

Deliverable D.2.1

Guideline 1st Call

Acronym: CSP

Title: Joint programming actions to foster innovative CSP solutions

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WP 2: Preparation and launch of the co-funded call

Task 2.3: Call Documentation and Guidance

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Lead beneficiary: AGENEX

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1. Introduction

The CSP ERANET 1st Cofund Joint Call is carried out by national / regional research and technology development (RTD) and innovation programmes and national / regional funding agencies in the field of concentrating solar power (CSP) / solar thermal electricity (STE). The CSP ERANET 1st Cofund Joint Call is carried out by the following countries and regions: Germany and North-Rhine-Westphalia, Greece, Israel, Italy, Portugal, Spain and Extremadura, Switzerland and Turkey.

Important dates:

- Official opening of the Call: 07.10.2019 12:00 CET
- Webinar: October 2019
- Deadline for submitting preproposals: 10.01.2020 17:00 CET
- Deadline for submitting full proposals: 19.06.2020 17:00 CET (Update)
- Feedback on funding decisions by 06.10.2020 and project starts from November/December 2020 on (Update)

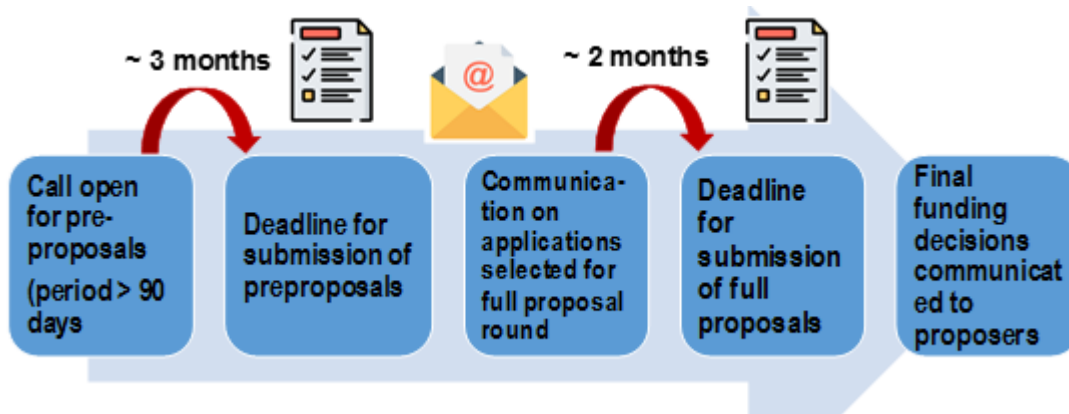


Figure 1: Workflow for participation.

2. Participating States, Organisations and Programmes

The participating national CSP-ERANET partners / contact points are listed in Table 1. Each applicant is strongly encouraged to check the project idea with the national contact point as early as possible in the preproposal phase, at the latest before submitting any applications.



Figure 2: Organisations involved in promoting the CSP ERANET 1st Cofund Joint Call and providing support and funding to innovative transnational projects.

Table 1: National / regional Funding Organisation Contact Points in CSP ERANET 1st Cofund Joint Call		
Country / Region	Organisation (Funding Organisation or Contact Point)	Contact(s) and Domain(s)
Germany	Projekträger Jülich (PtJ)	<p>Geschäftsbereich Energiesystem: Erneuerbare Energien/Kraftwerkstechnik, Fachbereich / Kraftwerkstechnik und CCS, Solarthermische Kraftwerke (ESE 5) Tarik Schwarzer: t.schwarzer@fz-juelich.de, +49 2461 61 9157</p> <p>Electronic submission system: Renate Horbelt: r.horbelt@fz-juelich.de, +49 2461 61 9874 Kambulakwao Chakanga: k.chakanga@fz-juelich.de, +49 2461 61 9871</p>

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Portugal	DGEG	Direção Geral de Energia e Geologia Isabel Cabrita Isabel.cabrita@dgeg.pt , +351 217922753
Spain	Agencia Estatal de Investigación (AEI)	PhD. Alberto Abánades era-energia@aei.gob.es Daniel Ruiz Iruela (Administrative and technical issues) daniel.ruiz@fecyt.es , +34 916037968
Spain-CDTI	Centre for the Development of Industrial Technology (CDTI)	Héctor Gonzalez Menendez hector.gonzalez@cdti.es ERANETS CDTI eranets@cdti.es
Spain-Extremadura	Junta de Extremadura-	Director General: Samuel Ruiz Fernández dgieym.ei@juntaex.es +0034 924 00 54 48 raquelmaria.prieto@juntaex.es +0034 924 00 54 48

	Dirección General de Industria, Energía y Minas	
Spain-Extremadura	Agencia Extremeña de la Energía AGENEX	<p>AGENEX</p> <p>Rachel Tully: rctully@agenex.net, +34 924 262 161</p> <p>Alfredo Pérez: aperez@agenex.net, +34 924 262 161</p> <p>Fernando Rivas frivas@agenex.net +34 924 262 161</p>
Switzerland	Swiss Federal Office of Energy (SFOE)	<p>Stefan Oberholzer:</p> <p>stefan.oberholzer@bfe.admin.ch, +41 58 465 89 20</p>
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3. Scope and Topics of the CSP ERANET 1st Cofund Joint Call

CSP ERANET 1st Cofund Joint Call topics are based on priorities identified in the Strategic Energy Technology (SET) Plan resp. in the subsequent Implementation Plans for CSP (available on the website CSP-ERANET). They include strategic targets that shall serve as reference for this call and proposals to be submitted. **Strategic targets** of the Implementation Plans for CSP are as follows:

1. Short-term: > 40% cost reduction by 2020 (from 2013) translating into
 - Supply price < 10 c€/kWh for a radiation of 2050 kWh/m²/year (conditions in Southern Europe)
2. Longer-term: develop the next generation of CSP/STE technology
 - New cycles (including supercritical ones) with a first demonstrator by 2020, with the aim to achieve additional cost reductions and opening new business opportunities.

The above-mentioned 2020 targets are to be adapted accordingly to the transnational projects' end year (i.e. 2022).

The Project will be based on the research and priorities identified in the SET Plan¹ and the CSP Implementation Plan², prioritizing 8 topics originates from the STAGE-STE Deliverable 2.3 "Final R+D input to Implementation Plan technological research programme to CSP/STE defined targets achievement".

The 8 topics are:

1. Advanced linear Fresnel technology
2. Parabolic trough with molten salt
3. Parabolic trough with silicone oil
4. Open volumetric air receiver
5. Improved central receiver molten salt technology
6. Next generation of central receiver power plants
7. Multi-tower beam down system
8. Advanced TES (Thermal Energy Storage)

¹ https://setis.ec.europa.eu/sites/default/files/setis%20reports/2017_set_plan_progress_report_0.pdf

² <https://setis.ec.europa.eu/solar-thermal-electricity-concentrated-solar-power-implementation>

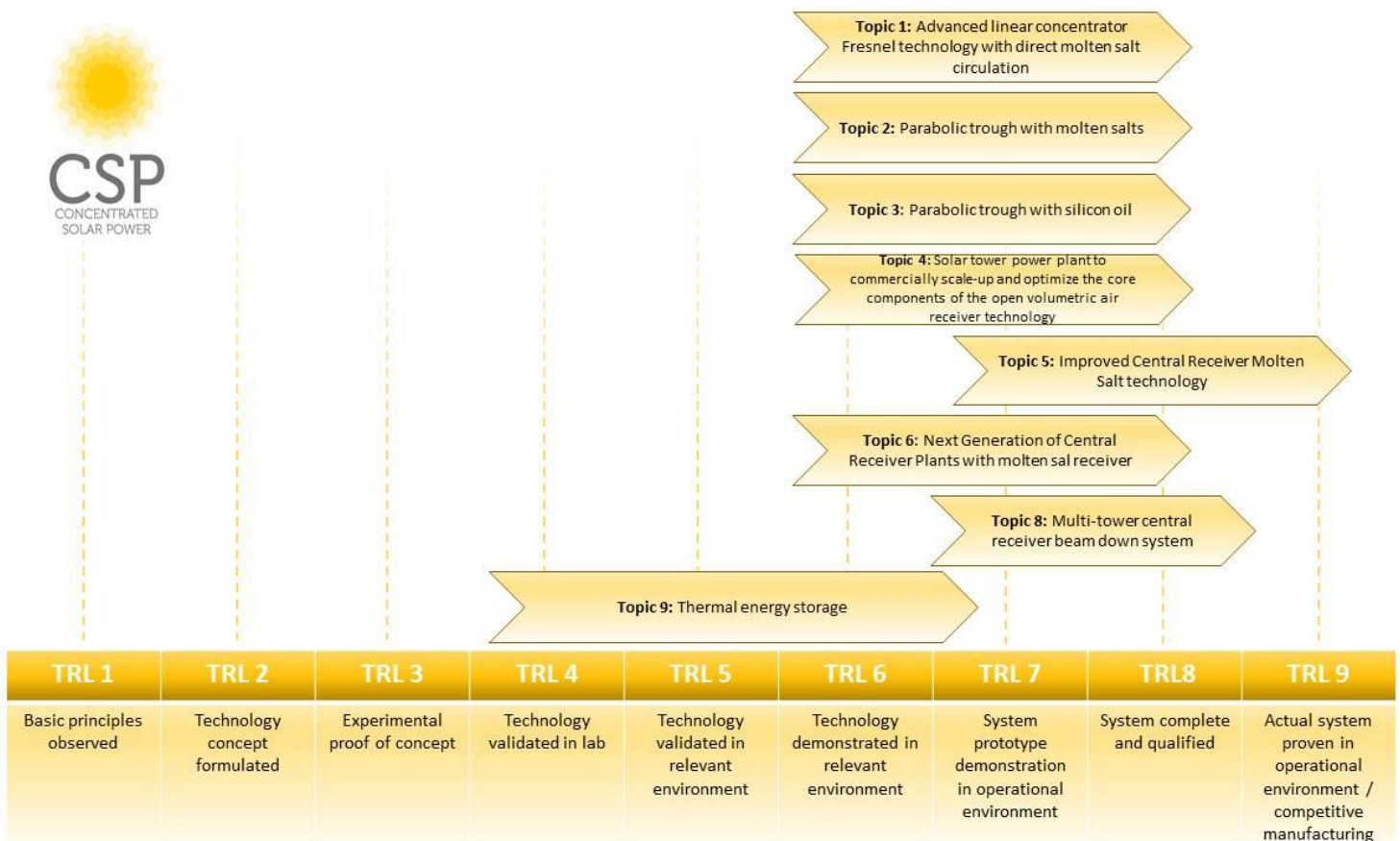


Figure 3: The topics of the CSP ERANET 1st Cofund Joint Call

Topic 1: Advanced linear concentrator Fresnel technology with direct molten salt circulation

Scope: Proposals should aim at the development of linear Fresnel technology with molten salts as working fluid and heat storage medium to take this technology to the next logical step, that of increased concentration to enable operation at higher temperatures and thus, higher thermodynamic conversion efficiency, together with a much-reduced storage size for the same amount of energy stored.

Areas / subtopics:

- 1.1. Testing and evaluating critical plant components (reliability of standard components)
- 1.2. Develop plant engineering, for full operation control in clear skies and variable solar radiation days, start-up and shutdown operation, night time freezing protection, including drain-down gravity assisted strategies.
- 1.3. Selection of best molten salt suitable regarding technical, economical and risk assessment, as well as corrosion related impacts.
- 1.4. Demonstration of evacuated tubular receivers with selective coatings to be heat resistant (no out-gassing) and inner pipes to be corrosion resistant.
- 1.5. Optimization of the (modular) thermal storage, its integration and operational requirements in the system, in order to improve scalability and reduce freezing risks.

- 1.6. Demonstration of molten salt specific operations (availability of emergency operations).
- 1.7. Technical-economical optimization of the existing solar field.
- 1.8. Development of a library for industrial needs and creation of a complete model in order to define process control.
- 1.9. Integration of forecasting and power grid management and trading as a key input for reliable operation

TRL: 6 to 8.

Topic 2: Parabolic trough with molten salts

Scope: Proposals should aim at attaining an increase of reliability in the whole system by reducing risks originating from molten salt specific operation conditions in main but also sub-ordinate components. The action should address all risk-relevant components and include a well-organized project management.

Areas / subtopics:

- 2.1. Testing and evaluating critical plant components (reliability of standard components).
- 2.2. Testing and demonstration of process control concept (reliability of normal control).
- 2.3. Demonstration of molten salt specific operations (availability of emergency operations).
- 2.4. Systematic risk assessment and documentation for molten salt line focusing systems.
- 2.5. Development/testing of new concentrator systems

TRL: 6 to 8.

Topic 3: Parabolic trough with silicone oil

Scope: Proposals should aim at demonstrating all sub-components such as collectors, mirrors, receivers, valves, heat exchanger and steam generator in a pre-commercial scale with up to 2 complete solar collectors loops. The accompanying research actions should answer all open questions concerning performance and durability of all involved elements of the system to reach bankability at the end of the project.

Areas / subtopics:

- 3.1. Construction of up to 2 loops of full scale parabolic trough collectors including oil/salt heat exchanger and steam generator.
- 3.2. Long term operation to identify durability issues.
- 3.3. Assessment of performance of collector and its subcomponents.
- 3.4. Analysis of solar flux and heat transfer at receivers.
- 3.5. Analysis of heat transfer fluid composition and verification of its durability and chemical stability during commercial plant operation.
- 3.6. Optimization of (oil/salt) heat exchanger for increased temperatures up to 430°C.

TRL: 6 to 8

Topic 4: Solar tower power plant to commercially scale-up and optimize the core components of the open volumetric air receiver technology

Scope: Proposals should aim at the implementation of an open volumetric receiver technology in a plant size of at least 50 MW. A plant like this would incorporate a receiver with a thermal output of 360-400 MW thermal and a thermal storage capacity of at least 1 GWh. The plant would have a surrounding 360° heliostat field and four individual receivers (~80-100 MW thermal each) pointing in four directions. A reasonable intermediate step for the receiver would be one fourth of the 300-400MW thermal receiver with a 90° heliostat (north-)field. The actions proposed should support the commercial implementation of such plant

Areas / subtopics:

- 4.1. Design of scaled-up open volumetric receiver (50-100 MW thermal) and optimization of the receiver design for increased efficiency.
- 4.2. Design of scaled-up fixed bed thermal energy storage.
- 4.3. Design of cost and performance optimized heliostats by optimizing drive units, mirror reflectivity and optical properties.
- 4.4. Detailed overall plant design for an intermediate commercial plant size of approximately 10 MW (50-100 MW thermal) including the up-scaled and optimized components.
- 4.5. Optimized plant and operational concepts in order to balance electricity production with other renewables and market the produced electricity.

TRL: From 6 to 8

Topic 5: Improved Central Receiver Molten Salt technology

Scope: Proposals should aim at covering some of the main systems of a commercial central receiver plant using molten salt (i.e., the solar field, the storage system, the solar receiver, the control and monitoring systems, the steam generating system and turbine) as well as operation and maintenance issues.

Areas / subtopics:

- 5.1. Increase nominal and annual performance of heliostats and heliostat field by 5% and reduce heliostat cost to < 100€/m².
- 5.2. For the solar receiver: Identification and selection of new suitable materials. Reduction of total receiver surface required for a given output.
- 5.3. For the control: Completely automated procedure must be developed to calibrate the whole heliostat field in a short time. Develop methods to measure receiver temperature and flux distribution. Determination of atmospheric attenuation on line.
- 5.4. For the storage system: Improvements in heat tracing. Improvements of storage tanks designs.
- 5.5. For the steam generation and turbine: Optimization of steam generator design. Improvement of operational flexibility of the turbine. Improvement of the life of the turbine components.

5.6. In terms of operation and maintenance (O&M): Development of predictive maintenance tools, systems and procedures to reduce maintenance costs.

TRL: From 7 to 9

Topic 6: Next Generation of Central Receiver Plants with molten salt receiver

Scope: Proposals should aim at contributing to the development of the next generation of CSP plants by achieving additional cost reduction and open new business opportunities. These R&D actions are focused on the central receiver technology with molten salts. Since most of the R&D activities proposed can be implemented in both small and large size plants there is no additional constraint due to the plant size.

Areas / subtopics:

- 6.1. Innovative solar field configurations should be considered to optimize the plant design.
- 6.2. Development of different low-cost heliostat designs according to their specific requirements as a function of their position in the solar field.
- 6.3. Smart independent heliostat developments (self-calibrated, self-diagnosis).
- 6.4. Wireless and autonomous commercial heliostat field developments.
- 6.5. Higher temperature solar receiver according to the needs of new power cycles to guarantee reliability and performance
- 6.6. Use of innovative molten salts to allow a wider operation range.
- 6.7. Development of new control tools to handle and optimize the operation of the innovative solar field configurations.
- 6.8. Development of methodologies for online heliostat field characterization and diagnosis.
- 6.9. Increase of accuracy of instrumentation for high temperatures: 1- Steam generation and turbine 2- Monitoring of molten salt degradation status and potential corrosion of molten salt loop 3- Low-water or waterless cleaning systems developments 4- New pumping equipment to recover gravitational energy 5- Optimization of O&M procedures

TRL: From 6 to 8.

Topic 7: Multi-tower central receiver beam down system

Scope: Proposals should aim at improving the "beam down" solution that simplifies the construction of the receiver as well as the tower with very positive impact on the CSP plant costs. Simplicity, modularity and robustness can result in a strong reduction of CSP installation costs and of operative cost.

Areas / subtopics:

- 7.1 Industrial optimization of mirror design and manufacturing.
- 7.2 Optimization of cavity integrated with storage.
- 7.3 Industrial optimization operating at very high temperatures.
- 7.4 Cost reduction and optimization (O&M) of tracker.
- 7.5 Study and test of high temperature components.
- 7.6 Operating control strategies for components, plant with thermal energy storage.

7.7 Operate a 2 MW thermal solar receiver.

TRL: From 5 to 8

Topic 8: Advanced Thermal energy storage

Scope: Proposals should aim at developing innovative thermal storage concepts and materials (media) with either affordable cost or outstanding volumetric energy density or higher working temperatures, paying special attention to the reliability of the systems, subsystems associated and storage materials available, including pumps, valves, instrumentation, tank(s) and heat exchanger equipment.

Areas / subtopics:

- 8.1. Development and testing of new storage concepts and/or media with potential to provide efficient, reliable, and economic thermal energy storage.
- 8.2. Identification and selection of storage subsystems materials with suitable characteristics such as compatibility with the storage.
- 8.3. Design and testing of main subsystems and components.
- 8.4. Detailed analysis of storage integration in CSP plants.
- 8.5. Different plant scheme analyses,
- 8.6. Detailed operation and performance analysis.
- 8.7. Detailed cost reduction analysis and impact in LCOE.
- 8.8. Demonstrator at a representative scale.

TRL: From 4 to 6-7

IMPORTANT: Not all programmes / funding agencies will accept applications in all topics (see Table 2 and in the Annex “National / Regional Requirements”) and for all Technology Readiness Levels (TRL’s), and some will prioritise some topics over others. Lower TRL research activities necessary to support demonstration and validation activities might be potentially in scope for CSP ERA NET funding, where they are a minor but integral part of wider projects, which progress a technology though to TRL’s of this topic. **Applicants are strongly encouraged to follow the instructions specified in the National requirements annexes and check with their national / regional contact points whether the project idea fits within the national / regional constraints.**

Eligible topics and areas / subtopics are shown in Table 2 for each funding organisation participating in the CSP ERANET 1st Cofund Joint Call.

Table 2: Matrix of eligible topics and subtopics per country / region resp. funding agency

	Germany	Germany-NRW	Spain-AEI	Spain-CDTI	Turkey	Greece	Switzerland	Italy	Israel	Portugal	Spain - Extremadura
1. Advanced linear Fresnel technology											
1.1			x	x	x	x		x	x	x	x
1.2			x	x	x	x		x	x	x	x
1.3			x	x	x	x			x	x	x
1.4			x	x	x	x			x	x	x
1.5			x	x	x	x			x	x	x
1.6			x	x	x	x			x	x	x
1.7			x	x	x	x		x	x	x	x
1.8			x	x	x	x			x	x	x
1.9			x	x	x	x		x	x	x	x
2. Parabolic trough with molten salt											
2.1	x	x	x	x	x			x	x	x	x
2.2	x	x	x	x	x			x	x	x	x
2.3	x	x	x	x	x			x	x	x	x
2.4	x	x	x	x	x			x	x	x	x
2.5	x	x	x	x	x			x	x	x	x
3. Parabolic trough with silicon oil											
3.1	x	x	x	x	x				x	x	x
3.2	x	x	x	x	x				x		x
3.3	x	x	x	x	x				x	x	x
3.4	x	x	x	x	x				x		x
3.5	x	x	x	x	x				x		x
3.6	x	x	x	x	x			x	x		x
4. Open volumetric air receiver											
4.1	x	x	x	x	x		x		x		x

4.2	x	x	x	x	x		x		x		x
4.3	x	x	x	x	x		x		x	x	x
4.4	x	x	x	x	x		x		x		x
4.5	x	x	x	x	x		x		x	x	x
5. Improved central receiver molten salt technology											
5.1	x	x	x	x	x				x		x
5.2	x	x	x	x	x				x	x	x
5.3	x	x	x	x	x				x		x
5.4	x	x	x	x	x				x	x	x
5.5	x	x	x	x	x				x		x
5.6	x	x	x	x	x				x		x
6. Next generation of central receiver power plants											
6.1	x	x	x	x	x				x		x
6.2	x	x	x	x	x		x		x		x
6.3	x	x	x	x	x		x		x		x
6.4	x	x	x	x	x		x		x		x
6.5	x	x	x	x	x				x		x
6.6	x	x	x	x	x				x		x
6.7	x	x	x	x	x				x		x
6.8	x	x	x	x	x				x		x
6.9	x	x	x	x	x				x		x
7. Multi-tower beam down system											
7.1			x	x	x			x	x		x
7.2			x	x	x			x	x		x
7.3			x	x	x			x	x		x
7.4			x	x	x			x	x		x
7.5			x	x	x				x	x	x
7.6			x	x	x				x		x
7.7			x	x	x			x	x		x
8. Advanced TES (Thermal Energy Storage)											
8.1	x	x	x	x	x	x	x	x	x	x	x
8.2	x	x	x	x	x	x	x	x	x	x	x
8.3	x	x	x	x	x	x	x	x	x	x	x
8.4	x	x	x	x	x	x	x	x	x	x	x
8.5	x	x	x	x	x	x		x	x	x	x
8.6	x	x	x	x	x	x			x	x	x



8.7	x	x	x	x	x	x		x	x	x	x
8.8	x	x	x	x	x	x			x	x	x



4. Application Issues for the CSP ERANET 1st Cofund Joint Call

4.1 Timeline and Process

The call is set up as a two-step submission procedure, consisting of a preproposal phase and a full proposal phase. Further information is available with the Guidelines for Users of the Electronic Submission System available on the CSP-ERANET website. It is a pre-screen of what will be required in the application. Applicants shall not fill in this PDF but enter data online in the Electronic Submission System (ESS). The most relevant dates and deadlines are given in Table 3.

Table 3: Dates and Deadlines for the CSP ERANET 1st Cofund Joint Call

Date	Activities
07.10.2019	Publication of the CSP-ERANET Joint Call
October 2019	Brokering webinar
10.01.2020	Deadline for submission of preproposals
15.04.2020	Communication on applications selected for full proposal round
19.06.2020	Deadline for submission of full proposals
06.10.2020	Final funding decisions communicated to proposers
Nov/Dec 2020	Start of projects funded

- Applicants are strongly encouraged to follow the instructions specified in the National requirements annexes and check with their national / regional contact points whether the project idea fits within the national / regional constraints and to discuss the project line-up and funding conditions.
- A preproposal is mandatory. It has to be submitted by the coordinator and partners through an online application form accessible via www.CSP-ERANET within the deadline set. Applicants are invited to register in the Electronic Submission System as early as possible.
- National / regional organisations will then carry out their eligibility check (and pre-evaluation) based on the preproposal and the respective national / regional funding rules. Independent international experts will evaluate the preproposals. Applicants will be provided with feedback after the review of the-ir preproposal, including the information on whether or not they are selected for submitting a full proposal. More specifically, the Joint Call secretariat will inform the coordinator of the application by e-mail by 15.04.2020. If the coordinator has not received any e-mail, he / she shall contact the Call secretariat. Recommendations for the full proposals according to the national / regional rules and principles may then be provided.
- The full proposal has to be submitted by the applicants through an online application form accessible via www.CSP-ERANET within the deadline set. Additionally, national / regional

funding applications may have to be submitted separately according to their specific rules (see Annex – National / Regional Requirements).

5. An evaluation will be performed by independent international evaluators and the funding organisations concerned, according to the evaluation criteria specified in the call. Based on the result of the international evaluation, proposals will be selected (or not) for funding.

4.2 Eligibility Issues

Different eligibility aspects have to be considered:

- Applications have to be submitted through the Electronic Submission System within the deadline set.
- Eligible consortia shall consist of a minimum of 3 partners from 3 different countries participating in the CSP ERANET 1st Cofund Joint Call and providing funding to the project selected. At least one partner in the consortium has to be from industry (except Topic 8). The project consortia may involve as many partners as necessary to successfully deliver the project. Partners from countries that are not members of the CSP-ERANET Joint Call (see list of funding partners under section 2) can join a project consortium as additional partners providing added-value to the project. However, these additional partners have to finance their activities from other sources, as each funding agency will only fund partners from their own country. A letter of commitment must be included as an annex to the full proposal including the commitment of this partner to the project.
- All applicants have to fulfil (additional) eligibility criteria of their respective national / regional programme / funding organisation. Furthermore, all applicants must take into account that some funding organisations require a mandatory submission of a national application in parallel with the international one.
- SME, large companies, non-profit research organisations, higher education institutions, public research organisations and public organisations may participate according to their national / regional financing regulations (see Annex – National / Regional Requirements).
- The project duration is limited to max. 36 months.

4.3 Funding Rules

Within this CSP ERANET 1st Cofund Joint Call, the funding rules of the national / regional agencies apply. The level of funding available will be determined by the rules of the relevant funding agency. Information about the specific funding rules and applicable topics will be provided via the person in charge of the respective national / regional agencies (see Table 1). Some relevant information is provided in Annex – National / regional Requirements. Each project partner will receive funds from his / her national / regional agency. Each project partner will be responsible for the preparation and submission of all necessary reports required by their funding agency in order to obtain funding in full accordance with national / regional rules.

4.4 Confidentiality



Project proposals and any information relating to them shall be kept confidential in accordance with the applicable national / regional legislation. Project proposals shall not be used for any purpose other than the evaluation of the applications, making funding decisions and monitoring of the project. International experts, which will be invited to evaluate the proposals, are required to sign a confidentiality agreement prior to evaluating proposals.

Successful projects have to provide a non-confidential project summary that will be published on the CSP-ERANET website in the interests of knowledge exchange and contributions for the trans-national reporting (details of projects are strictly kept confidential, see section 5).

4.5 Consortium Agreement

A consortium agreement between the project partners will be required. In order to accelerate the selection and contract offer process, a statement on the signature of the consortium agreement should be submitted with the full proposal. Models for consortium agreements can be obtained from national / regional funding agencies or from the EC IPR Helpdesk: <http://www.ipr-helpdesk.org>. The project proposal has to be the foundation for the consortium agreement. The purpose of the consortium agreement is to clarify the responsibilities of the partners, decision processes inside the project, management of any change of partners, how to exploit and/or commercialise the results (for each partner) and IPR issues.

4.6 Evaluation

The evaluation is carried out on a national / regional level and by independent international evaluation experts. The international evaluation criteria are listed in Table 4.

Table 4: Set of International Evaluation Criterion Used	
Main criterion	Sub-criterion
Excellence	<ul style="list-style-type: none"> • Clarity and relevance of the project’s objectives; • Credibility of the proposed technology/concept – including trans-disciplinary considerations, where relevant; • Credibility of the proposed project approach; • Ambition and innovation potential - e.g. beyond the current state of the art.
Impact	<ul style="list-style-type: none"> • Expected contribution to the reduction in the cost of CSP power, life-cycle environmental impact and other relevant Key Performance Indicators; • Expected impact on Work Programme (SC3-JA-1) objectives; • Expected ability of the project to enhance innovation capacity and integration of new knowledge in the European solar power industry; • Future market deployment potential of the proposed innovation; • Project’s ability to strengthen the competitiveness and growth of European companies by developing innovations that meet the needs of European and global solar power markets and, where relevant, deliver these innovations to the market;

	<ul style="list-style-type: none"> • Strength of the proposed research data management, exploitation and dissemination plans (including IPR management proposals, where relevant); • Any other environmental or socially important impacts.
<p>Quality and Efficiency of Implementation</p>	<ul style="list-style-type: none"> • Coherence and expected effectiveness of the project plan, including the appropriateness of task and resource allocation; • Strength of management structures and governance procedures, including risk management; • Consortium strengths and complementarity of project partners. • Added-value through the transnational consortium

4.7 Funding Recommendation

Based on the evaluation results and funding budget available, projects will be recommended / selected for funding. The outcome of this process will be communicated by the call secretariat to the coordinator of the full proposal. The coordinator will then inform all project partners.

Formal funding decisions are made by the participating funding organisations. The funding recommendation of the call consortium is irrevocable and therefore no redress procedure is possible.

After a positive funding recommendation, the project partners must directly contact their national / regional contact points in order to start the contract negotiation and accomplish the remaining steps until the research project can start. The project coordinator is responsible for synchronising the project start with his/her partners.

5. Funding and Reporting

5.1 Contract

Funding contracts for successful applications are dealt with directly between the project partners and their national / regional funding agencies.

5.2 Start and Instalments

Depending on the national / regional regulations, a pre-condition for transferring the first funding instalments is the existence of a consortium agreement that also includes IPR related issues.

As the national / regional funding contracts may not all become effective at the same time, the project parties i) usually do not receive the instalments and ii) usually are not reviewed / monitored on national / regional level at exactly the same time. The national / regional funders will however aim to agree a common start date and duration for recommended projects.

5.3 Monitoring

Each project partner will be responsible for the necessary reporting to their funding agency according to national / regional rules in order to obtain and maintain funding during the lifetime of their portion of the project. Besides the national / regional project review, the transnational cooperation aspects will be monitored on the CSP-ERANET level. The project coordinator is responsible for reporting according to the requirements (reporting at the start, during the course and at the end of project with publishable summary and further information for internal reporting, participation in questionnaires, provide the Consortium Agreement signed). The reporting and monitoring shall not be conducted in paper form. The coordinator shall enter data online in the Electronic Monitoring System (ESS). Any substantial change in an on-going project has to be reported immediately to the involved funding organisations and the Call secretariat. The project partners should be aware that changes might have effects on funding.

5.4 Dissemination

Project partners are required to refer to CSP ERANET 1st Cofund Joint Call in their publications, exhibitions, lectures and press information concerning results of the CSP ERANET 1st Cofund Joint Call projects. Acknowledgement should be: Project xy is supported under the umbrella of CSP ERANET 1st Cofund Joint Call by (list of all national / regional agencies supporting the project).

To demonstrate the added value of transnational cooperation projects, results from the call shall be disseminated. This process can be tackled via different channels, e.g.:

- Conferences with relevant stakeholders to inform about the project results.
- Publication of a short outline of funded projects on the CSP-ERANET and national / regional websites. This information may also be used by CSP-ERANET for further dissemination. Further details of projects are strictly kept confidential. They can be published only in agreement with the project partners and where there is value in doing so.
- Press conferences and workshops.

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Germany - PtJ

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Project Management Jülich, Division Energy System: Renewable Energies / Power Plant Technology
Contact	Tarik Schwarzer: t.schwarzer@fz-juelich.de, +49 2461 61 9157 Electronic submission system: Renate Horbelt: r.horbelt@fz-juelich.de, +49 2461 61 9874 Kambulakwao Chakanga: k.chakanga@fz-juelich.de, +49 2461 61 9871
Topics	The Agency potentially supports projects in the following topics: <ul style="list-style-type: none"> • Topic 2: Parabolic trough with molten salt TRL: 6 to 8 • Topic 3: Parabolic trough with silicon oil TRL: 6 to 8 • Topic 4: Open volumetric air receiver TRL: 6 to 8 • Topic 5: Improved central receiver molten salt technology TRL: 6 to 8 • Topic 6: Next generation of central receiver power plants TRL: 6 to 8 • Topic 8: Advanced Thermal energy storage TRL: 4 to 6/7
Type of RTD	The Agency potentially supports the following types of RTD, namely: <ul style="list-style-type: none"> • Industrial / applied research • Experimental Development
Eligible applicants	The Agency potentially supports all private and public applicants, namely: List the ones that can be supported <ul style="list-style-type: none"> • Private – SME • Private – large companies • Private – Non-profit research organisation • Higher education institution • Public research organisation • Public organisation <p>The maximum rate of support for research organisations is 100% of total costs (for all type of R&D); for SMEs: max. 60% for Industrial research and max. 35% for Experimental Development of total costs; for LE's: max. 50% for Industrial research and max. 25% for Experimental Development</p>
Budget	EUR 3'000'000 (national budget)
Further specifications	Only consortia with significant industrial participation are eligible for funding. National application forms ("easy-Online Antrag") have to be used for the <u>full proposal</u> phase, submission via https://foerderportal.bund.de/easyonline/ A financial viability check (if applicable) has to be carried out in parallel to the full proposal phase. Please contact Projektträger Jülich in advance.

Germany – ETN / North-Rhine-Westphalia

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Project Management ETN, Division for Energy,
Contact	Dr. Melanie Schulte, me.schulte@fz-juelich.de, +49 2461 690 504 Dr. Joachim Kutscher, jo.kutscher@fz-juelich.de, +49 2461 690 604
Topics	The Agency potentially supports projects in the following topics: <ul style="list-style-type: none"> • Topic 2: Parabolic trough with molten salt TRL: 6 to 8 • Topic 3: Parabolic trough with silicon oil TRL: 6 to 8 • Topic 4: Open volumetric air receiver TRL: 6 to 8 • Topic 5: Improved central receiver molten salt technology TRL: 7 to 9 • Topic 6: Next generation of central receiver power plants TRL: 6 to 8 • Topic 8: Advanced Thermal energy storage TRL: 4 to 6/7
Type of RTD	The Agency potentially supports the following types of RTD, namely: <ul style="list-style-type: none"> • Industrial / applied research • Experimental Development
Eligible applicants	The Agency potentially supports all private and public applicants, namely: List the ones that can be supported <ul style="list-style-type: none"> • Private – SME • Private – large companies • Private – Non-profit research organisation • Higher education institution • Public research organisation • Public organisation <p>The maximum rate of support for education- and research organisations is 90 % of total expenditures (for all type of R&D, only in special cases 100 %); for SEs: max. 80% (S), for MEs max. 75 % (M), for LEs max. 65 % in case of Industrial Research and in case of Experimental Development for SEs max. 60%, for MEs max. 50 %, for LEs max. 40%. Depending on the type of applicant and the type of research.</p>
Budget	EUR 500'000 (regional budget)
Further specification	NRW regional application forms have to be used by applicants who are recommended for funding in the full proposal phase. Please contact Project Management ETN in advance.

Greece

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY (GSRT)
Contact	1. Dr. Anna Rosenberg Programme Officer Tel.: +30 213 13 00 095 E-mail: a.rosenberg@gsrt.gr 2. Paraskevi Afentaki National Coordinator of ERANETS Tel.: +30 213 13 00 112 Email: pafe@gsrt.gr
Topics	The Agency potentially supports projects in the following topics: All subtopics from : Activity no. 1: Advanced linear Fresnel technology Activity no.8: Advanced TES (Thermal Energy Storage) TRL4-(8) (according to COMMISSION REGULATION (EU) No 651/2014/Definitions for Aid for Research, Development and Innovation, pages 24-26/par. 83-96)
Type of RTD	GSRT potentially supports the following types of RTD, namely: Industrial research, experimental development, feasibility studies (COMMISSION REGULATION (EU) No 651/2014 article 25)
Eligible applicants	GSRT potentially supports all private and public legal entities namely: private enterprises (such as SMEs, large-companies etc), research organizations, higher education institutions, and other public organizations with R&D activities). Individuals as well as individual enterprises are not eligible under this scheme.
Budget	EUR 1.000.000 national funding that comes from structural funds and particularly from Operational Programme for Research, Entrepreneurship and Innovation 2014-2020, National Research and Innovation Strategy for Smart Specialization 2014-2020 (RIS3)
Further specifications	Eligible costs (a) personnel costs: researchers, technicians and other supporting staff to the extent employed on the project. (b) costs on fixed assets i.e. b1) costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible and b2) costs for buildings and land, to the extent and for the duration period used for the project. With regard to buildings, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible. For land, costs of commercial transfer or actually incurred capital costs are eligible. (c) costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project. (d) additional general costs and other operating expenses, including costs of materials, supplies, travel expenses, organization of meetings, dissemination/publicity costs, audit costs, incurred directly as a result of the project implementation. (e) indirect costs = flat rate 15% of gross personnel costs excluding VAT = 15%* (a-(VAT of a)). Indirect costs are eligible for all legal entities and include costs that do not incur directly as a result of the project implementation (e. g. administrative and management costs, utility costs). Note: Please bear in mind that scientific management costs are eligible under category (a) whereas administrative and financial/legal management costs fall under eligible categories (e) or (d)-audit costs only.



Aid of intensity

Public research Institutes and Universities: the aid intensity can reach 100% for performing non-economic activities in accordance with point 19, article 2.1.1 of the «Framework for State aid for research and development and innovation» (2014/C 198/01)).

Private Sector: (a) 50% of the eligible costs for industrial research; (b) 25% of the eligible costs for experimental development; (c) 50% of the eligible costs for feasibility studies.

- The aid intensities for industrial research and experimental development may be increased up to a maximum aid intensity of 80% of the eligible costs as follows:

(a) by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises;

(b) by 15 percentage points if one of the following conditions is fulfilled:

(i) the project involves effective collaboration:

— between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or

— between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results;

(ii) the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

-The aid intensity for feasibility studies may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises.

Upper funding limits for the eligible costs

Upper limit of the total public funding will be 200.000 € per project (including indirect costs). Please note that this amount can be increased to 250.000 € per project if Greek partner assumes the project coordination. The maximum state aid intensity will be calculated according to the provisions of the European state aid rules and regulations in force (type of research activity, size of the participating enterprise, collaborative research).

Duration of the projects

The duration of a funded project is 24-30 months. A possible extension of the duration under conditions can be accepted for the projects with a project duration of 24 months with a maximum up to the 1/3 of the initial duration taking into account the starting date without modifying the scientific or increasing the financial part of the project and the prerequisites of the current Operational Programme 2014-2020 (e.g. closing date for financing the projects in national level).

Evaluation

In national level, only eligibility check is conducted and not a full peer review in pre-proposal and full proposal stages. We rely on the evaluation of external experts.

National requirements :

Submission at the national level is required at a later stage. A national call will be published to support the approved, at the transnational level, proposals only. Detailed information on the procedure and the funding rules will be provided at the GSRT website in the guidelines of the national call, during the submission period.

For more information please contact the NCP.

Israel

Specifications for CSP-ERANET Joint Call

Agency	Ministry of Energy, the chief scientist office (CSO)
Contact	Dr Gideon Friedman, Gideonf@energy.gov.il Yael Harman, yaelh@energy.gov.il
Topics	The Agency potentially supports projects all eligible topics and subtopics.
Type of RTD	The Agency potentially supports all types of RTD.
Eligible applicants	The Agency potentially supports all Israeli private and public applicants, namely: List the ones that can be supported <ul style="list-style-type: none"> • Private – SME • Private – large companies • Private – Non-profit research organisation • Higher education institution • Public research organisation • Public organisation • Municipalities
Budget	EUR 600'000 (national budget)
Further specification	The submission should follow the requirements presented in the CSO's tenders (Academia, Start-up and pilot & demonstration) according to the proposal TRL level, type of institution and the requested budget.

Italy

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Ministry for Education, University and Research (MIUR)
Contact	Ing. Aldo Covello tel. +39 06 9772 6465 e-mail: aldo.covello@miur.it
Topics	<p>MIUR supports research activities in the following topics:</p> <ul style="list-style-type: none"> 1.1 Testing and evaluating critical plant components (reliability of standard components) 1.2 Develop plant engineering, for full operation control in clear skies and variable solar radiation days, start-up and shutdown operation, night time freezing protection, including drain-down gravity assisted strategies 1.7 Technical-economical optimization of the existing solar field. 1.9 Integration of forecasting and power grid management and trading as a key input for reliable operation 2. Parabolic trough with molten salt (all five subtopic) 3.6 Optimization of (oil/salt) heat exchanger for increased temperatures up to 430°C 7.1 Industrial optimization of mirror design and manufacturing. 7.2 Optimization of cavity integrated with storage 7.3 Industrial optimization operating at very high temperatures. 7.4 Cost reduction and optimization (O&M) of tracker 7.7 Operate a 2 MW thermal solar receiver 8.1 Development and testing of new storage concepts and/or media with potential to provide efficient, reliable, and economic thermal energy storage 8.2 Identification and selection of storage subsystems materials with suitable characteristics such as compatibility with the storage. 8.3 Design and testing of main subsystems and components. 8.4 Detailed analysis of storage integration in CSP plants. 8.5 Different plant scheme analyses, 8.7 Detailed cost reduction analysis and impact in LCOE.
Type of RTD	All activities classifiable as Industrial research and Experimental development are eligible for funding. Furthermore, Industrial research activities must be predominant with respect to Experimental development activities (in terms of costs).
Eligible applicants	<p>The following entities are eligible, providing that they have stable organization in Italy: enterprises, universities, research institutions, research organizations in accordance with EU Reg. n. 651/2014 of the European Commission - June 17, 2014. Eligible participants must have a stable organization in Italy.</p> <p>Furthermore, any Italian participant, in order to be eligible, must comply with the eligibility criteria listed in the art. 2.4 of the "Linee guida al DM 593/2016"</p>
Budget	<p>Total national budget for the call: EUR 600.000</p> <p>Maximum funding per proposal (participant co-funding excluded): € 250.000 if the project is coordinated by an Italian partner; € 150.000 in all other cases.</p>

Eligible Costs	All costs incurred during the lifetime of the project under the following categories are eligible: Personnel, Equipment, Consulting and equivalent services, Consumables and Overheads. Overheads (spese generali) shall be calculated as a percentage of the personnel costs and cannot be higher than 50% of them. Travel expenses, dissemination and coordination costs are to be included in the overheads.																															
Further specification	<table border="1" data-bbox="336 495 1316 1039"> <thead> <tr> <th colspan="2" data-bbox="336 495 564 546"></th> <th colspan="3" data-bbox="564 495 1078 546">Funding Rates</th> <th data-bbox="1078 495 1316 546"></th> </tr> <tr> <th data-bbox="336 546 564 913" rowspan="2">Activity typology</th> <th data-bbox="564 546 1078 913" rowspan="2">Applicant typology</th> <th colspan="3" data-bbox="564 546 1078 730">Enterprises, consortia, end users and private research bodies (which do not meet the requirements of research organization under EU Reg. no. 651/2014 of the Commission - June 17, 2014)</th> <th data-bbox="1078 546 1316 913" rowspan="2">Universities, public research institutions, research organizations (public and private) in accordance with Reg. EU n. 651/2014 of the Commission - June 17, 2014)</th> </tr> <tr> <th data-bbox="564 730 737 913">Small Enterprises</th> <th data-bbox="737 730 909 913">Medium Enterprises</th> <th data-bbox="909 730 1078 913">Large Enterprises</th> </tr> </thead> <tbody> <tr> <td data-bbox="336 913 564 976">Industrial Research</td> <td data-bbox="564 913 1078 976"></td> <td data-bbox="564 913 737 976">40%</td> <td data-bbox="737 913 909 976">30%</td> <td data-bbox="909 913 1078 976">20%</td> <td data-bbox="1078 913 1316 976">50%</td> </tr> <tr> <td data-bbox="336 976 564 1039">Experimental Development</td> <td data-bbox="564 976 1078 1039"></td> <td data-bbox="564 976 737 1039">30%</td> <td data-bbox="737 976 909 1039">20%</td> <td data-bbox="909 976 1078 1039">10%</td> <td data-bbox="1078 976 1316 1039">25%</td> </tr> </tbody> </table> <p data-bbox="336 1070 1316 1137">The amount of funding which can be granted to each beneficiary is calculated multiplying the eligible costs for the funding rate listed in the above table.</p> <p data-bbox="336 1167 1316 1200">On request of applicants a pre-payment may be done, equal to:</p> <ul data-bbox="395 1200 1316 1267" style="list-style-type: none"> • 80% of the total contribution for public entities; • 50% of the total contribution for private entities. <p data-bbox="336 1267 1316 1335">The remaining part of contribute will be paid in instalments after each financial and progress reporting period.</p> <p data-bbox="336 1373 1316 1406">Relevant national laws and rules applicable to this call</p> <ul data-bbox="363 1406 1316 1559" style="list-style-type: none"> - Decreto legge n. 83/2012; - Decreto Ministeriale n. 593 del 26 luglio 2016; - Linee guida al DM del 26 luglio 2016 n. 593. - Procedure operative per il finanziamento dei progetti internazionali ex art. 18 D.M. del 26 luglio 2016 n. 593 <p data-bbox="336 1559 1316 1715">The criteria and provisions provided herewith are intended only for informative purposes. The complete list of criteria and provisions legally valid, which must be respected by all the Italian participants, is included in the “Avviso integrativo nazionale”, published on the dedicated webpage on MIUR website and in the applicable Italian laws.</p> <p data-bbox="336 1742 1316 1776">Submission of the proposal at national level</p> <p data-bbox="336 1776 1316 1933">In addition to the project proposal, which shall be submitted at European level, the Italian participants are requested to submit further documentation to MIUR, through the national web platform, available at the following link: http://banditransnazionali-miur.cineca.it. The content of such documentation is defined in the cited web platform.</p>							Funding Rates				Activity typology	Applicant typology	Enterprises, consortia, end users and private research bodies (which do not meet the requirements of research organization under EU Reg. no. 651/2014 of the Commission - June 17, 2014)			Universities, public research institutions, research organizations (public and private) in accordance with Reg. EU n. 651/2014 of the Commission - June 17, 2014)	Small Enterprises	Medium Enterprises	Large Enterprises	Industrial Research		40%	30%	20%	50%	Experimental Development		30%	20%	10%	25%
		Funding Rates																														
Activity typology	Applicant typology	Enterprises, consortia, end users and private research bodies (which do not meet the requirements of research organization under EU Reg. no. 651/2014 of the Commission - June 17, 2014)			Universities, public research institutions, research organizations (public and private) in accordance with Reg. EU n. 651/2014 of the Commission - June 17, 2014)																											
		Small Enterprises	Medium Enterprises	Large Enterprises																												
Industrial Research		40%	30%	20%	50%																											
Experimental Development		30%	20%	10%	25%																											



These national additional documents must be submitted by the same deadline established for the pre-proposal phase submission as defined in the international joint call.

Any participant who does not submit its national documents by the deadline of the pre-proposal phase, will be considered not eligible for funding.

MIUR will require to all Italian participants admitted for funding, some additional documents describing more in detail the participant and its research activities within the project.

It is strongly recommended to contact the National Contact Persons already in early stage of project preparation.

The admission for funding is subject to the adoption of the necessary accounting and administrative measures for the allocation of the resources.

Funded participants will be requested to submit financial and scientific reports to MIUR.

Useful Links

- <http://www.ricercainternazionale.miur.it/>
- [http://www.ricercainternazionale.miur.it/era/eranet-cofund-\(h2020\)/csp.aspx](http://www.ricercainternazionale.miur.it/era/eranet-cofund-(h2020)/csp.aspx)
- <http://banditransnazionali-miur.cineca.it>
- <http://www.ricercainternazionale.miur.it/evidenza/normativa-prog-internazionali.aspx>



Portugal

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Direção Geral de Energia e Geologia
Contact	Isabel Cabrita t. +351217922753 isabel.cabrita@dgeg.pt
Topics	The following topics will be supported 1.1 -1.9 2.1 – 2.5 3.1 and 3.3, 4.3 and 4.5, 5.2 and 5.4 7.5 8.1 – 8.8
Type of RTD	The Agency potentially supports projects in the following topics: Industrial research Applied research experimental research
Eligible applicants	The Agency potentially supports all private and public applicants, namely: List the ones that can be supported <ul style="list-style-type: none"> • Private – SME • Private – large companies • Private – Non-profit research organisation • Higher education institution • Public research organisation • Public organisation
Budget	EUR 100.000 (national budget)
Further specification	Prototypes or products have to be implemented in Portugal

Spain – AEI

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Agencia Estatal de Investigación (AEI - State Research Agency), Spain
Contact	PhD. Alberto Abánades (Scientific issues) Daniel Ruiz Iruela (Administrative and technical issues) Telephone: +34 916037968 Contact email : era-energia@aei.gob.es
Topics	The Agency potentially supports projects in <u>all topics</u> .
Type of RTD	The Agency potentially supports all type of RTD, namely: <ul style="list-style-type: none"> Fundamental / basic research required for the specific project fulfilling the objectives of this call and necessary to support demonstration and validation activities
Eligible applicants	<p>The eligible entities for the AEI funding are:</p> <p>Non-profit research organisations according to the PCI 2020 call.</p> <p>The Spanish Principal Investigators that apply for funding to AEI must comply with the requirements established in this transnational call and with the final rules on eligibility to be defined in the PCI 2020 call and must have experience as investigators in projects funded by the Plan Estatal I+D+i 2013-2016, the Plan Estatal I+D+i 2017-2020, ERC Grants, European Framework Programmes or other relevant international programmes.</p> <p>The participation of the Spanish industrial sector is crucial to the success of this call, so it is <u>highly recommended</u> that researchers participate in transnational consortia together with <u>Spanish companies in the sector that will be financed by the Centre for the Development of Industrial Technology (CDTI)</u> according with its specific regulations (link to the requirements of the CDTI).</p> <p>It is very important that companies comply with the requirements of the CDTI, since otherwise the consortium may be declared ineligible.</p> <p>Incompatibilities: These must be taken into account when participating in different ERA-Nets or other international initiatives.</p> <ul style="list-style-type: none"> Principal Investigators are not allowed to apply for funding in more than one proposal of this CSP joint Call, in more than one proposal in the same PCI call and in two PCI calls in consecutive years. This situation has to be taken into account when researchers are participating in the ERANET calls, because all of them are funded through PCI. Principal Investigators must remain unchanged between the proposal to this transnational call and the National PCI 2020 call. <p>The AEI will avoid double funding (overlapping with other EU or National funding), and will not grant projects or parts of projects already funded.</p>
Budget	<p>Maximum funding for the CSP call 2019: 500.000 €</p> <p>Eligible costs</p> <ul style="list-style-type: none"> Personnel costs for temporary employment contracts (scholarships are not eligible).



	<ul style="list-style-type: none"> • Current costs, small scientific equipment, disposable materials, travelling expenses and other costs that can be justified as necessary to carry out the proposed activities. • <u>Indirect costs (overheads) or clinical trials (proofs of concept, proofs of principle) are not eligible for funding in the PCI call.</u> <p>The duration of the projects must be 2 or 3 years. The following funding limits are considered eligibility criteria. Proposals not respecting these limits could be declared ineligible.</p> <ul style="list-style-type: none"> • Maximum amount of funding per partner: € 200.000 for a 3 year project, € 50.000 in addition if the project is coordinated by Spain*. • Maximum amount of funding per proposal: € 300.000(two or more Spanish partners*), € 50.000 in addition if coordinated by Spain. (<p>*Industrial partners funded by CDTI do not account in this calculations).</p> <ul style="list-style-type: none"> • Centres formed by different Spanish legal entities will be considered as a unique entity, and thus the maximum funding should not exceed the limits per proposal established above (for example mixed centres). The final funding will take into account the transnational evaluation of the collaborative proposal, the scientific quality of the Spanish group, the added value of the international collaboration, the participation of the industrial sector, and the financial resources available.
Further specifications	<p><u>Programa Estatal de I+D+i Orientada a los Retos de la Sociedad</u>, Plan Estatal de Investigación Científica y Técnica y de Innovación 2017-2020.</p> <p>The instrument for funding the Spanish groups will be the Spanish call on RDI Projects “International Joint Programming” or equivalent (Proyectos I+D+I “Programación Conjunta Internacional” o equivalente), which is expected to be launched in 2020 (PCI 2020). Only as a reference, the beneficiaries are advised to read the call <u>PCI 2019</u>.</p> <p>The Spanish legal entities granted are obliged by the regulations established in this PCI call and by the funding limits specified below.</p> <p>CSP call will be managed by the <u>Subdivisión de Programas Científico-Técnicos Transversales, Fortalecimiento y Excelencia</u></p> <p>Purpose of funding: The projects granted by the AEI must be aligned with the main objectives described in the <u>Plan Estatal</u>.</p> <p>Mandatory acknowledgement Mandatory acknowledgement Any publication or dissemination activity resulting from the granted projects must acknowledge the AEI funding: “Project (reference nº XX) funded by the AEI through PCI call”.</p>

Spain – CDTI

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	CDTI - Centro para el Desarrollo Tecnológico Industrial, E.P.E.
Contact	Héctor Gonzalez Menendez: hector.gonzalez@cdti.es
Topics	<ul style="list-style-type: none"> The Agency potentially supports projects in all the call topics as long as the activities to be developed are technology-based (especial attention to this approach should be taken in subtopics 2.4 and 8.7)
Type of RTD	<p>The Agency potentially supports the following types of RTD, namely:</p> <ul style="list-style-type: none"> Industrial Research and /or Experimental Development (TRL up to 8). <p><i>N.B. <u>Only technology-based activities</u> within industrial research and/or experimental development projects are eligible for funding (in accordance with the definitions of the General Block Exemption Regulation, EC Regulation nº651/2014). The Spanish part of the proposed work plan must be developed in Spain. Please note that non-technological activities related to business models or processes are excluded for CDTI funding.</i></p>
Eligible applicants	<p>The Agency potentially supports for-profit private companies (being SME or large companies) established and carrying out R&D activities in Spain.</p> <p><i>N.B. Other entities such as Universities, Public Research Institutions, Technological Centres, and non-profit private institutions could participate under subcontracting by Spanish companies (subcontracting cannot exceed the 50% of the national project budget).</i></p>
Budget	EUR 1'500'000 (CDTI budget)
Further specification	<p>The eligible costs include:</p> <ul style="list-style-type: none"> Personnel costs, to the extent employed on the research project. Instrument and equipment costs, to the extent and during the period in which they are used for the project. Contractual research costs, technical knowledge and patents bought or licensed from outside sources at market prices, as well as costs of consulting services intended exclusively for the research project. Other costs (operating expenses) including materials, supplies and similar products, exclusively used for the research project. Audit costs for the national reporting of the project (when applicable). Additional general expenses (indirect costs, as a percentage of personnel costs). <p>Applicants <u>must check the detailed description</u> published on CDTI website. Please note that management and dissemination costs <u>are not eligible for funding</u>.</p> <p>Project duration: 12 to 36 months.</p> <p>Project transnationality: projects should be transnational by nature, therefore, each country/ region will be responsible for no more than 70% of the total budget project costs.</p> <p>Compulsory Minimum Eligible Budget: € 150,000 (this amount applies to the project budget per partner, not the requested funding).</p>

Mandatory National Application

Additionally to the international application process, those applicants requesting funding from CDTI must submit a formal application by way of **CDTI electronic submission system** (<https://sede.cdti.gob.es>). The application must include a detailed description, in Spanish Language, of the activities to be undertaken by the company and the respective budget. Applicants must indicate their VAT (CIF) number in all their respective applications (both international and national). Further guidance will be published on CDTI website.

Financial conditions

CDTI funding will be based on grants, which will be calculated as a percentage of the eligible costs, up to a maximum aid intensity of 60 % for small enterprises, 50 % for medium enterprises and 40% for large enterprises, according to the General Block Exemption Regulation ([EC Regulation nº651/2014](#)).

Specific financial conditions for ensuring the beneficiary's solvency could be required according to CDTI funding rules. CDTI will avoid double funding, and will not finance projects, or parts of projects, which have been already, funded through other national, transnational or EU calls. CDTI will be responsible for making the final decision regarding the awarding of funds, taking fully into account the transnational evaluation of the collaborative project, the previous funds received by the participants for other related projects, the fulfilment of eligibility and funding rules, and the financial resources available.

Further information

Applicants are strongly advised to check the detailed information available on CDTI website and to contact the NCP for getting advice about national funding rules, before submitting a proposal.

Please check the complete national funding rules and relevant information about the call on the following links:

"Financiación CDTI para Proyectos de Investigación y Desarrollo"

<http://www.cdti.es/index.asp?MP=100&MS=802&MN=2>

"Financiación CDTI para Proyectos Transnacionales en el marco de acciones ERA-NET"

<http://www.cdti.es/index.asp?MP=101&MS=831&MN=2>

For further information, please contact the NCP or visit CDTI website: <https://www.cdti.es/>

Spain-JUNTAEX

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Junta de Extremadura (Regional Government of Extremadura), Spain.
Contact	Samuel Ruiz Fernández: dgieym.ei @juntaex.es For administrative and technical issues: Fernando Rivas Navazo: frivas@agenex.net
Topics	The Agency potentially supports projects <u>in all the call topics</u> .
Type of RTD	The Agency potentially supports all activities classifiable as: <ul style="list-style-type: none"> • Industrial / applied research • Fundamental / basic research • Experimental Development
Eligible applicants	The following entities, providing that they have stable organizations, are eligible to apply for funding: private enterprises, non-profit organizations, universities and higher education institutions, public organizations and research centers.
Budget	The available funding for the CSP call 2019 is EUR 50.000 (regional budget).
Further specifications	<p>Eligible Costs:</p> <ul style="list-style-type: none"> - In the case of Extremadura’s public entities which pass the AEI financial requirements in their national program, the funding will complement regional entities to cover the marginal costs that are not supported at national level. - In the case of private entities which pass the CDTI financial conditions in their national program , there will be additional funding to cover the cost of dissemination of the project results, consortium management and/or any other management cost not supported by CDTI, for any company which are locate in Extremadura region as an incentive effect, (maximum 50.000€/project) added the national funded. <p>For further information, applicants <u>must check the detailed description</u> published on AGENEX’s website (www.agenex.net). Regional application forms must be used for the full proposal phase.</p> <p>The final funding will take into account the transnational evaluation of the collaborative proposal, the scientific quality of the regional group, the added value of the international cooperation, the participation of the industrial sector, and the financial resources available.</p> <p>It is very important that companies comply with the requirements of the national programmes, managed by CDTI and AEI.</p>



Switzerland

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	Swiss Federal Office of Energy (SFOE)
Contact	Stefan Oberholzer, stefan.oberholzer@bfe.admin.ch
Topics	<p>The Agency potentially supports projects in the following topics:</p> <ul style="list-style-type: none"> • Topic 4: Open volumetric air receiver • Topic 6: Next Generation of Central Receiver Plants with molten salt receiver: only subtopics 6.2, 6.3 and 6.4 • Topic 8: Advanced Thermal energy storage: Only subtopics 8.1, 8.2, 8.3 and 8.4
Type of RTD	<p>The Agency potentially supports the following types of RTD, namely:</p> <ul style="list-style-type: none"> • Industrial / applied research • Experimental Development
Eligible applicants	<p>The Agency potentially supports all private and public applicants, namely: List the ones that can be supported</p> <ul style="list-style-type: none"> • Private – SME • Private – large companies • Private – Non-profit research organisation • Higher education institution • Public research organisation • Public organisation <p>Funding is primarily provided for pilot and demonstration project with TRL>5 (exceptionally TRL4) which underlie the national rules for such projects:</p> <ul style="list-style-type: none"> - Funding is limited to 40% of the eligible project costs, which are the additional project costs that cannot be amortized over the expected lifetime of the developed installation or solution. Additional project costs are the additional costs compared to the costs of implementing an equivalent, conventional technology or solution. - Eligible funding recipients are private and public sector entities (companies, research institutes, municipalities, or communities consisting of several of the former). - Project topic contributes to increasing energy efficiency or use of renewable energy; - High application and success potential; - Project topic in line with the Swiss energy policy; - Gathered results are publically accessible and disseminated. - More criteria might be added depending on the topic / adjudication mode. <p>In exceptional cases, smaller research type projects can be supported through the SFOE research programme application rules. The maximum funding rate for applied research is max. 100% of total costs for non-profit research organisations, max. 50% of total costs for SMEs and LEs; for experimental development is max. 50% of total costs for non-profit research organisations and max. 50% of total costs for SMEs and for LEs.</p>
Budget	EUR 200.000 (national budget)
Further specification	<p>Consortia should have significant industrial participation.</p> <p>National application forms have to be used for the full proposal phase</p> <p>A national proposal has to be worked out in parallel to the full proposal phase.</p> <p>Please contact SFOE before submitting pre proposal.</p>

Turkey

Specifications for CSP ERANET 1st Cofund Joint Call

Agency	TÜBİTAK
Contact	Ilknur YILMAZ/Cagri YILDIRIM Tel. +90 312 298 1753/1884 e-mail: ncpenergy@tubitak.gov.tr website is: www.ufuk2020.org.tr
Topics	The Agency potentially supports projects in <u>all topics</u> .
Type of RTD	The Agency potentially supports the following types of RTD, namely: Basic research, applied research, experimental development and innovation.
Eligible applicants	Higher education institutions, their institutes, public R&D centres, SMEs and private companies established in Turkey.
Budget	EUR 700.000 (national budget) There is no budget limit of the Programme but limit is determined per call. Moreover, there is no budget limit per project.
Further specifications	Applicants from Turkey would be supported via: 1071 Programme - Support Programme for Increasing Capacity to Benefit from International Research Funds and Participation in International R&D Cooperation The purpose of the 1071 programme is to support research and innovation activities of the Turkish stakeholders via enabling the cooperation of academy and industry for the international R&D projects. National application forms have to be used for the full proposal phase – download from http://www.tubitak.gov.tr .