National Nuclear Safety and Waste Management Research Programme 2023-2028

Operational Management Handbook

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1. Introduction

1.1. Background

The National Nuclear Safety and Waste Management Research Programme (SAFER2028) was initiated by the Ministry of Economic Affairs and Employment (MEAE) to take place between 2023 and 2028. The programme is a continuation of earlier government-led nuclear safety and waste management programmes.

The objective of the programme is to develop and continuously improve nuclear safety and nuclear waste management safety expertise for solving safety issues relevant to the Finnish use of nuclear energy. The programme supports the capturing of knowledge and its transfer between organisations and generations through carrying out internationally high-level multidisciplinary safety research. The programme is funded by the Finnish State Nuclear Waste Management Fund (VYR), as well as other key organisations operating in nuclear energy.

The topics for SAFIR2028 research are described in the SAFER2028 Framework Plan [1].

1.2. Function and application

The purpose of this handbook is to provide practical guidance for all actors in the research programme. It includes information on programme organisation and functions, planning of research, reporting practices, and evaluation of project proposals as well as project progress and outcomes. The instructions apply to VYR funded projects and possible other SAFER2028 projects that are funded by other organisations but included in the SAFER2028 programme.

The handbook is a living document and will be updated during the programme when necessary.

1.3. Liability

The organisations that have received VYR funding are responsible for carrying out the research as described in the approved project plan and reporting to VYR as defined in the funding decision and VYR funding terms for the research projects (Appendix 1). The organisation of the project manager is responsible of reporting project progress to SAFER2028 organisation.

The administration of SAFER2028 is carried out by the administrative organisation and programme director selected based on competitive bidding. The responsibilities of the administration project are defined in the VYR funding terms for the administration projects (Appendix 2).

2. Organisation and functions

The programme's operating model consists of the Management Group (MG), the Stakeholder Group (ShG), six research area Steering Groups (SGs) and Technical Advisory Groups (TAGs) that are responsible for scientific and technical guidance of the projects (Figure 1). The administration of the programme is conducted by the administration organisation and programme director.

The research areas of the SAFER2028 programme are:

- Overall safety and society (SG1)
- Reactor safety and fuel (SG2)
- Nuclear waste management (SG3)
- Mechanical and structural integrity of NPPs (SG4)
- Doctoral education network (SG5)
- Infrastructure (SG6)

The research is carried out in projects led by project managers. The research topics of the projects may be related to one or more research areas but administratively each project is placed in one research area. The responsible SG places each project in a Technical Advisory Group.

The administrative practices of the research programme are described in detail below. The principle of independence is applied in selecting and monitoring the projects. Thus, a person working in a project cannot be a member of SG of the research area in question. If a member of a Technical Advisory Group also participates on a project in the TAG area as a supervisor or in the actual research work, the member cannot participate in the TAG decisions related to that project (e.g., approval of deliverables, changes in plans or statement about progress). The SAFER2028 Disqualification Guideline (Appendix 3) is followed in all decision-making concerning funding.

MEAE appointed the Management Group for the programme that includes representatives from regulatory authority and licensees. The Management Group determines the research area Steering Groups and Technical Advisory groups. The Management Group also nominates the members of the Steering and Technical Advisory Groups.

2.1. Management group

The Management Group (MG) has representatives of each of the following organisations: Radiation and Nuclear Safety Authority (STUK), Fortum, Posiva, Teollisuuden Voima (TVO) and the Ministry of Economic Affairs and Employment (MEAE). The MG's mandate will end on 31 March 2029.

The chair of MG is from STUK and the director of the programme acts as a secretary for MG. The representative of MEAE also serves as VYR contact person.

The participating organisations will pay the participation expenses of their representatives. This applies to all other Groups also. MG can invite new members as having permanent or temporary positions. A representative of the Swedish Radiation Safety Authority (SSM) was invited to join the MB in 2022. The organisations represented in MG can also change their representatives during the programme. The changes are reported in written form (e.g., email) to the programme director and they shall be approved by MG.

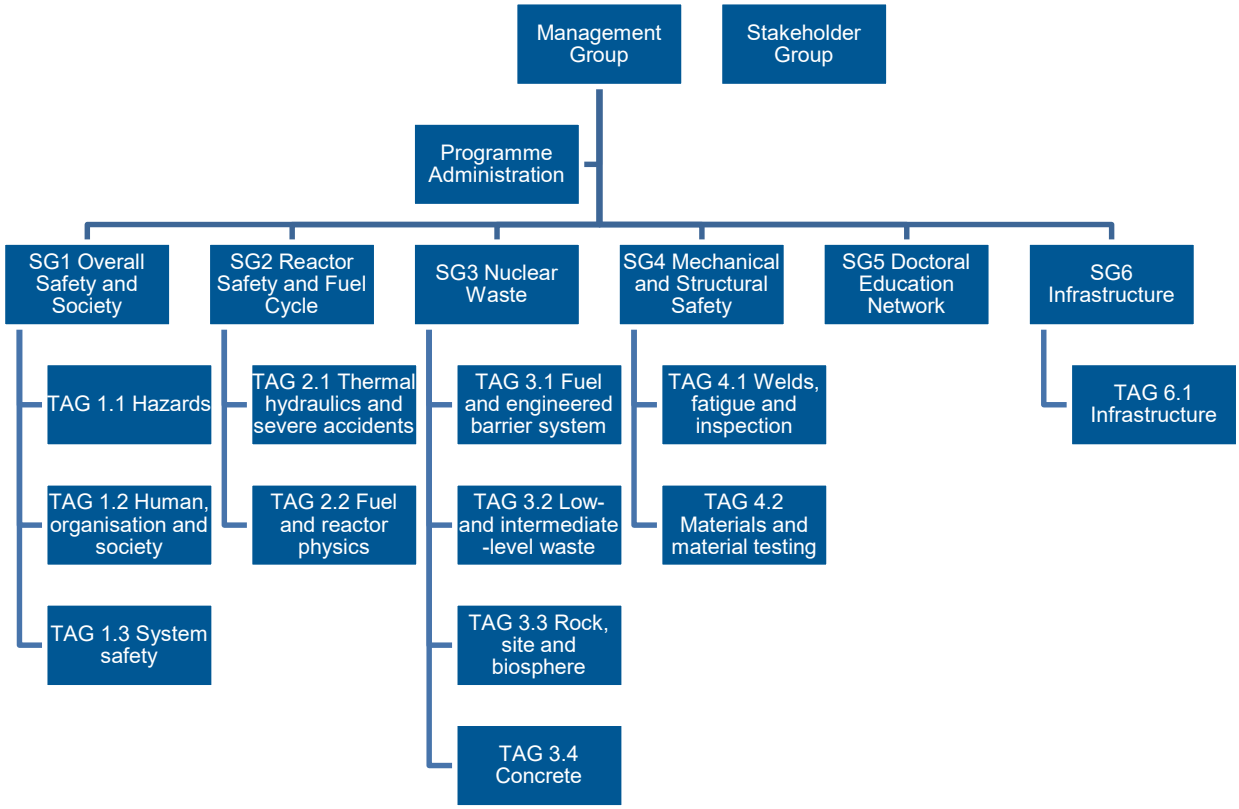

Figure 1. Structure of SAFER2028 organisation. Each research project belongs to one Technical Advisory Group (TAG) and one Steering Group (SG). Doctoral Education Network (DENSE) projects belong to SG5 but not to any TAG.

MG defines the research area Steering Groups and Technical Advisory Groups. MG also appoints the chairs, vice chairs and members of the Steering and Technical Advisory Groups based on proposals made by the organisations involved.

MG is responsible for the programme as a whole and its results so that the programme meets the statutory requirements. MG also decides on the project portfolio, monitors the implementation of the research programme, and amends the Framework Plan for each call for proposals, if needed. MG prepares a proposal for MEAE on the projects for the next year, and MEAE will prepare a funding proposal to VYR after receiving a statement from STUK. MG can also initiate and order small projects (25-50 k€) on topics not included in the funded research projects.

MG will meet when needed, typically three times each year (March, June, December). In addition to the operational programme management, the following topics are typically dealt with in the meetings:

- ***March meeting:*** approval of the final invoices of the projects from the preceding year as recommended by the Steering Groups.
- ***June meeting:*** decisions related to the next call and amendment to the Framework Plan; status of the SAFER2028 indicators.
- ***December meeting:*** funding proposal for MEAE about the project portfolio for the next year; decisions about the small projects to be ordered

The decisions of MG are recorded in the meeting minutes that are distributed to the organisations taking part in the SAFER2028 programme (through a protected website area). MG can also have online and email meetings when beneficial. The decisions made in the email meetings are confirmed in the next physical meeting and documented in the meeting minutes of the physical meeting.

2.2. Stakeholder Group

The Stakeholder Group (ShG) consists of representatives from research organisations and universities. ShG has representatives from the following organisations: Aalto University (Aalto), Business Finland (BF), Finnish Meteorological Institution (FMI), Geological Survey of Finland (GTK), University of Eastern Finland (UEF), University of Helsinki (HU), University of Jyväskylä (JyU), University of Turku (UTU), Lappeenranta-Lahti University of Technology (LUT) and VTT Technical Research Centre of Finland (VTT). In addition, a representative from each MG organisations participates in ShG.

The Stakeholder Group acts as an advisory board of the Management Group giving opinions and feedback regarding MG decisions and an information exchange forum between the research organisations. Stakeholder Group ensures information exchange at all levels of the research programme. ShG will meet twice a year and the meeting minutes are shared on the protected website area. The programme director or administration project experts act as a secretary of ShG.

2.3. Research area Steering Groups

Steering Groups (SGs) have representatives from the following organisations: Radiation and Nuclear Safety Authority (STUK), Posiva, Fortum, and Teollisuuden Voima (TVO). Posiva does not participate in all SGs as some of the SGs focus only on NPP-related issues. MEAE has a representative in SG6 (Infrastructure), and research organisations and universities are represented in SG5 (DENSE). A representative of STUK acts as a chairperson of SG1-4. SG5 and SG6 can be chaired also by other organisations. The programme director or administration project experts act as secretary of all SGs. A deputy member is appointed for each SG member. The deputy members can participate in the meetings despite the official representative is present

SGs follow the compliance of projects with the Framework Plan [1] and results of the research programme in their respective research fields; they offer suggestions to MG for preparation of each annual call for proposals, evaluate the proposals and place the projects in Technical Advisory Groups. The groups also promote the emergence of multidisciplinary research projects. Each SG can propose to establish new Technical Advisory Groups in its own area and propose multidisciplinary groups to MG.

SGs are responsible for monitoring the research projects in their fields and reporting to MG. They rely on the competence of the Technical Advisory Groups in monitoring the progress or when otherwise necessary. SGs ensure that the achieved results and realised costs of the projects are in line with the funding decisions. They give a recommendation for the approval of midterm and final invoicing. When necessary, SGs will also approve research plan and budget changes to tasks within a research project.

SGs will meet when needed, typically twice each year (February/March and November). In addition to the operational programme management, the following topics are dealt with in the meetings:

- ***February/March meeting:*** approval of the results and invoicing of the research projects of the preceding year; approval of the updated project plans of the starting year
- ***November meeting:*** approval of the invoicing of the research projects until the end of October; evaluation of the proposals for the next year; recommendation for possible updates to the project plans; recommendation of funding for the MB; proposals for small projects to the MB.

The February/March meeting is arranged in the end of February or in the beginning of March after the Technical Advisory Group meetings in the area.

The decisions of SG and its proposals for MG are documented in minutes distributed on the protected website area. Each SG can also have email meetings. Email meetings may be necessary, e.g., if changes in project budgets need to be approved before the next physical meeting. The decisions made in the email meetings are confirmed in the next physical meeting and documented in the meeting minutes of the physical meeting.

2.4. Technical Advisory Groups

Each Technical Advisory Group (TAG) has representatives from all or some of the MG organisations and the research organisations and universities participating in the projects on the group. There can be one or several representatives from each organisation, depending on the requires expertise. Deputies are not appointed for TAG representatives. Other experts approved by MG can also be nominated as members. Members of the SGs can be members of a TAG, but they cannot act as chairs of TAGs. Members of the MG can participate in TAG meetings, but not be actual TAG members.

The chairperson of a TAG is a representative of a nuclear energy company or STUK or another recognised expert in the field. Its secretary is a project manager on a rotary basis. Secretary duties include preparing the meeting agenda based on a draft provided by the programme administration, reserving the required meeting facilities and sending the calendar invitations, preparing the minutes (collecting the contributions from other project managers), sending the minutes for comments and finalising the minutes based on the received comments. The finalised minutes should be sent as a single pdf file including all attachments to the TAG members and programme administration (safer2028@vtt.fi).

TAGs are responsible for the scientific and technological guidance of the research. They also decide on necessary changes to plans concerning the research content when the changes are not substantial and do not require budget changes.

MG confirms the research topics and members of each Technical Advisory Group based on the proposal of the SG of the research area. New TAGs can be set up and old ones terminated during the programme.

TAGs will meet when needed, typically twice each year (February and September/October). In addition to the guidance of the projects, the following topics are dealt with in the meetings:

- ***February meeting:*** evaluation of the realisation of the project plans during the preceding year; comments on the updated project plans for the starting year.
- ***September/October meeting:*** comments on the realisation of the project plans.
- ***May/June*** ad hoc meetings for one or more projects can be arranged in May if seen necessary.

Minutes are prepared of the TAG meetings, in which the decisions and comments concerning the progress of the projects are documented. The presentations given by the project managers are attached to the minutes. The project status reports are made available as separate documents to the protected website area. However, the TAG members shall review each progress report before the meeting and assess that it gives a realistic picture of the status of the project. Necessary corrections to the progress reports are made after the meeting. The minutes are distributed on the protected website area. Each TAG can also have email meetings. The decisions made in the email meetings are confirmed in the next physical meeting and documented in the meeting minutes of the physical meeting.

Project ad hoc meetings may be organised as often as needed between the TAG meetings.

Some SAFER2028 projects have confidential materials and hence access to TAG materials and meeting requires signing a mutual non-disclosure agreement. Confidential documents must be clearly marked as such by the project manager. Further instructions on dealing with confidential material is provided in Chapter 5.1.

2.5. Programme director and administrative organisation

The programme director and the administrative organisation are responsible for the administration of the programme. They are chosen based on a competitive bidding. The duties of the director and the administrative organisation are specified in a contract as well as in annual orders and offers to MEAE. Administrative organisation consists of programme director and two project experts who assist the programme director and act as a substitute in meetings if necessary. Additional assisting staff of the administrative organisation may also participate in the meeting and seminar arrangements, website related activities, etc.

The director prepares the meetings of MG and SGs and implements their decisions; , takes care of international cooperation at programme level and promotes international collaboration. The programme director together with the project

experts also prepare topics to be discussed in the MG, SG, ShG and TAG meetings, take care of the co-ordination between the programme and the projects, and maintains the website.

Twice a year (at the end of October and in January), the programme director and the administrative organisation collect cost summaries and content-based progress reports of the projects for the SG meetings to facilitate the approval of the invoicing. The programme director or the project experts will participate in the meetings of MG, SGs and TAGs.

The director and the administrative organisation make available the annual plans of the projects as well as the annual report, summaries of the project progress reports, and other required reports and follow up on costs to serve as a basis for invoicing VYR. The administrative organisation co-ordinates the annual call for proposals for VYR funded projects in accordance with the guidelines set out by MEAE and MG.

The programme director and the administrative organisation promote and present the programme, develop its activities, maintain the operational management handbook, take care of the knowledge management on programme level and other internal guidelines.

The programme director and administrative organisation of the programme organise an interim (in 2026) and final (in 2029) seminar as decided by MG, as well as other common functions of the programme.

2.6. Project manager, research group and execution organisation

Each research project is led by a project manager who participates in the research activities together with other researchers in the project. The project manager and the organisation the manager represents are responsible for executing the project according to the project plan and the budget, and according to the decisions of SG and TAG involved. The project manager is responsible for the realisation of the project and manages communication within the project´s research group, with the other projects, with TAG guiding the project and the administrative organisation. The project manager is responsible for the reporting obligations set for the projects in the programme.

In joint projects having participants from several organisations executing research (i.e. coordinated projects in previous KYT programmes), the project manager and the organisation of the manager are responsible for necessary contracts between the organisations participating the project. The project´s research group is led by the project manager and it shall follow the project plan and the related decisions of the programme management.

SAFER2028 will have a special arrangements for projects containing confidential information. NDA issues are discussed in Chapter 5.1. of this document.

The reporting and invoicing practices in SAFER2028 are described in Chapter 3.7. The project manager shall send the progress report (Appendix 4) of the project to the Technical Advisory Group not later than a week before the meeting. The project manager prepares a presentation of the project results achieved so far and reports possible problems, and other topics to inform TAG.

The results of the projects are published as journal articles, conference articles, research reports, theses, and other publications. The project manager ensures that the project publications are reviewed by the TAG members or other experts named by TAG. Deliverable reviewers are selected for articles and research reports in the TAG meetings. Theses and other deliverables, such as travel reports and presentations, are not evaluated. The project manager shall send the deliverables to be reviewed to the nominated reviewer together with the Publication evaluation form (Annex X) with the top part pre-filled. At this point, the internal evaluation related to the quality procedure of the research organisation should be completed.

It should be noted that the SAFER reviewer may suggest some changes or additions, so the report should be fully finalised only after the SAFER review has been completed. In the case of articles, the SAFER review may take place either before or after the peer review. In the latter option, the SAFER reviewer will obviously not propose any additional changes. Once the deliverables have been finalised, the project manager should send those in pdf format to the TAG members and programme administration (safer2028@vtt.fi).

If the SAFER2028 reviewer evaluates that the report does not conform to the objectives of the research plan, the review and the approval of the deliverable is handled in the next TAG meeting. The review time is three weeks after which, if the review is not obtained or postponing approved by the project manager, the report can be approved without review.

The cost reporting for the invoices is taken care by each research organisation according to the instructions described in VYR Funding Terms for Research Projects (Appendix 1). The project manager also collects the cost reports of the project (as PDF files) and sends them to safer2028@vtt.fi in the beginning of November (costs until 31.10.) and February (costs until 31.1.).

Participation in international projects and programmes is encouraged when benefits for domestic safety research can be foreseen. In the agreements of jointly funded projects, it shall be noted that the results of VYR funded research shall be published. The related TAG and programme director shall be informed about international co-operation before a project level contract is signed and the progress of co-operation shall be reported in the TAG meetings. Programme level co-operation is always subject to the approval of MG. This includes for example participation in OECD/NEA projects. MG follows and steers the co-operation on programme level.

If the project manager cannot temporarily take care of the duties, a vice project manager act as a substitute. However, the project manager is still responsible for the project. If the absence of the project manager is longer (for example a parental leave) a new project manager can be nominated despite the original project manager returns to the position. DENSE funding for doctoral students is personal and cannot be transferred to substitutes. If the doctoral student is unable to do their DENSE related research project, the funding will be cancelled or postponed on a case by case basis. The decision is made in MG.

3. Planning of research

3.1. Project proposals

The detailed objectives of the research to be carried out in SAFER2028 programme is described in the Framework Plan [1]. MG can amend the Framework Plan during the programme as necessary.

A call for proposals for the coming year is published annually on SAFER2028 website in August. Project plans can be made for one or several years but in most of the cases the funding is granted for one year at a time. However, showing that the project has long-term plans is typically considered positive. In this case, the detailed plan is required only for the coming year

SAFER2028 also has two types of projects that can receive funding decisions for multiple years: Excellence and DENSE projects. In the case of funding recommendation for several years, the projects will each year in the call for proposals inform about the continuation of the project and update the project plan including the planned deliverables and the detailed budget for the next year as necessary. The project plan of an excellence project proposal shall give such a detailed description of the whole project that SGs are able to evaluate the plan for several years funding decision. MG has the right to suspense or decrease funding for any Excellence or DENSE project that does not advance according to the plan.

In addition to the research projects applying funding in the yearly call, MG can annually initiate small preliminary type studies with an order procedure. Decisions on the small projects will be made after the funding decisions of the call for proposals. The small projects will support the implementation of the Framework Plan in topics that are not covered by the research projects. They can also deal with topics outside the Framework Plan if seen necessary by MG. Different project types are described in detail in the SAFER2028 Framework Plan (Chapter 2.2.) [1].

Clear goals and tasks must be set for each project funded in the programme. SGs must be able to assess how the goals have been met during the project year and at its end. The plan for each project year must contain interim goals that can be assessed at the end of October and the goals for the entire project year that are assessed at the end of the project year in January.

In-kind work carried out by other personnel than those mentioned in the project plan as well as the use of research infrastructure, should be mentioned in the project plan and included in the budget sheet explanations with the estimated volume.

The projects can include external funding in addition to the funding of VYR and the executing organisations. The other funding organisations are listed in the VYR funding decision that primarily forms the contract. If additional separate contracts are necessary, they shall not conflict with the VYR funding terms. The form “Agreement for SAFER2028 project funding” (Appendix 7) shall primarily be used. Other contracts shall be approved by MG or the MEAE contact person.

Research institutions, organisations carrying out technological research and universities may receive VYR funding for up to 70% of the project’s total expenses. For the participation fees related to the international treaties (e.g., OECD/NEA project membership fees), however, 100% VYR funding is possible.

Funding can also be granted to companies that are active in the field of research. For these companies, 100% VYR funding is possible. Companies with 50 or fewer employees can report 50% indirect employee costs (“henkilösivukulut”) and 30% general overhead costs (“yleiskulut”). A company can also propose larger general overhead costs in reporting, but then it should be based on accounting. For bigger companies, the acceptable indirect employee and general overhead costs are 50% and 50%, respectively.

In addition, the de minimis rule of the EU state subsidy regulations will be applied to companies. If necessary, the EU Commission will be notified of the research programme by a decision of MEAE.

MG can approve also projects without VYR funding to be followed under SAFER2028 if the project supports SAFER2028 goals (e.g., own funding or other funding organisations). In the projects, the contracts made with the funding organisations and the related reporting schedules are followed in addition to reporting in SAFER2028 (e.g., TAG meetings).

3.2. Procedure for selecting the proposals

The programme director takes care of the evaluation procedure of the proposals that have arrived on time. The SAFER2028 Disqualification guideline (Appendix 3) is followed at all steps of the evaluation. The overall evaluation process is described in Figures 2 and 3 below.

SGs assess the project proposals. The first phase is a numerical and written evaluation by filling an evaluation form. One form is filled by each organisation represented in SG. The SG members are encouraged to consult experts in their organisation in evaluating the proposals. The Steering Group members are responsible for collecting the evaluations of their organisation into the same form. The programme administrative organisation makes summaries of the evaluations for SGs.

Evaluation of DENSE projects is done differently to other projects. Since representatives of research organisations and universities are present in the SG5 meetings, SG5 cannot make any financing recommendations or rank the proposals. Instead, SG5 decide whether the received DENSE proposals are in line with the SAFER2028 Framework Plan and gives a statement on the scientific quality of each project, which is then forwarded to MG that makes the funding decision.

During the project evaluation phase, SGs and programme director may negotiate with the parties on making changes to the plans and on combining project proposals into larger entities. MG makes the decision about its proposal to MEAE based on the evaluation summaries, the minutes of the SG meetings, and recommendation of a small group nominated by MEAE. Typically the small group consists of SG chairs and MG representatives (one form each organisation). The small group has its meeting after the SG meetings and before the MG meeting.

MEAE asks for a statement of STUK and then makes a proposal to VYR of the research projects to be funded. MEAE will make a proposal to VYR of a project portfolio that meets the requirements of the Nuclear Energy Act. The board of VYR makes the final decision.

The decisions made by VYR are sent to the project managers that have applied for VYR funding in the proposals.

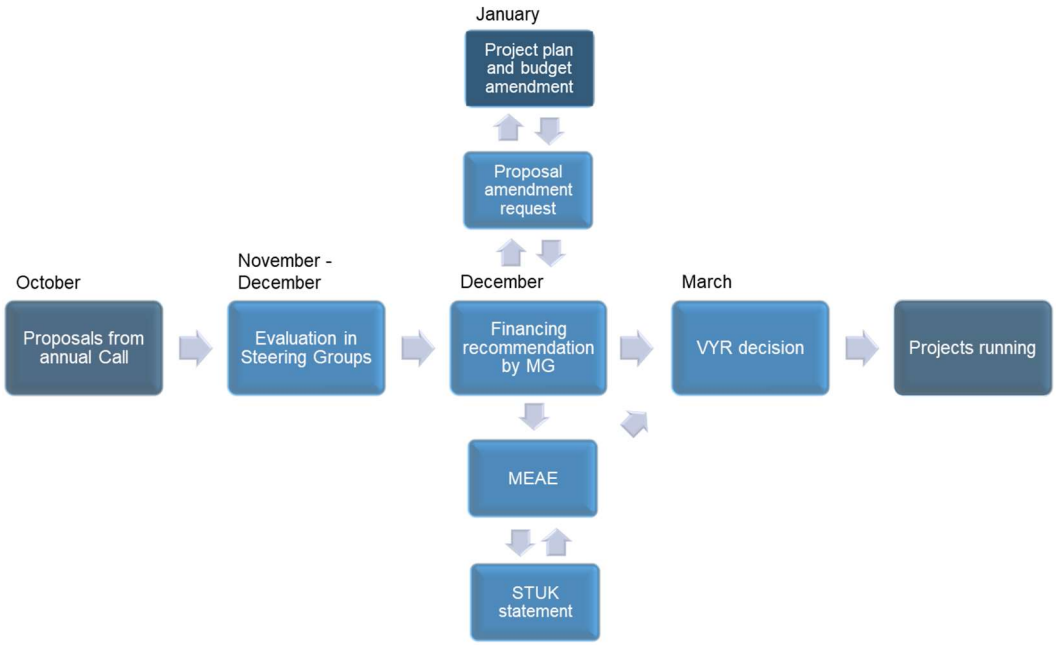

Figure 2. Schedule and process for financing decisions after each call for proposals.

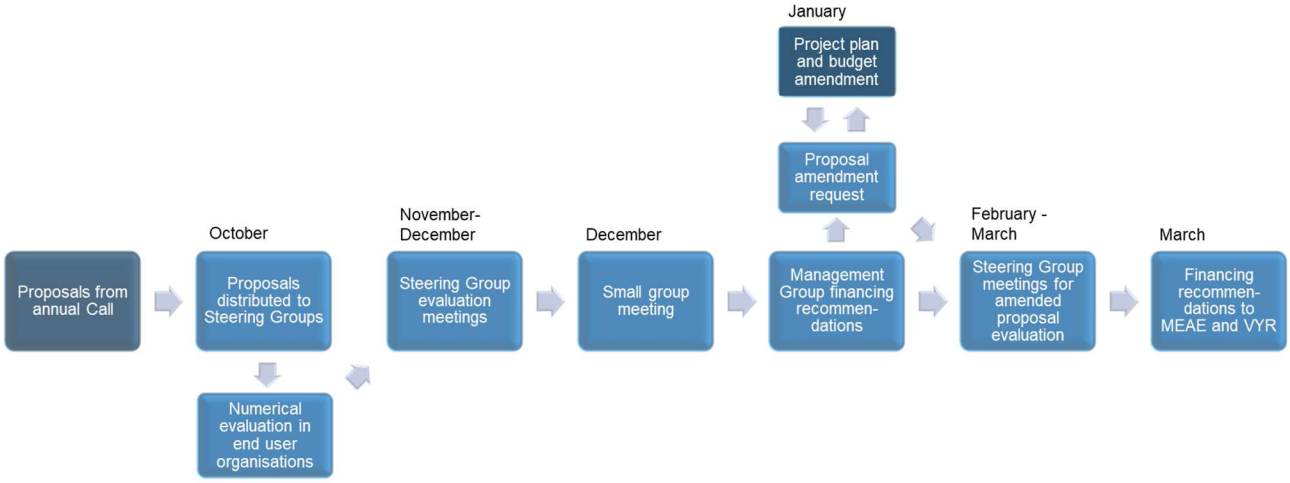

Figure 3. Schedule and process for proposal evaluation after each call

3.3. IPR issues and publicity

According to the Finnish Nuclear Energy Act [2], the research projects shall be of a high scientific standard and their results shall be publishable. The equipment and devices, software, and research results are owned by the research execution organisations (Appendix 1). In case of projects containing restricted information (see Chapter 6.1) exceptions can be made for publicity of reports during a certain timeframe as required by e.g. OECD/NEA.

If the goal of the project is to develop a software program, STUK and other organisations represented in MG shall be given a right to use the program with terms to be agreed. The costs for use or a license is to be agreed case-specifically. The research execution organisation is responsible for relevant archiving of the research results of individual projects.

3.4. Travels in the projects

The acceptable direct costs are detailed in VYR funding terms for the research projects (Appendix 1). The following specifications apply for the travels that can be included in project costs:

- Travels described in an approved project plan are acceptable.
- Travels to scientific conferences are acceptable if project results are presented as an oral or poster presentation. If more than one person is willing to participate the same conference, or another similar meeting, a reasoning is necessary in the progress report. The project manager can decide about the participation.
- Travels related to international co-operation described in the approved project plan can be included (e.g., OECD/NEA projects).
- Participation in training courses of the projects topics may be approved by a SG in special cases and before the course (if not in the project plan).
- A reasoning for each travel, including participation in scientific conferences, is necessary in the progress report if not already included in the project plan (e.g., why just that conference has been selected).

All travels shall be reported in the progress report to help SGs check the cost reports.

3.5. SAFER2028 annual plans

The annual project plans requested separately in the annual call for proposals are made available on the SAFER2028 website. The full project plans received in the call are made available for MG and SG members. The full updated project plans of the projects to be funded are made available on the protected website area.

4. Results of the projects and SAFER2028 annual reports

The results are published as journal articles, conference articles, research reports, theses, and other publications. Journal and conference articles, research reports and theses will be published on SAFER2028 website. Links to original publications will be utilised as necessary. Other publications, such as travel reports and presentations, will be collected to the protected website area. The process for invoices, reports and publications in illustrated in Figure 4 below.

A summary of the results of each project year are reported in the annual reports. The programme director makes the reports with the help of project managers and the administrative organisation. The lists of publications and completed theses, travels made by project funding and international connections are included.

The annual reports are published on the SAFER2028 website.

4.1. Project progress reporting

The progress of projects is reported for TAGs by the “Project progress report” that also includes the follow-up table of the deliverables (Appendix 4). The progress reports will be put on the protected website area. Figure 4 illustrates the types and processes for different project deliverables, reports, publications and invoices.

The cost reports (Appendix 5) are collected for SGs twice a year (see Chapter 2.5).

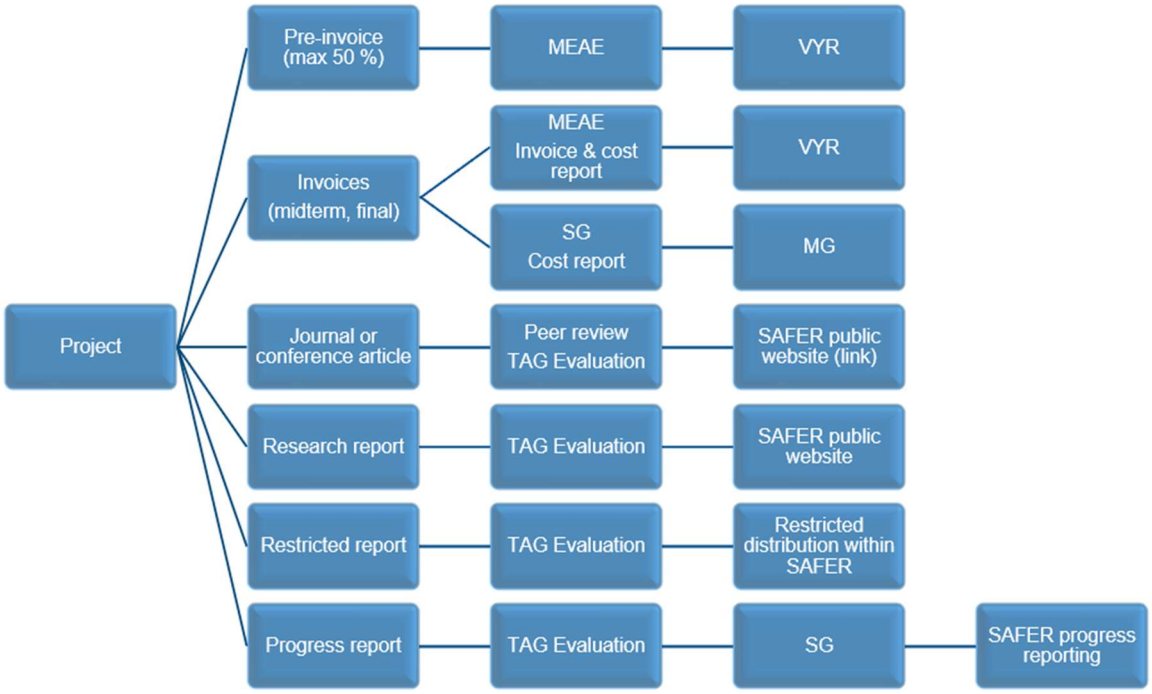

Figure 4. Project cost and progress reporting process.

4.2. Interim seminar

A midterm seminar will be held after three programme years in March 2026. During two days, the results of each project will be presented as oral presentations or posters. An interim report will describe the midterm results and progress of research in the projects. The interim report will be published on the public website.

4.3. Final seminar

The final seminar will be held in early 2029 after the research projects have ended. During two days, the selected results of each project will be presented as oral presentations or posters. The SAFER2028 final report will describe the main results of each project. The final report will be published on the public website.

5. Evaluation and continuous improvement

5.1. Evaluations and actions

The projects for SAFER2028 programme are selected based on evaluation by several experts of STUK and the licensees. The evaluation criteria for each year's call are published on the website in the call instructions.

The review process of project deliverables is described in section 2.6. The reviewers evaluate the following points:

- Does the publication meet the objectives described in the research plan
- The most important outcome
- Readiness for real-world applications and suggestions how to utilise the results
- Exploitation of the results
- Scientific and technical level of the results
- Quality of the reporting

A summary of all reviews is made by the programme director with the support of administrative organisation. The indicators described in the following chapes will be reviewed and deviations will be recorded and handled.

A midterm seminar is held after three programme years (in 2026). MG decides about an international evaluation during the third and sixth project year. The evaluation results will be exploited in development of SAFER2028 and planning of the next research programme.

The realisation of the Nuclear Energy Act 53§is assessed by MG according to the indices (described below) related to the development of expertise and research infrastructure.

MG decides about possible audits. The research execution organisations may be audited by the programme management or in external audits carried out by experts nominated by MG. The purpose of audits is to confirm that the procedures described in this operational management handbook are followed in the projects and their management, and also to find topics for improvement.

5.2. Indicators for research results and quality

The following indices are used as result and quality indicators of SAFER2028 research:

1. The number of journal articles (total, per person years)
2. The number of peer-reviewed conference proceedings publications (total, per person years)
3. The number of research reports (total, per person years)
4. The number of other publications (total, per person years)
5. The assessed quality in the research report evaluations (Scientific and technical level of the results; excellent, good, satisfactory, poor, cannot say)
6. *Human resources:* The number of doctoral theses
7. *Human resources:* The number of masters theses
8. New IPR generated in the projects (list)

5.3. Indicators for impact on nuclear safety

The following indices are used as indicators on nuclear safety:

1. Volume of the SAFER2028 programme and volume of external funding (not including funding from the research execution organisations).

2. *Networking:* The number and proportion of projects with an indication of international networking (such as international funding including, e.g., approved OECD/NEA membership fees, other real co-operation with international projects etc.).
3. The exploitation of the results assessed in the returned research report evaluation forms (in 0-2 years, later, no use; by authorities, licensees, in research).
4. *Tools:* Software tools that are developed in SAFER2028 (own, licenses, international contracts). Questionnaires will be made after project year 2026 and 2028.
5. *Human resources:* The number of person years of research carried out in the different expertise areas described in the Survey of Competence in the Nuclear Energy Sector 2017-2018 in Finland and the Survey of Competence in Nuclear Waste Management carried our in 2022.
6. *Human resources:* The significance for safety from the research programme point of view, assessed in the middle and at the end of the programme by a questionnaire sent to STUK and the licensees (e.g., whether there has been sufficient expertise for solving the arising safety issues without delay).

6. Communication

The research programme is presented on the public SAFER2028 website: http://SAFER2028.vtt.fi/.

Additionally, the programme uses Twitter for communication at https://twitter.com/SAFER2028 and can produce media releases e.g. regarding seminars or other events. The annual calls for proposals with the necessary attachments are published on the website. Annual plans of SAFER2028 projects and SAFER2028 annual reports are also published on the website.

The protected website area (extranet) are accessed by personal user names and passwords. All members of SAFER2028 MG, ShG, SGs and TAGs as well as project managers have access to SAFER2028 extranet. The presentations and posters of the interim and final seminars are published on the public website.

The public website also describes the SAFER2028 organisation and contact information of the programme administration and MEAE contact person.

The extranet contains the meeting minutes of the MG, ShG, SG´s and TAG´s, their members, project plans and progress reports and document templates. The theses produced by the projects will be published on the website if no restrictions apply. For projects with restricted deliverables, the existence of each report will be noted on the intranet but access to the materials is through the project manager for those organisations willing to sign an NDA (see Chapter 6.1.)

The members of MG, SGs and TAG´s as well as the programme director also make SAFER2028 known in international networks.

6.1. Confidential Information and Non-Disclosure Agreements

Even though the programme is public, in some cases it might be necessary to share some confidential information between a few participants. A common example is a project that includes OECD/NEA project participation. OECD/NEA project results cannot be shared to parties who have not signed the project agreement without signing a Non-Disclosure Agreement (NDA). However, as the funding for the participation comes from SAFER2028 programme, the OECD/NEA project results shall be discussed in TAG meetings. So, there is a need to limit the distribution of some deliverables as well as TAG meeting minutes.

If TAG has projects including confidential information, TAG member organisations should sign an NDA. The project manager is responsible for informing SAFER2028 administration of NDA requirements concerning their project and finalising a suitable NDA that fulfils the requirements in compliance with e.g. OECD/NEA agreement. SAFER2028 NDA form can be used as a starting point. The programme administration assists projects with the NDAs at the research programme level.

Confidential deliverables will be distributed only to TAG members and programme administration by the project manager. Confidentiality should be always clearly marked. A list of confidential deliverables will be on the restricted website area. The deliverables are available upon request from the project manager or from the programme administration. Some confidential information may also be included in the TAG meeting presentations that are included in the meeting minutes' attachments. In this case, the presenter should prepare a version of the presentation that can be published together with the meeting minutes on the protected website area. The original presentation should be sent as a separate pdf file to the TAG members and programme administration together with the finalised meeting minutes.

References

1. National Nuclear Power Plant Safety Research 2019-2022. SAFER2028 Framework Plan. Publications of the Ministry of Economic Affairs and Employment 22/2018.

2. Nuclear Energy Act 11.12.1987/990.

Attachments

1. VYR funding terms for the research projects
    a. In Finnish
    b. In English
2. VYR funding terms for the administration projects (in Finnish)
3. SAFER2028 Disqualification guideline
4. Project progress report
5. Project cost report for VYR
6. Publication evaluation form
7. SAFER2028 NDA template (to be published later)

13.9.2022

VALTION YDINJÄTEHUOLTORAHASTON (VYR) RAHOITTAMISSA TUTKIMUSHANKKEISSA SOVELLETTAVAT EHDOT

1. Rahoituspäätös

Rahoituspäätös perustuu rahoitushakemuksen liitteenä olevaan tutkimussuunnitelmaan, joka sisältää myös rahoitussuunnitelman ja kustannusarvion kustannuslajeittain sekä palkkakustannusten ja palkkioiden laskentaperusteet.

Rahoituspäätöksessä mainittu VYR:n rahoitusosuus on enimmäismäärä. Rahoituspäätöksessä mainituista ehdoista (tässä esitetyt ehdot mukaan lukien) ei voida poiketa ilman VYR:n hyväksyntää. Vähäisistä muutoksista voidaan sopia hankkeen suorittajaorganisaation (jäljempänä suorittaja) ja rahoituspäätöksessä nimetyn yhdyshenkilön kesken.

Rahoituspäätöksiä koskee de minimis -sääntö ja suorittajan on varmistuttava siitä, ettei sillä ole yli 200 000 euron nousevaa rahoitusta de minimis-säännön mukaisesti myönnetyissä hankkeissa kolmen vuoden ajalta (koskee vain yrityksiä).

2. Alihankinnat

Mikäli tutkimusohjelman hankkeen toteuttamiseen osallistuu kyseisen hankkeen suorittajan lisäksi alihankkijoita, tulee hankkeen suorittajan tehdä näiden kanssa sopimus rahoituksen käytöstä, käytön valvonnasta ja niiden ehdoista. Alihankkijoiden tulee noudattaa tässä esitettyjä hankkeen rahoitusehtoja.

3. Yhteydenpito ja valvonta

VYR seuraa hankkeen toteutusta ja tuloksia ensisijaisesti rahoituspäätöksessä nimetyn yhdyshenkilön kautta.

Hankkeen suorittajan on seurattava hankekohtaisesti aiheutuvia kustannuksia joko sisäistä laskentajärjestelmää tai kirjausluetteloa käyttäen siten, että VYR:lle esitetyt kustannukset ovat tarvittaessa vaikeuksitta todennettavissa kirjanpidon alkuperäistositteista. Tilinpidossa ja laskutuksessa tulee eritellä myös alihankinnat.

VYR:lla on oikeus saada tietoonsa ja tarkastaa asiakirjat, joihin hankkeen suorittajan laskutus perustuu.

4. Veloitusperusteet

Tutkimushankkeista aiheutuviksi kustannuksiksi voidaan hyväksyä välittömiä ja välillisiä kustannuksia. Välillisten kustannusten (yleiskustannusten) osuus tulee olla määriteltynä rahoitushakemuksessa.

Välittöminä kustannuksina hyväksytään tutkimussuunnitelman mukaiset toimeksiannon suorittamiseen osallistuneiden henkilöiden palkat sekä muut palkkaukseen liittyvät henkilösivukulut ja yleiskustannukset sekä aine-, tarvike- ja laitekustannukset, hankkeeseen liittyvistä matkoista ja vieraista palveluista aiheutuvat kustannukset sekä tulosten julkaisemisen, raporttien kääntämisen ja tiedottamistoimenpiteiden kustannukset.

Työajan palkoiksi hyväksytään työhön suoranaisesti osallistuneiden henkilöiden todelliset tehdyn työajan palkat. Tehtyjen tuntien on oltava todennettavissa sisäisen laskennan raporteista tai palkkakirjanpidosta. Yleishallintoon kuuluvat palkat eivät ole laskutuskelpoisia. Nämä kulut otetaan huomioon rahoitushakemuksessa esitetyn yleiskustannuskertoimen kautta.

Hankkeen toteuttamisen kannalta välttämättömien koneiden, laitteiden ja ohjelmistojen hankintakulut voidaan hyväksyä vain niiltä osin kuin laitetta käytetään ko. tutkimushankkeessa. Ehdotus tällaisten kulujen sisällyttämisestä VYR:n rahoittamiin hankkeisiin tulee sisällyttää rahoitushakemuksiin. Vähäisiksi katsottavien kulujen osalta suorittaja voi sopia näistä ilman eri ilmoitusta VYR:lle rahoituspäätöksessä nimetyn yhdyshenkilön kanssa.

Hankkeessa tulee noudattaa julkisia hankintoja koskevia määräyksiä ja valtion matkustussääntöä.

5. Laskutus

5.1 Yleistä

Tutkimus- tai toteutussuunnitelmassa määritellyn työvaiheen tultua suoritetuksi voidaan ao. jaksolta syntyneet kustannukset laskuttaa ilman arvonlisäveroa (VYR-hankekokonaisuuteen kuuluvien hankkeiden rahoitus on valtionavustuksen luonteista rahoitusta, valtionavustuslaki 27.7.2001/688). Hankkeessa noudatetaan seuraavia välilaskutuskausia:

– 1. erä: VYR:n tehtyä rahoituspäätöksen voidaan laskuttaa enintään 50 % kokonaisrahoituksesta, kertyneet kustannukset raportoidaan ja eritellään laskussa kohdan 4 ja 5.2 mukaisesti. Ensimmäinen lasku on ennakkolaskun luonteinen. Laskuun tulee merkitä vielä käyttämätön rahoitus.
– 2. erä: 30.10 mennessä kertyneet kulut, enintään 80 % vuoden kokonaisrahoituksesta, vähennettynä 1. erän osuudella. Kertyneet kustannukset raportoidaan ja eritellään kohdan 4 ja 5.2 mukaisesti. Laskuun tulee merkitä vielä käyttämätön rahoitus.
– loppulaskutus, mistä on esitetty erityismääräykset kohdassa 5.3, kattaa kaudella 1.1.–31.12. (tai rahoituspäätöksessä mainittuun muuhun päivämäärään mennessä kertyneet) vielä laskuttamattomat kulut.

VYR voi keskeyttää maksusuoritukset, mikäli työ ei ole edennyt toimeksiannon edellyttämällä tavalla. VYR tai rahoituspäätöksissä nimetty yhdyshenkilö ilmoittaa tästä laskun esittäjälle.

VYR maksaa välieriä koskevat laskut 30 päivän kuluessa, mikäli hankkeen eteneminen vastaa laskutusta (tukiryhmän ilmoitus VYR:n yhdyshenkilölle). Periaatteena on, että välierät laskutetaan jäljempänä mainittujen tunnistetietojen ja kustannuslajitteisen jaottelun mukaan ja varsinainen yksityiskohtainen tilitys ja selvitys tehdään viimeisen erän laskutuksen yhteydessä.

Kaikkeen rahoitusta koskevaan kirjeenvaihtoon ja veloitukseen on sisällytettävä seuraavat hankkeen tunnistetiedot:

– tutkimushankkeen nimi;
– VYR:n rahoituspäätöksen numero ja päivämäärä;
– rahoituspäätöksessä nimetyn yhdyshenkilön nimi; sekä
– rahoituspäätöksen euromäärä.

VYR käsittelee ja arkistoi laskut vain verkkolaskuina. Laskun mukana on myös oltava liitteet sekä kustannuserittely. Liitteiden suositeltava tiedostomuoto on pdf.

VYR:n verkkolaskutusosoite on:

– Verkkolaskuosoite/OVT-tunnus: 003707024793100
– Välittäjätunnus (OpusCapita Solutions Oy): E204503
– Y-tunnus: 0702479-3
– ALV-tunnus: FI07024793

Verkkolaskutuspalveluun kirjautuminen ja sen käyttöön liittyvät ohjeet löytyvät osoitteesta www.valtiokonttori.fi/verkkolaskutus.

VYR:n laskuihin liittyviin tiedusteluihin vastaa Riitta Elo, riitta.elo@gov.fi tai puh. 050 566 8298.

5.2 Välierien laskutus

Välierän laskusta tulee selvitä seuraavat tiedot:

– tunnistetiedot;
– aikaisemmin veloitettu summa;
– nyt veloitettava summa kustannuslajeittain kohdan 4 mukaisesti ja vielä käyttämätön rahoitus;
– suppea yhteenvetoselvitys laskutuskaudella tehdystä tutkimuksesta; sekä
– muiden rahoittajien rahoitusosuus ja toteutunut laskutus.

Laskutuksen tulee perustua toteutuneisiin kustannuksiin.

5.3 Viimeisen erän laskutus

Viimeinen erä (vähintään 20 prosenttia kustannuksista) voidaan laskuttaa, kun VYR:lle on toimitettu tutkimushankkeen loppuraportti tai muu rahoituspäätöksessä mainittu lopputulos. Loppulaskun maksuaikana käytetään 60 päivää, jolloin VYR:lla on riittävästi aikaa ottaa huomioon rahoituspäätöksessä nimetyn yhteyshenkilön mahdollisesti vuosiraporttia tai muuta lopputulosta koskevat huomautukset ennen laskujen eräpäivää.

Loppulasku ja selvitys tutkimustuloksista (vuosiraportti) tulee toimittaa VYR:lle 28. helmikuuta mennessä. Kyseinen lasku ja selvitykset toimitetaan samanaikaisesti tai aiemmin tiedoksi myös tutkimusohjelman hallintohankkeelle.

Loppulaskutuksessa esitetään:

– jäljennös alkuperäisestä kustannus- ja rahoitussuunnitelmasta,
– hakemusta vastaavalla tavalla eritelty selvitys toteutuneista kustannuksista,
– tilintarkastajan vakuutus, että kustannuserittely perustuu tilityksentekijän kirjanpitoon ja kustannuslaskentaan, ja että tilitys on laadittu näiden ohjeiden mukaisesti ja että kustannuserittelyyn ei ole sisällytetty menoja, jotka niiden mukaan eivät ole tilityskelpoisia, sekä että esitetyt hankkeen kokonaiskustannukset ovat oikeat ja rahoittajien osuudet ovat esitetyn mukaiset. Tilintarkastajan vakuutusta ei vaadita valtion virastoilta, laitoksilta ja yliopistoilta.
– suorittajan nimenkirjoitusoikeudenhaltijan allekirjoitus ja nimen selvennys.

6. Oikeus tuloksiin ja laitteisiin

Tutkimusohjelman yhteydessä hankitut tai kehitetyt laitteet, koneet, ohjelmistot ja tutkimustulokset ovat tutkimuksen suorittajan omaisuutta, ellei muuta ole sovittu.

Tutkimustulosten julkistamisesta päätetään rahoituspäätöksessä nimetyn yhdyshenkilön ja suorittajan kesken. Pääsääntö on, että tutkimustulosten on oltava julkaistavissa (ydinenergialaki 53 d §).

Mikäli hankkeen nimenomaisena kohteena on ollut uuden tietokoneohjelman kehittäminen kokonaan tai pääosin VYR:n rahoituksella, ydinturvallisuusalalla toimivat viranomaiset saavat erikseen täsmennettävin ehdoin määritellyn oikeuden käyttää tietokoneohjelmaa. Ohjelmiston käytön veloitusperusteista sovitaan tapauskohtaisesti.

7. Rahoituksen keskeyttäminen ja takaisinperintä

7.1 Rahoituksen keskeyttäminen

VYR:llä on oikeus keskeyttää hankkeen rahoittaminen, jos:

(1) suorittaja laiminlyö olennaisesti hankkeen toteuttamisen rahoituspäätöksen perusteena olevan hankesuunnitelman mukaisesti;
(2) suorittaja on esittänyt virheellisiä tietoja tai salannut seikkoja, jotka olisivat voineet vaikuttaa tilauksen tai sopimuksen tekemiseen tai sen ehtojen asettamiseen;
(3) suorittaja muuten olennaisesti laiminlyö rahoituspäätöksen ehtojen (mukaan lukien tässä esitetyt ehdot) noudattamisen; tai
(4) suorittajan taholla tapahtuneet hankkeen toteuttamiseen merkittävästi vaikuttavat muutokset ilmeisesti vaarantaisivat hankkeen toteuttamisen.

7.2 Rahoituksen takaisinperintä

Mikäli hankkeen rahoituksen keskeyttäminen aiheutuu 7.1 kohdan 1, 2 tai 3 alakohdassa mainitusta syystä, VYR:llä on oikeus saada takaisin suorittajalle maksamansa määrä sekä palautettavalle määrälle sen nostopäivästä lukien vuotuista korkoa siten kuin valtionavustuksista annetussa laissa (688/2001) on säädetty.

8. Erimielisyydet

VYR:n rahoittamia hankkeita koskevat erimielisyydet pyritään sovittelemaan neuvottelemalla VYR:n ja suorittajan kesken. Jos sovittelumenettely ei johda tulokseen, erimielisyydet ratkaistaan Helsingin hallinto-oikeudessa.

THE TERMS AND CONDITIONS APPLIED TO PROJECTS FUNDED BY THE NUCLEAR WASTE MANAGEMENT FUND (VYR)

1. Funding decision

The funding decision is based on the research plan attached to the funding application. The research plan also includes the funding plan and estimation of costs by cost type as well as the principles for the calculation of wages and salary costs and rewards.

The funding share of VYR mentioned in the funding decision is the maximum amount. It is not possible to deviate from the terms and conditions of the funding decision (including the terms and conditions presented in this document) without authorisation from VYR. Minor changes can be agreed between the organisation performing the project (hereinafter referred to as the Performing Party) and the contact person named in the funding decision.

The possible application of the de minimis rule has been recorded in funding decisions but the Performing Party must verify that, over a period of three years, it has not received funding in excess of 200,000 euros in projects that receive funding according to the de minimis rule (applies to companies only).

2. Subcontracting

If in addition to the Performing Party in question, subcontractors take part in implementing the project in the research programme, the Performing Party must make an agreement with them on the use of the funding, monitoring how it is used and the terms and conditions. Subcontractors must observe the funding terms and conditions of the project provided in this document.

3. Maintaining contact and monitoring

VYR will monitor the implementation and results of the project primarily through the contact person named in the funding decision.

The Performing Party must monitor the costs incurred either by using an internal accounting system or a record so that costs presented to VYR can be verified from the original accounting receipts if necessary. Subcontracting must be specified in accounting and invoicing.

VYR has the right to receive information about and to check the documents on which the invoicing by the Performing Party is based.

4. Invoicing principles

Direct and indirect costs can be accepted as costs arising from research projects. The share of indirect costs (overhead costs) must be specified in the funding application.

Wages and salaries of persons that have in accordance with the research plan participated in carrying out the assignment as well as other general personnel costs and overhead costs as well as material, supplies, equipment and ITC costs, costs of project-related trips and external services as well as costs of publication of the results, translation of the reports and communications procedures will be acceptable as direct costs.

The wages and salaries for the actual hours worked by persons who have directly participated in carrying out the work will be acceptable as wages and salaries for working hours. It must be possible to verify the hours worked from the internal cost accounting reports or from payroll accounting. Wages and salaries payments in general administration can not be invoiced. These costs will be taken into consideration through the overhead costs factor provided in the funding application.

The purchasing costs for machines, equipment and software necessary in implementing the project can only be accepted to the extent the equipment is used in the project in question. A proposal for including these costs in projects funded by VYR must be included in the funding applications. Regarding costs considered minor, the Performing Party can agree this with the contact person named in the funding application without a separate notification to VYR.

The regulations regarding public procurement and the government travel compensation rules must be observed in the project.

5. Invoicing

5.1. General

When a work phase defined in the research or implementation plan has been completed, the costs incurred during the period in question can be invoiced for excluding VAT (funding of projects in the VYR project portfolio is similar to state aid, the Act on Discretionary Government Transfers, 688/2001). The following periods for interim invoicing will be observed in the project:

- 1st instalment: Once VYR has made the funding decision, a maximum of 50% of the total funding can be invoiced. The costs incurred will be reported and will be specified in the invoice according to sections 4. and 5.2. The first invoice will be similar to a preliminary invoice. The invoice must state the unused amount of funding.
- 2nd instalment: Costs incurred by 30 October, at the maximum 80% of the total annual funding, the 1st instalment deducted. The incurred costs will be reported and specified according to sections 4. and 5.2. The invoice must state the unused amount of funding.
- the final invoice, for which special regulations are presented in section 5.3, covers the costs incurred during 1 January – 31 December that have not yet been invoiced for (or costs incurred by some other date mentioned in the funding decision).

VYR may discontinue the payments if the work has not progressed as required in the assignment. The person presenting the invoice will be notified of this by VYR or the contact person named in the funding decision.

VYR will pay the invoices regarding interim instalments within 30 days if the progress of the project corresponds to the invoice (notification from the steering group to the VYR contact person). In principle, interim instalments will be invoiced for on the basis of the identification details and allocation by cost type mentioned later, and the actual detailed accounting and report will be made when sending the invoice for the final instalment.

All correspondence and invoicing regarding the funding must be provided with the following project identification details:

- name of the research project;
- date and number of the VYR funding decision;
- name of the contact person named in the funding decision; as well as
- the amount of euros in the funding decision.

VYR will only handle and archive the invoices as electronic invoices. The invoice must include the appendices and the cost breakdown. The recommended format for the appendices is pdf.

The electronic invoicing information for VYR is:

- electronic invoicing address / OVT ID: 003707024793100
- electronic invoicing ID (through OpusCapita Solutions Oy): E204503
- business identity code (Y-tunnus): 0702479-3
- VAT-number: FI07024793

Instructions for online billing can be found at
https://www.valtiokonttori.fi/en/service/government-electronic-invoicing-website/

The contact person for VYR invoicing related questions is Riitta Elo, riitta.elo@gov.fi.

5.2 Invoicing interim payments

The interim invoices must include the following information:

- identification details;
- the amount charged previously;
- the amount charged now by cost type according to section 4 and the currently unused funding;
- a short summary of the research conducted during the invoicing period; as well as
- the funding shares of other funding parties and actual invoicing.

Invoicing must be based on actual costs incurred.

5.3 Invoicing for the final instalment

The final instalment (at least 20 percent of the costs) can be invoiced for when the final report of the research project or other result mentioned in the funding decision has been delivered to VYR. The payment term of the final invoice will be 60 days, in which time VYR will have sufficient time to take into consideration the possible comments made by the contact person named in the funding decision regarding the annual report or other outcome before the invoice date.

The final invoice and the report on research results (annual report) must be delivered to VYR by 28 February. The administration project of the research programme will be notified of the invoice and reports in question at the same time or earlier.

The final invoice will present:

- a copy of the original cost and funding plan,
- a report of the actual costs incurred specifying them as outlined in the application,
- an assurance from the auditor, that the cost specification is based on the accountable person's bookkeeping and cost accounting, and that the settlement of accounts has been prepared according to these instructions and that costs have not been included in the cost specification if they are not acceptable according to them, as well as that the proposed total cost of the project is correct and the shares of the funding parties are as presented. An assurance from the auditor is not required from central government agencies, institutes or universities.
- the signature by the person with the official right to sign for the Performing Party and the name in block capitals.

6. Right of ownership to results and equipment

The instruments, machines, software and results obtained or developed in connection with the research programme are the property of the Performing Party, unless otherwise agreed.

Decisions concerning the publication of research results will be made between the contact person named in the funding agreement and the Performing Party. As a general rule, research results have to be publishable (Nuclear Energy Act, Section 53 d).

If the express aim of a project has been to develop new software either entirely or mostly with VYR funding, the authorities operating in nuclear safety have the right to use the named software according to specified terms. Charges for use of the software will be agreed on a case-by-case basis.

7. Discontinuation and recovery of funding

7.1 Discontinuation of funding

VYR has the right to discontinue funding the project if:

1. the Performing Party is essentially neglecting the implementation of the project according to the project plan that the funding decision was based on;
2. the Performing Party has presented erroneous information or has concealed issues which might have affected making the order or agreement or setting the terms for such an agreement;
3. the Performing Party is essentially neglecting the terms and conditions in the funding decision (including the terms and conditions presented here); or
4. changes significantly affecting the project implementation incurred by the Performing Party would obviously endanger the implementation of the project.

7.2 Recovery of funding

If the funding is discontinued due to a reason mentioned in subsections 1, 2 or 3 of section 7.1, VYR has got the right to recover the amount it has paid to the Performing Party as well as the annual interest on the recovered amount from the day it was withdrawn as laid down in the Act on Discretionary Government Transfers (688/2001).

8. Disputes

An attempt will be made to conciliate disputes regarding projects funded by VYR by negotiations between VYR and the Performing Party. If the conciliation procedure does not lead to a result, the disputes will be solved in the Helsinki District Court.

24.3.2022

VALTION YDINJÄTEHUOLTORAHASTON (VYR) SOVELTAMAT EHDOT SAFER2028-TUTKIMUSOHJELMAN HALLINTOHANKKEESSA

1. Tilaus

Tilaus tehdään suunnitelmasta, joka sisältää työsuunnitelman ja kustannusarvion kustannuslajeittain sekä palkkojen ja palkkioiden laskentaperusteet. Tilauspäätöksellään VYR tilaa hallinto-/koordinaatiopalvelun päätöksessä mainitun ja sen liitteenä olevan tarjouksen mukaisena. Tilauksesta aiheutuvia velvoitteita ei voida siirtää ilman VYR:n suostumusta kolmannelle osapuolelle. Ensisijainen hankkeen suorittaja ja hankkeesta vastuullinen taho on tutkimusohjelman hallintotyöstä vastaavan, tilauspäätöksessä mainitun henkilön taustaorganisaatio (seuraavassa ”suorittaja”).

Tilauksessa mainittu VYR:n rahoitus on enimmäismäärä. Tilauksen ehtojen tai siinä hyväksyttyjen kustannuslajien olennainen muuttaminen edellyttää VYR:n hyväksymistä. Vähäisistä muutoksista rahoituksen saaja voi sopia tilauspäätöksessä mainitun yhdyshenkilön kanssa.

2. Valvonta

VYR:lla on oikeus seurata tilauksessa määriteltyjen tavoitteiden ja tulosten saavuttamista ja niistä aiheutuneita kustannuksia sekä tutkimusohjelman hankkeiden raportointia ja niistä tiedottamista. Seuranta tapahtuu ensisijaisesti yhdyshenkilön kautta.

Mikäli hankkeen toteuttamiseen osallistuu kyseisen hankkeen suorittajan lisäksi alihankkijoita, tulee hankkeesta vastuullisen huolehtia, että alihankkijat noudattavat näitä ehtoja.

Suorittajan on seurattava hankkeesta aiheutuvia kustannuksia joko sisäistä laskentajärjestelmää tai kirjausluetteloa käyttäen siten, että VYR:lle esitetyt kustannukset ovat tarvittaessa vaikeuksitta todennettavissa kirjanpidon alkuperäistositteista. Tilinpidossa ja laskutuksessa tulee eritellä myös alihankinnat.

VYR:lla on oikeus saada tietoonsa ja tarkastaa asiakirjat, joihin suorittajan laskutus perustuu.

Suorittaja on velvollinen ilmoittamaan tilauspäätöksen perusteena olevassa tarjouksessa esitettyjen, hankkeen suunnitelman mukaiseen suorittamiseen mahdollisesti vaikuttavien seikkojen muuttumisesta tilaajalle välittömästi. Tällaisena seikkana pidetään erityisesti hallintohankkeesta vastaavan henkilön esteestä suorittaa tehtävä suunnitellusti.

3. Veloitusperusteet

Maksettaviksi kustannuksiksi voidaan hyväksyä hankkeesta aiheutuvia välittömiä ja välillisiä kustannuksia.

Välittöminä kustannuksina hyväksytään suunnitelman mukaiset toimeksiannon suorittamiseen osallistuneiden henkilöiden palkat sekä muut palkkaukseen liittyvät henkilökustannukset, aine-, tarvike- ja laitekustannukset, hankkeeseen liittyvistä matkoista ja vieraista palveluista aiheutuvat kustannukset sekä tulosten julkaisemisen, raporttien kääntämisen ja tiedottamistoimenpiteiden kustannukset.

Työajan palkoiksi hyväksytään työhön suoranaisesti osallistuneiden henkilöiden todelliset tehdyn työajan palkat. Tehtyjen tuntien on oltava todennettavissa sisäisen laskennan raporteista tai palkkakirjanpidosta. Yleishallintoon kuuluvat palkat eivät ole laskutuskelpoisia. Nämä kulut otetaan huomioon rahoitushakemuksessa esitetyn yleiskustannuskertoimen kautta.

Hankkeessa tulee noudattaa julkisia hankintoja koskevia määräyksiä sekä valtion matkustussääntöä. Hankkeen suorittaja on vastuussa kyseisten, hankintoja ja matkustamista koskevien ohjeiden ja määräysten noudattamisesta.

4. Laskutus

4.1 Yleistä

Syntyneet kustannukset voidaan laskuttaa neljännesvuosittain VYR:n tehtyä tilauspäätöksensä kuitenkin niin, että ensimmäinen laskutus voidaan tehdä välittömästi niiden tilauspäätöksen perusteena olevan hankesuunnitelman mukaisten kulujen osalta, jotka ovat syntyneet ennen päätöstä, kuitenkin enintään 30 % kokonaisrahoituksesta. Viimeinen laskutuserä, joka on vähintään 20 % kokonaisrahoituksesta voidaan laskuttaa hankkeen tultua kokonaan suoritetuksi. Viimeisen erän ajoittuminen voi olla riippumaton edellä todetusta neljännesvuosilaskutusten syklistä.

VYR voi keskeyttää maksusuoritukset, mikäli työ ei ole edennyt toimeksiannon edellyttämällä tavalla. VYR ilmoittaa tästä laskun esittäjälle.

VYR maksaa laskut viimeistä erää lukuun ottamatta 30 päivän kuluessa, mikäli hankkeen eteneminen vastaa laskutusta.

Kaikkeen tässä päätöksessä mainittua rahoitusta koskevaan kirjeenvaihtoon ja veloitukseen on sisällytettävä seuraavat hankkeen tunnistetiedot:

– tutkimushankkeen nimi;
– VYR:n rahoituspäätöksen numero ja päivämäärä;
– rahoituspäätöksessä nimetyn yhdyshenkilön nimi; sekä
– rahoituspäätöksen euromäärä.

VYR käsittelee ja arkistoi laskut vain verkkolaskuina. Laskun mukana on myös oltava liitteet sekä kustannuserittely. Liitteiden suositeltava tiedostomuoto on pdf.

VYR:n verkkolaskutusosoite on:

– Verkkolaskuosoite/OVT-tunnus:	003707024793
– Välittäjätunnus (OpusCapita Solutions Oy):	E204503
– Y-tunnus:	0702479-3
– ALV-tunnus:	FI07024793

Verkkolaskutuspalveluun kirjautuminen ja sen käyttöön liittyvät ohjeet löytyvät osoitteesta www.valtiokonttori.fi/palvelu/verkkolaskutus.

VYR:n laskuihin liittyviin tiedusteluihin vastaa Riitta Elo, riitta.elo@gov.fi tai puh. 050 566 8298.

4.2 Välierien laskutus

Ennen viimeistä erää laskutettavien erien laskuista tulee selvitä seuraavat tiedot:
– edellä mainitut tunnistetiedot;
– aikaisemmin veloitettu summa;
– nyt veloitettava summa kustannuslajeittain;
– suppea yhteenvetoselvitys laskutuskaudella tehdystä koordinaatiotyöstä.

Laskutuksen tulee perustua toteutuneisiin kustannuksiin.

4.3 Viimeisen erän laskutus

Viimeisen erän (vähintään 20 prosenttia kustannuksista) laskusta tulee selvitä seuraavat tiedot:
– hankkeen tunnistetiedot;
– aikaisemmin veloitettu summa;
– nyt veloitettava summa kustannuslajeittain;
– yhteenvetoselvitys viimeisellä laskutuskaudella ja koko hankkeessa tehdystä koordinaatiotyöstä.

Loppulaskun maksuaikana käytetään 60 päivää, jotta VYR:llä on mahdollisuus varmistua siitä, että työ on suoritettu loppuun hankesuunnitelman mukaisena. Loppulasku kustannuserittelyineen ja selvitys koordinaatiotyöstä tulee toimittaa VYR:lle kuukauden kuluessa viimeisten laskutettavien kustannusten syntymisestä.

5. Poikkeustilanteet

5.1 Tilauksen peruuttaminen

VYR:lla on oikeus peruuttaa tilaus, jos
(1) suorittaja laiminlyö olennaisesti tilauksen mukaiset velvollisuutensa tai varojen käytöstä annettujen määräysten ja ohjeiden noudattamisen,
(2) suorittaja on esittänyt virheellisiä tietoja tai salannut seikkoja, jotka olisivat voineet vaikuttaa tilauksen tekemiseen tai sen ehtojen asettamiseen; tai
(3) suorittaja muuten olennaisesti laiminlyö tilauksen ehdot; tai
(4) suorittajan taholla tapahtuneet hankkeen toteuttamiseen merkittävästi vaikuttavat muutokset ilmeisesti vaarantaisivat toimeksiannon suorittamisen; tai

5.2 Maksujen takaisinperintä peruuttamistapauksessa

Mikäli tilauksen peruuttaminen johtuu toimeksiannon suorittajan 5.1. kohdan 1, 2 tai 3 alakohdan mukaisesta menettelystä, VYR:lla on oikeus saada takaisin toimeksiannon suorittajalle maksamansa määrä sekä palautettavalle määrälle sen nostopäivästä lukien vuotuista korkoa ja viivästyskorkoa. Korko määräytyy korkolain (633/1982) 3 §:n 2 momentin mukaan ja viivästyskorko 4 §:n 3 momentin mukaan.

6. Erimielisyydet

Tähän tilaukseen liittyvät erimielisyydet pyritään sovittelemaan ensisijaisesti neuvottelemalla VYR:n ja suorittajan kesken. Siltä osin kuin neuvottelujen ja tässä esitettyjen ehtojen perusteella ei voida ratkaista mahdollisia erimielisyyksiä, sovelletaan lisäksi julkisia hankintoja koskevia yleisiä sopimusehtoja. Jos mainitut sovittelumenettelyt eivät johda tulokseen, erimielisyydet ratkaistaan Helsingin hallinto-oikeudessa.

SAFER2028 Disqualification Guideline for Evaluation Process

During the evaluation of the project proposals the eligibility of the evaluators must be taken into consideration at all phases. Management Group and Steering Group members as well as other experts taking part in the evaluation can be disqualified for evaluating a proposal for e.g. the following reasons:

1. Personal gain or loss from the financing decision of the proposal.
2. The evaluator has worked in the same research group with the applicant (the responsible contact person for the application) in the past three years or has joint scientific publications with the applicant in the past three years.
3. The evaluator has acted as a manager, subordinate, or thesis supervisor of the applicant during the past three years.
4. The evaluator represents another organisation applying for funding in the same call.
5. The evaluator is a family member of the applicant:
    - Spouse or a child, grandchild, sibling, parent, grandparent or other particularly close person, or their spouse
    - Parents' siblings and their spouse, siblings' children and ex-spouse
    - Spouse's child, grandchild, sibling, parent and grandparent, as well as their spouse and spouse's siblings' children.
6. If trust in their impartiality is compromised for any other particular reason or if the evaluator themselves feels that they are disqualified for a specific reason.

A disqualified evaluator must leave the evaluation meeting when the proposals he or she is disqualified for are being discussed. The evaluator can also not participate in numerical evaluation of these proposals.

dd.mm.yyyy

ACRONYM - Project full name

Project progress and status of the deliverables, TAGn.n meeting x/20xx

Update above the date, project name, number of TAG the project belongs to, and the meeting number. List all deliverables and milestones planned for the on-going project year in the table similarly as in the project plan.

Estimate the completion of each deliverable based on the results achieved so far (use the scale 0%, 5%=started, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95%, 100% = report approved).

Delete all instructions in italic in the end.

Deliverable number	Deliverable name	Indicative person months	Completion estimate (0-100%)
D1.1.1	1st deliverable of T1.1		
Xxxxxx… *Concise description of work carried out and essential research results, plan for the near future, possible problems, status of the deliverable etc. The reporting is used to assess project progress and also for the approval of invoicing.*			
D1.1.2	2nd deliverable of T1.1		
..	…		
M1	**Milestone**		
D1.2.1	1st deliverable of T1.2		
D1.2.2	2nd deliverable of T1.2		
…			
D2.1.1	1st deliverable of T2.1		
D2.1.2	2nd deliverable of T2.2		
…			
D3.1.1	1st deliverable of T2.1		

Deliverable number	Deliverable name	Indicative person months	Completion estimate (0-100%)
	Total		

Has there been changes to the original project plan?

☐ Yes

☐ No *(explain below)*

Comments

Describe here for this reporting period:

- *Potential challenges in achieving the results or keeping the schedule*
- *Necessary changes to the original project plan explaining the reasons*
- *Changes in funding (if pending funding decision has been confirmed etc.)*

Deliverable follow-up:

Number	Deliverable name	Type	Planned completion	Sent for review	Reviewer	Approval
D1.1.1	Name of D1.1.1		dd.mm.yyyy	dd.mm.yyyy	N.N., Company	dd.mm.yyyy
D1.1.2	Name of D1.1.2					
…	…					
D1.2.1	Name of D1.2.1					

Deliverable type:

S = scientific journal article or article in a book etc. with external review
C = conference article with external review
R = research report of own organisation or another organisation
T = thesis or dissertation
O = other (other kind of deliverables that are considered not to need a review such as an abstract, slide set, travel report etc.).

A reviewer is not nominated for the publications of types "T" and "O".

If the planned completion date is changed, strikethrough the original and add the new date below.

The internal review in SAFER2028 should not by any means affect the submitting of the paper for external review or publication. Possible aspect related to confidentiality shall be checked before internal review if necessary.

The deliverable can be approved if a review is not received within three (3) weeks.

SAFER2028
Ydinturvallisuustutkimus

Hankkeen koko nimi		
Hankkeen lyhytnimi		Lasku nro
VYR:n päätöksen diaarinumero ja päivämäärä		

Tutkimuksen suorittaja

Laitos tai yritys	Toimintayksikkö	
Postiosoite		Puhelin
Kustannustilityksen yhdyshenkilö	Sähköposti	Puhelin

Kustannuserittely (euroa)

Kustannuslaji (Ilman arvonlisäveroa)		Aikaisemmin raportoidut kustannukset	**Kustannukset kaudelta** **dd.mm.yy - dd.mm.yy**	Kustannukset yhteensä	Rahoitus-päätöksen kustannus-arvio
a Palkkakustannukset					
- tehdyn työajan palkat					
- muut henkilökustannukset	**60 %**				
b Yleiskustannukset	**85 %**				
c Koneet ja laitteet					
d Tarvikkeet					
e Vieraat työt ja palvelut					
- projektit alihankintoina					
- muut vieraat työt ja palvelut					
f Jäsenmaksut (jotka rahoitetaan 100% VYR): *kaudella maksetut listataan tässä*					
g Matkakustannukset					
h Muut kustannukset (ml. tulosten julkaiseminen ja tiedotus)					
Yhteensä					
Arvonlisävero					

Työaikaerittely (kaudelta)

Henkilö	**Käytetty työaika (htkk)**	**Henkilö**	**Käytetty työaika (htkk)**

Käytetty työaika yhteensä (htkk) **Kaudelta** | **Yhteensä projektin alusta** (tarkkuudella 0,1 htkk)

Matkojen erittely (kaudelta)

Matkakohde (valtio, kaupunki)	**Matkan aihe (konferenssin nimi tms.)**	**Kokonaiskustannus (euroa, ei työkustannuksia)**

Matkakustannukset yhteensä **(euroa)**

Rahoituksen erittely (euroa)

Rahoittaja	Aikaisemmin raportoitu rahoitus	**Rahoitus kaudella** **dd.mm.yy - dd.mm.yy**	Rahoitus yhteensä	Rahoitus-päätöksen mukainen rahoitus
VYR				
Oma rahoitus				
Yhteensä				

Internal review of a publication

See page 2 for instructions.

Technical Advisory Group	Project acronym	Deliverable	Reviewer, organisation	Date
TAG n.n		Dx.x.x		x.x.20xx
Title of the publication:				
Author(s):				

Type of publication:

Scientific journal article or similar ☐ Conference article ☐ Research report ☐ Other ☐
Description if "Other":

Does the publication meet the objectives described in the research plan?

YES ☐ *(no justification needed)* NO ☐ *(please provide justification below)*
Justification:
Proposal for corrective actions:

The most important outcome(s):

Summaries of the following assessments are also used as indicators of the whole SAFER2028 programme.

Readiness for real-world applications and suggestions how to utilise the results:

Exploitation of the results:

within 0-2 years ☐ later ☐ no use ☐ cannot say ☐
by authorities ☐ power companies ☐ in research ☐
Justification and comments:

Scientific and technical level of the results (note also the allocated resources):

excellent ☐ good ☐ satisfactory ☐ poor ☐ not applicable ☐ cannot say ☐

Quality of the reporting:

excellent ☐ good ☐ satisfactory ☐ poor ☐

Please return the filled form by e-mail to safer2028@vtt.fi and the project manager.
Possible detailed comments can be sent by e-mail to the project manager.
Please note that the evaluations may be set available on SAFER2028 intranet.

Instructions for SAFER2028 internal review

The project manager should fill the blue cells before sending the publication evaluation form.

The following types of publications are reviewed:

S = scientific journal article or article in a book etc. with external review
C = conference article with external review
R = research report of own organisation or some other organisation.

The following types of publications are not reviewed:

T = thesis or dissertation
O = other (other kind of deliverables that are considered not to need a review such as an abstract, slide set, travel report etc.).

The reviewer shall check the objectives described in the project plan. The project plans are available in the SAFER2028 extranet (https://www.safer2028.fi/extranet/). They can be obtained also from the project manager or from SAFER2028 programme administration (safer2028@vtt.fi).

Readiness for real applications and suggestions how to utilise the results:

- Please discuss the expected use of the results in the end user organisations (authorities, power companies).

Exploitation of the results:

- Please give your opinion on the exploitation of the results in your own organisation or other SAFER2028 end user organisations (authorities, power companies, Posiva).
- Please also indicate if you think that the result will be exploited by the research organisations as an intermediate result necessary for the final results to be utilised later by the end user organisations.

Scientific and technical level of the results:

- Excellent: Research on high international level with no essential weaknesses.
- Good: Research is on international level. A few minor weaknesses may exist.
- Satisfactory: Research is on strong national level. Several minor weaknesses may exist.
- Poor: Research is clearly not on international level and not on strong national level. Moderate or strong weaknesses exist.
- Not applicable: the report clearly includes intermediate results for further research (e.g., data from the experiments, plans for construction etc.)
- Cannot say: the reviewer feels he cannot compare the results with international level.

Quality of the reporting:

- The publications and reports differ in scope and the same criteria do not apply well for all of them. However, the following criteria can be considered:
    - Are the methods and results reported clearly so that they are easy to understand for an expert in the area?
    - Is the comparison with the state-of-the-art adequate?
    - Has the impact of the results on nuclear safety been discussed sufficiently?
    - Are there unclear points not adequately explained or other obscurities?

- Excellent: The applicable of the criteria described above are well satisfied.
- Good: Minor deficiencies exist.
- Satisfactory: Moderate deficiencies exist.
- Poor: The report does not adequately satisfy the above criteria.