.
- A TSO performs safety assessments with a global regulatory vision, on a regular basis and with a broad scope.
- A TSO delivers services supporting its national nuclear regulatory authorities, in the field of nuclear and radiation safety.
- A TSO develops and maintains a high level of competence in nuclear and radiation safety (knowledge, expertise, long standing experience, global overview, ethics, references).
- A TSO has a value charter and makes sure it is implemented at all levels in the organisation. The charter promotes values such as: honesty, impartiality, proactivity and initiative, consistency in the safety approach, respect for all stakeholders.
- A TSO is an independent organisation. This means that it is able to form and express its technical judgment independently from external interest.
- A TSO maintains an adequate training and knowledge management programme for its staff.
- A TSO maintains a R&D programme allowing the development of new knowledge and techniques in support of its missions, and an independence of judgement from licensees.
- Code of ethics: if a TSO delivers services to a domestic or foreign licensee, it does so in full transparency with respect to the licensee's nuclear safety authority, and is able to demonstrate that conflicts of interest are avoided.

3. Remarks

It follows from the definition that there should only be one TSO at most in each European country. Indeed it seems difficult that several TSOs in a country are able to perform safety assessments with a global regulatory vision, on a regular basis and with a broad scope.

It should be noted that TSO-type activities (like safety reviews and assessments) are in some countries carried out by the nuclear safety authority itself. In that case the authority may have an "internal" TSO-type activity but this internal organisation may not be labelled a TSO.

In such countries however, for the purpose of the harmonisation progress in Europe, the nuclear safety authority may be invited to participate in some activities jointly initiated by TSOs.

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