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## NUCLEAR ENGINEERING VOCABULARY

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### PRESENTATION

The members of the *CSTNIN – the Special Commission for Nuclear Engineering Terminology and Neology* - have just produced a Nuclear Engineering Vocabulary, published by *SFEN*.

### THE GLOSSARY

A 120-page document which, to date, includes 400 nuclear engineering terms or expressions.

For each term or expression, this Glossary gives:

- the primary and secondary subject field in which it is applied,
- a possible abbreviation
- its definition,
- a synonym, if appropriate,
- any relevant comments,
- any associated word(s),
- the English equivalent
- its status on the date of publication of the Glossary.

The status comprises several elements: publication in the *Journal Officiel*, the list to which the term belongs, the working group concerned, the position of the entities authorised to pass judgement in the matter, the most recent date of examination and any additional details.

This Glossary also includes an English-French index; the texts published in the Journal Officiel relative to the *CSTNIN*; the successive lists of the terms studied; the primary and secondary subject fields in which these terms are applied.

## THE AUTHORS

The members of the *CSTNIN* who have contributed to this work – qualified officers designated by ministerial decree or their successors together with invited experts - represent the following Institutions, Organisations or Companies:

- ANDRA, the French National Agency for Radioactive Waste Management,
- ASPEA, the Swiss Atomic Energy Association,
- BELGONUCLEAIRE,
- CEA, the French Atomic Energy Commission,
- COGEMA, the nuclear materials group,
- the Canadian Terminology and Standardisation Directorate,
- EDF, the French electricity utility,
- FRAMATOME,
- IPSN, the French Institute of Nuclear Protection and Safety,
- RGN, the Revue Générale Nucléaire (the general nuclear review),
- SFEN, the French Society for Nuclear Energy,
- SGN, new technologies company,
- TRACTEBEL.

The compilation and adaptation work required to produce this Glossary, based on the plenary sessions of the *CSTNIN* and meetings of the Working Groups, was led by the members of the Groups.

## THE NUCLEAR ENGINEERING COMMISSION

The *CSTNIN* was set up by ministerial decree of May 23<sup>rd</sup> 1997. This Special Commission took over the work carried out by the ministerial commission on nuclear engineering terminology which had been in existence since 1985.

Its goals are:

- to draw up a list of cases in which it seems desirable to add to existing French vocabulary,
- to collect, analyse and propose terms and expressions required,
- to harmonise the terms, expressions and definitions proposed with those proposed by other organisations dealing with terminology, neology and standardisation,
- to contribute to the distribution of lists of terms, expressions and definitions among users.

This special Commission was set up to generate proposals and, as such, is positioned upstream of the approval process for new terms and expressions intended to enrich the French language.

The *CSTNIN* is chaired by a qualified person, former Director of one French Nuclear Research Center.

Coordination of the *CSTNIN* 's work and its relations with the decision-making authorities is performed by a senior official for terminology and neology at the Ministry of the Economy, Finance and Industry.

The Special Commission brings together qualified officers and fully-fledged members. The former include over twenty experts, most of whom come from French companies (*ANDRA, CEA, COGEMA, EDF, FRAMATOME, SFEN, SGN, etc.*) or French-speaking organisations (Belgian, Canadian, Swiss, etc.) involved in activities relating to nuclear science and technology. The fully-fledged members represent the official organisations: the *Académie Française*, the French Academy of Sciences, the General Delegation for the French Language and government services, together with public and private associations.

The Commission's secretariat is managed by the Department of Information Technologies of the French Atomic Energy Commission.

In order to achieve its goals, the Commission for Nuclear Engineering set up five working groups, each dealing with a separate field:

- 1 - Reactor Physics and Technology,
- 2 - Safety, Quality Assurance and Radiation Monitoring,
- 3 - Fuel cycle,
- 4 - Reactor operation,
- 5 - Cleanup and Dismantling.

## THE DECISION-MAKING PROCESS

For every term or expression, it was up to each entity to reach its own decision. This involved:

- **the Working Groups:** For each term, taken from one of the lists and attributed to one of the *CSTNIN* Working Groups, they were required to:
  - study all the available glossaries (Le Grand Dictionnaire Terminologique, Termium – the Government of Canada Translation Bureau -, Eurodicautom, the electronic Petit Robert, TLF - Trésor de la Langue Française -, *IAEA Safety Glossary*, etc.),
  - study the French and international standards (AFNOR, ISO, etc.),
  - consult external organisations (DGLF (2), LSNT (3), the Service du Dictionnaire de l'Académie – the Dictionary Service of the *Académie Française*, etc.)

After the members had examined and studied all the sources, the term was either defined and proposed to the *CSTNIN*, or retained for further examination, or rejected

- **the *CSTNIN*:** the Special Commission would then adopt, retain or reject the proposed term at its plenary session. Any term adopted would then be submitted to the COGETERM.
- **the COGETERM:** the *General Commission for French Terminology and Neology* (4) would then adopt, return or reject the terms submitted. All the terms approved were then sent on to the *Académie Française*.

- **The Académie Française:** For each term, the Académie could give its approval, with the possibility of stating any reservations, or its disapproval. Every term approved would then be brought to the attention of the Minister.
- **the Minister of the Economy, Finance and Industry:** The Minister may give reasons for opposing the publication of certain terms.

**Publication in the *Journal Officiel*** is the final step in the process. The publication is a list of the terms, expressions and definitions adopted, in accordance with Decree no. 96-602 of July 3<sup>rd</sup> 1996 applying to the enrichment of the French language. Following publication, the terms and expressions are applied by the Administrative Authorities and Government Public Institutions.

## THE LIST OF TERMS

Since the first list appeared in the *Journal Officiel* on December 27<sup>th</sup>, 1989, further to the decree of 30/11/1989, there have been five lists of terms, namely the following:

- **List 1:** Terms adopted by the CSTNIN, with modifications to certain terms in the Decree of November 30<sup>th</sup> 1989 and submitted to the COGETERM on June 26<sup>th</sup>, 1998. This modified list appeared in the *Journal Officiel* on 22/09/2000.
- **List 2:** Terms approved by the COGETERM on April 14<sup>th</sup>, 1999, the result of work carried out by the CMTIN, the commission which pre-dates the CSTNIN. The Académie Française approved the majority of these terms on October 14<sup>th</sup>, 1999 and they were published in the *Journal Officiel* on August 3<sup>rd</sup>, 2000.
- **List 3:** Terms adopted by the CSTNIN, submitted to the COGETERM on March 14<sup>th</sup>, 2000.
- **List 4:** Terms initially appearing in list 3 and which the CSTNIN decided to study further.
- **List 5:** a list currently being drawn up which will take into account new terms used in the field of nuclear engineering (hybrid and fusion reactors, etc.).

## THE NEXT STEPS

The publication of this Glossary is the culmination of several years' work carried out by the Special Commission on Nuclear Engineering. Many terms are still awaiting definition, some require further examination because they are, for example, already in use in official documents and a new definition would be of no small consequence; others are appearing with the development of new reactors; finally, some terms require lengthy discussion before agreement can be reached between the twelve French-speaking nuclear companies represented in the Commission.

This Glossary also meets the desire expressed by all the key players involved in the French and international energy industry. An English version responding to the needs of international organisations, is currently being assessed.

The version, published in September 2000, is not, therefore, the last and this goes to prove that the nuclear engineering industry considers the future of this source of energy with confidence.

## REFERENCES

- (1) Ministry of Industry.
- (2) The Délégation Générale à la Langue Française is under the auspices of the French Ministry of Culture.
- (3) Langues de Spécialité Néologie et Terminologie (Languages for special purposes, neology and terminology), from the former INALF (the National Institute for the French Language), part of the CNRS (National Scientific Research Centre), under the authority of the Ministry of Research.
- (4) Set up by the French Prime Minister, members are appointed by the Ministry of Culture.