**Interaction between SARNET and CEG-SAM activities[[1]](#footnote-1)**

**Update 1[[2]](#footnote-2)**

**Background**

* The Network of Excellence for a Sustainable Integration of European Research on Severe Accident Phenomenology and Management (SARNET) and the Contact Expert Group on Severe Accident Management (CEG-SAM) are two independent organisations, which cover the same technical field: research on nuclear reactor severe accidents.
* The main objectives of CEG-SAM are:
  + In compliance with the ISTC and STCU objectives:
    - To monitor on-going projects,
    - To review and assess final reports checking specific project objectives;
    - To stir participants to greater information exchange, including on-site visits;
    - To evaluate and prioritise project proposals,
  + To make further recommendations to the funding Party;
  + To foster exchange of information between ISTC and STCU projects and other related projects in the same field, e.g. Euratom Framework Programmes, in order to facilitate cross fertilisation among them, to support international co-operation and dissemination, and to get mutual benefit from experience of projects implementation as well;
  + To check real progress avoiding duplication, identifying potential gaps or new projects and promoting proposals that would contribute to improve the *Severe Accident Management* knowledge and its applicability; and
  + To promote possibilities of joint industrial applications of R&D results, as well as of future joint research in the frame of the ISTC Agreement, in particular through the ISTC partnering scheme. In this context, an exchange of information on programs and projects carried out by the CEG-SAM members will be sought.
* Major tasks of SARNET (in the same technical field) are:
  + The definition of priorities in terms of R&D,
  + The evaluation of ongoing projects and the elaboration of recommendations to properly and efficiently address open issues;
  + The common analysis of experimental results and development of models;
  + The dissemination of acquired knowledge in particular thanks to the ASTEC code that capitalizes this knowledge.
* All EU experts of the CEG-SAM belong to organizations/institutions members of SARNET;
* SARNET activities are co-funded by the EC and most of ISTC and STCU projects (monitored by CEG-SAM) are financed by EC.

**Consequences**

There should be a strong interaction between CEG-SAM and SARNET activities:

* To guarantee the coherence of positions and conclusions on R&D needs of both entities;
* To be sure that national R&D projects elaborated in Europe (or at least in R&D organisations participating to SARNET) will take properly into account the capabilities and proposals of the Russian research organisations;
* To offer the EU members of the CEG-SAM the logistic support of SARNET (financing, Advanced Communication Tool,...);
* To widen the dissemination (through SARNET activities of interpretation, modelling, code and data base development) of ISTC and STCU results within the nuclear European community.

The practical organization of this interaction will have to take into account the fact that the Kazhak, Russian and Ukrainian partners are not partners of SARNET, and that non-EU countries (which co-fund ISTC and STCU projects dealing with severe accident management) can participate to CEG-SAM activities and have access to information arising from these co-funded projects.

**Proposal**

The following interaction between the two structures is proposed:

* The results of SARNET activities, related to the priority definition in terms of R&D needs, will be periodically presented to the CEG-SAM members Conversely main updates in ISTC projects relevant to “a” work package could be presented to members at periodic meetings.
* The ISTC or STCU Secretariat transmits the ISTC or STCU proposals related to SAM and project reports to the chairman, co-chairman and secretary of the CEG-SAM. The CEG-SAM secretary distributes these documents to the members. The ISTC or STCU project proposals are transmitted by the CEG-SAM secretary to SARNET Work-Package Leader in charge of the concerned field:
  + for projects related to core degradation and corium behaviour;
  + for projects related to fission products behaviour;
  + for containment loading problems,
  + for code development.

The concerned SARNET Work-Package Leader will then organise a consultation among the SARNET members and prepare a technical advice for CEG-SAM. The CEG-SAM will consider the SARNET advices as inputs to prepare, in compliance with ISTC and STCU objectives, its recommendation for the ISTC or STCU Governing Board.

When possible, SARNET will propose nomination of its members to become foreign collaborators to the projects it recommends for funding to the CEG-SAM.

* The experimental results of the ISTC and STCU projects (when considered of interest by the SARNET consortium) will be integrated in DATANET (the SARNET database network) and used for the development of knowledge (interpretation and models):
  + The data integration in DATANET will be part of the SARNET JPA and the SARNET organisation would then be in charge of the work.
  + Alternatively, the data integration could be a part of the ISTC or STCU project itself, in that case the concerned Kazhak, Russian or Ukrainian organizations will be in charge of the work.
* Future activities in support of Euratom-ROSATOM projects: CEG-SAM will support by evaluating or improving proposals in severe accident research to the Euratom-ROSATOM committee as well as following the progress on running projects and providing feedback to the committee.

Contractual and logistic aspects:

* The participation of organizations/institutions that are members of SARNET to the CEG-SAM group activities could be considered as part of the SARNET JPA (related expenses will become eligible for partial funding by the EC);
* The interpretation of ISTC and STCU results, when considered of interest by the SARNET consortium will be considered as part of the SARNET JPA (related expenses become consequently eligible);
* Related expenses will also become eligible for the integration of chosen ISTC and STCU results in DATANET under the SARNET JPA;
* ACT, the SARNET advanced communication tool, will be used to make easier within SARNET the transfer and collection of information related to ISTC and STCU projects (information distribution, collection of advice, organisation of dedicated meetings).

1. Document approved by CEG-SAM on 28 February 2005 and by SARNET Governing Board on 18 March 2005 [↑](#footnote-ref-1)
2. Update approved by SARNET General Assembly on 10 May 2010 and by CEG-SAM on 28 September 2010 [↑](#footnote-ref-2)