

# Call 2015 for Research Proposals

Supporting the topics of

# User-Centric Security, Privacy and Trust in the Internet of Things

and

# **Terahertz Band for Next-Generation** Mobile Communications Systems

**Deadline: 13 January 2016, 17:00 CET** 

Documents and procedures: <a href="http://www.chistera.eu">http://www.chistera.eu</a>

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Indicative budget: 10,600,000 €

Funding Organisations supporting CHIST-ERA research projects:



























CHIST-ERA is an ERA-NET on Long-term Challenges in Information and Communication Sciences and Technologies

The coordination of the CHIST-ERA Funding Organisations is supported by the

**European Union's Seventh Framework Program** 



# Key Facts & Figures CHIST-ERA

CHIST-ERA is a consortium of funding organisations with programmes supporting Information and Communication Sciences and Technologies (ICST). The CHIST-ERA consortium is itself supported by the European Union's Future & Emerging Technologies scheme (FET).

CHIST-ERA promotes multidisciplinary and transnational ICST research with the potential to lead to significant breakthroughs. The funding organisations jointly support research projects selected in the framework of CHIST-ERA, in order to reinforce European capabilities in selected topics.

#### **Content of the Call**

Topic I	Topic 2	
User-Centric Security, Privacy and Trust in the Internet of Things SPTIoT	Terahertz Band for Next-Generation Mobile Communications Systems TMCS	
Indicative budgets:		
5,925,000 €	4,675,000 €	

Proposals must be submitted by international consortia with research partners in at least three of the following countries:

Austria Belgium France Ireland

Latvia

The Netherlands (SPTIoT topic only)

**Poland** 

Portugal (SPTIoT topic only)

Romania

Spain

Switzerland

Turkey

United Kingdom

# Proposals are evaluated jointly based on criteria of relevance to the topic, scientific excellence, implementation, and impact.

#### Each consortium partner is funded separately by a funding organisation.

Each partner must fulfil the conditions of the funding organisation they are applying to, as described in the annex. Industrial partners are eligible to be funded by some funding organisations.

#### **Timeline**

#### 13 January 2016 Deadline for proposal submission (17:00 CET)

July 2016	Notification of accepted proposals
October 2016	Projects start
September 2018/2019	Projects end (duration: 24 or 36 months)

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# Research Targeted in the Call

Each year, CHIST-ERA launches a call for research proposals in two new topics of emergent scientific importance. This year's call concerns the following topics:

- 1. User-Centric Security, Privacy and Trust in the Internet of Things (SPTIoT);
- 2. Terahertz Band for Next-Generation Mobile Communications Systems (TMCS).

In previous years, CHIST-ERA calls have targeted quantum computing, consciousness, knowledge extraction, low-power computing, intelligent user interfaces, smart communication networks, adaptive machines, distributed computing, cyber-physical systems, and human language understanding. Future calls will target new topics.

The <u>CHIST-ERA</u> consortium has created a common funding instrument to support international research groups that engage in long-term research in the area of information and communication technologies. Through this instrument, funding organisations support and join the European Union's "<u>Future and Emerging Technologies (FET)</u>" agenda. By coordinating their efforts, they can support more diverse research communities, who are able to tackle the most challenging and novel research topics.

#### **Community-defined topics**

A workshop was held in Lisbon on 16-18 June 2015 to identify important research challenges within the two selected topics. The workshop brought together ICST researchers from across a range of research communities and countries. The delegates identified a number of research challenges, which have formed the scope of this call. Presentations given at the workshop are available on the CHIST-ERA website (<a href="http://conference2015.chistera.eu/">http://conference2015.chistera.eu/</a>). Attendance at the workshop is not a prerequisite for submitting an application to this call. The evaluation criterion "Relevance to the Topic" is assessed only based on the topic descriptions below. The workshop presentations can nevertheless provide background information for preparing a proposal.

#### Nature of research

Submitted proposals should be of a FET-like nature and contribute to the development of an international and multidisciplinary research. The transformative research done in CHIST-ERA should explore new topics with potential for significant scientific and technical impacts in the long term.

The two topics of this year's call are described below.

# 1<sup>st</sup> Topic: User-Centric Security, Privacy and Trust in the Internet of Things

The Internet of Things (IoT) vision, which benefits from the steady advances in microelectronics, communications and information technology, seems within reach. However, technical flaws in data security, both real and perceived, threats of intrusions and lack of transparency might significantly lower the uptake and benefits of the new technologies. Current techniques are insufficient to promote trust and guarantee users' security and privacy within a future of unlimited interconnection. For users to be confident in their interactions with the IoT, one must consider how they will be supported to understand how their data is collected, used, processed, accessed and kept safe. By providing users with this information, we empower them to understand and make their own decisions regarding their data, which is essential in gaining informed consent and in ensuring the take-up of IoT technologies.

#### **Target Outcomes**

Projects should address one or more of the following research challenges, ensuring they include codesign with users to address the key, fundamental, but inter-related and interdisciplinary aspects of privacy, security and trust.

- Methods for data anonymisation
- Technical mechanisms to increase trustworthiness when data is shared between different providers
- Intrusion detection methods
- Authentication using trusted computing (lightweight hardware and software security)
- Dynamic security to allow systems to adapt to varying users
- Tools for supporting preferences and priorities of culturally diverse users
- Natural language for expressing data access/usage policy
- Data visualisation for increasing user awareness of privacy issues
- Empowering users with risk evaluation tool for their data and contacts
- Assistive technology/techniques to encourage more secure behaviour and awareness of users

#### **Expected Impact**

Projects are expected to:

- Cross traditional boundaries between disciplines in order to strengthen the community involved
  in tackling these new challenges. A broad range of disciplines needed to cover the breadth of this
  topic should be considered and could include expertise and skills in hardware and software, data
  analytics, cryptography, machine learning, big data visualisation, data analysis, business models,
  user interfaces, user behaviour and human-computer interaction.
- Have short-term impact on the development of designs, algorithms and prototypes that will contribute to the longer term impact of a more user-centric and trustworthy IoT.

# 2<sup>nd</sup> Topic: Terahertz Band for Next-Generation Mobile Communications Systems

Within a decade a 1000-fold increase in wireless communication traffic volume is expected, requiring increased throughput and data rates. The Terahertz (THz) band, which remains largely unexplored, offers new possibilities. Spectrum frequencies over 275 GHZ are as yet unallocated and those over 200 GHz still present important opportunities to fulfil the demand for wireless data transmission. Exploring the spectrum at these frequencies offers new possibilities for employing large bandwidths for high-speed wireless communications. The development and fabrication of cutting-edge low-cost THz devices has recently started, and new network concepts have the potential to cover the connectivity requirements of 5G systems and beyond. However, further research on Terahertz band devices, models, networking techniques and (potential) applications are required in order to realise efficient and practical THz Band communication networks. In particular, the following research areas are particularly important:

### (a) THz device and/or system fabrication and integration

- New fabrication and integration techniques to enable the integration of photonic and electronic THz components
- Techniques to reduce individual component size (relative to microwave technologies)
- New/improved components capable of operating over wide bandwidth at THz frequencies
- 3D printing techniques for THz components (e.g. lenses, reflectors)
- Device and/or system packaging to minimise signal losses
- Integrating multiple functions on a chip, e.g. transmitters and receivers

#### (b) THz power generation

- High power, low-noise THz amplifiers for transmitters and receivers
- Signal amplitude loss caused by interconnects between system components
- Spatial power combination through antenna arrays

#### **Target Outcomes**

Projects must deliver against one or more of the following outcomes for frequencies above 275 GHz, or at least above 200 GHz:

- Address novel component design and fabrication of THz devices and/or systems. Consideration should be given to the packaging and/or integration of components.
- Develop components for THz power generation (e.g. sources, novel high power, low-noise THz
  amplifiers for transmitters and receivers). New architectures that have these features should
  assist in overcoming the high path-loss at THz frequencies and lead to communications systems
  with much higher data rates.
- Push current emitted continuous-wave powers, up to 100 mW.
- Develop new interconnection schemes between systems and modules capable of efficiently transferring THz power around the system while minimising signal losses and interference.
- Spatial and temporal tuning of power output (e.g. phased-arrays to allow active control of beam spatial profiles and emission characteristics, as well as beam-steering).

In all cases, applicants should aim to produce a working, demonstrable THz device and/or system that can be validated in its intended application environment for mobile communications.

Proposals addressing THz power generation for mobile THz communication systems are encouraged to provide estimates of expected power consumption and dissipation of each component in the system.

#### **Expected Impact**

Projects are expected to significantly advance the state-of-the-art by achieving two or more of the following objectives:

- Build and strengthen the community of researchers in novel component design and fabrication.
   Research across the breadth of the above-mentioned research area (a) will require and bring together skills, expertise and facilities in a subset of the following areas: fabrication, packaging, cointegration (photonics and electronics), components, electromagnetics and materials.
- Build and strengthen the community of researchers in THz power generation. Research across
  the breadth of the above-mentioned research area (b) should aim to bring together bring
  together skills and expertise in a subset of the following areas: high-speed electronics, III-V
  semiconductors, THz-compatible dielectric materials, THz photonic generation, antennas,
  waveguides.
- Enable the emergence of innovative devices and /or systems for THz communications.
- Identify new opportunities fostered through these technologies and possibly the transfer of these technologies from laboratories to industries.
- Develop novel techniques to integrate components, including THz sources, antennae, and receivers to form a THz communication system.
- Demonstrate higher bandwidth operation than is available from existing microwave frequency-range communication systems, over useful distances.

# **Eligibility**

CHIST-ERA is a hybrid funding instrument. Proposals are submitted by international consortiums with partners (research groups) from multiple countries. The call as well as the proposal evaluation and selection are international. Funding is then provided by participating funding organisations directly to the selected consortium partners.

Each partner is directed by a principal investigator (PI), who interacts with the funding organisation. One partner acts as the coordinator for the consortium and is the single point of contact with CHIST-ERA.

It is necessary that both the **consortium is eligible** for CHIST-ERA and **all partners are eligible** to be funded by their respective organisation. All partners have to fulfil the regulations of their respective funding organisation.

If a partner may be eligible to receive funding by multiple participating organisations, the partner must choose a single organisation for funding.

## **Eligibility of the Consortium**

CHIST-ERA projects have a duration of either 24 or 36 months.

The following criteria must be met:

- I. The consortium is **international**:
  - It must have a minimum of three partners;
  - Partners must be located in at least three distinct countries.
- 2. The consortium is balanced:
  - At most 60% of the total funding may be requested by partners from one country.

The consortium needs to be **focused**, that is, the proposed research must have a clearly defined goal. Consortia should therefore normally contain between three and six partners.

Research groups who are not eligible to receive funding from any organisation participating in the concerned topic may be part of a consortium if they are able to secure their own funding. Third-party funding is not considered for the criteria above. The consortium coordinator must be supported by a funding organisation participating in the topic.

## **Eligibility of Partners**

The eligibility criteria for partners are specific to the chosen funding organisation. **Be aware that some funding organisations:** 

- require that eligibility of partners is checked with them prior to applying;
- only fund non-commercial research.

The table on the next page provides an overview of each organisation's eligibility rules. Further details, including those of the Funding Organisations' contact points, can be found in the annex.

In order not to jeopardize the whole consortium, partners should ensure that no a priori doubts exist about the eligibility of their institution (university, academic institutions, industry), the eligibility of their PI (permanent staff, position secured for the duration of the project, etc.), and their eligible costs.

#### **Eligibility of Partners: Overview Table** See the National Annex for detailed national regulations and conditions. **Country Funding** Budget (k€) † Max. number of **Prior** Addi-Industrial Reference funding Additional information organisation contact tional partners scheme projects † eligible SPT **TMCS TMCS** ‡ SPT forms **IoT** IoT ‡ ‡ AT 300 **FWF** 1-2 1-2 Yes 300 Yes Yes Stand-alone projects BE 200 **FNRS** 200 Yes No No "Projets de recherche" Only Wallonia-Brussels Federation. BE **FWO** 200 No No No Research Projects Only Flanders. CH **SNSF** 500 500 1-3 1-3 Yes\* Yes Yes "Programmes/ERA-NET" "Acciones de Programación \*\* Read specific conditions in national ES **MINECO** Yes\*\* 400 400 3-4 3-4 No No Conjunta Internacional" annex. No FR **ANR** 750 750 3-4 3-4 Yes\* Yes Collaborative Project Standard IRC eligibility criteria apply. 150 ΙE IRC Yes No No You must contact IRC prior to submission. Support for participation in the EU research and technology LV VIAA 300 2 Yes\* Yes No development programs Read specific conditions in national NL **NWO** 1,000 3-5 No Yes No Applicants must fill in NCN UNISONO **NCN** 500 1-3 Yes PL Yes No form via the OSF electronic submission system http://www.osf.opi.org.pl/ \*\*\* Industry partners are funded only PT **FCT** 250 1-2 Yes\*\*\* No Yes up to 50% of the requested budget. RO **UEFISCDI** 300 1-2 1-2 No No No Exploratory Research programme TR TÜBITAK 500 500 2-3 2-3 No No Yes TUBITAK 1001

1.300

2-4

2-4

1,300

UK

**EPSRC** 

No

No

No

Standard Mode

<sup>\*</sup> Prior contact is required if PI has never been supported by reference funding scheme.

<sup>†</sup> The budget is indicative and represents the committed funding available for all projects the organisation supports in this topic. Together with the budget, the maximum number of projects gives an indication of the financial constraints that should be expected by partners applying to be funded by this organisation.

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‡ Some funding organisations require that partners contact them prior to submission or send specific documents. Some allow industrial partners but additional conditions may apply. Applicants are strongly recommended to contact their contact point (found in the annex) prior to submission in order to verify their eligibility.

# **Application Procedure**

## I. Ensure the Proposal is Valid

- The research is clearly in line with one of the two topics of the call.
- The consortium meets eligibility criteria.
- Each partner meets eligibility criteria.

It is the responsibility of each partner to ensure their eligibility. Refer to the overview table on the previous page and the detailed regulations of each organisation in the annex for partner-specific conditions.

Please make sure that all partners who must contact their funding organisation prior to submission of their proposal have done so.

# 2. Submit the Proposal

The coordinator prepares a joint proposal for the whole consortium, using the proposal form available on the CHIST-ERA website (<a href="http://www.chistera.eu/">http://www.chistera.eu/</a>). The form is submitted via the electronic submission system on the website.

We recommend that a preliminary proposal be submitted several days before the deadline to guarantee against unforeseen issues. Proposals that have already been submitted can be modified until the deadline.

Partners whose funding organisation requires submitting forms alongside the consortium application must do so at this point.

The coordinator and all partners must be in a position to diligently answer email queries after the submission. If a partner's PI is not available, they must be represented by a collaborator of the same organisation.

# **Evaluation and Selection of Proposals**

Proposals are assessed by an evaluation panel of international experts. There is one panel for each topic of the Call.

The proposals are evaluated and ranked within each topic according to the following criteria:

- 1. Relevance to the Topic: Relevance of the project with respect to the topic description.
- 2. **S/T Quality:** Scientific and/or technological excellence:
  - a. Soundness of the concept, and quality of the objectives;
  - b. Progress beyond the state-of-the-art;
  - c. Quality and effectiveness of the methodology and the associated work plan;
  - d. Originality and novelty of ideas.
- 3. Implementation: Quality and efficiency of the implementation and management:
  - a. Appropriateness of the management structure and procedures;
  - b. Quality and relevant experience of individual participants;
  - c. Quality and added value of the consortium (complementarity, balance, etc.);
  - d. Appropriateness of allocation and justification of requested resources (staff, equipment...);
  - e. Identification of risks.
- 4. **Impact:** Potential impact through the development, dissemination and use of project results:
  - a. Contribution, at the European and/or international level, to the expected impacts;
  - b. Societal and scientific importance;
  - c. Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

The assessment of each proposal by the evaluation panel is detailed in a consensus report, which is made available to applicants.

On the basis of the ranking in each topic and of available funding, a board representing the call's funding organisations (Call Steering Committee) prepares a list of projects recommended for funding.

# **Management of Projects**

## **Setting up the Consortium**

If the proposal is recommended for funding, each partner may need to submit an administrative application to the chosen funding organisation to apply for their CHIST-ERA funding (grant or contract). In rare cases, specific partners in a consortium may be requested to apply for their funding from another funding organisation than the one they had chosen initially. The subsequent negotiation phase between the partner and the funding organisations follows the established procedures and, if successful, results in a grant agreement between the two parties.

All partners of a consortium should request their funding to start at approximately the same date, to ensure that the collaborative research can be conducted as planned.

The administrative and financial management of funding is overseen by the respective funding organisations, according to their rules and guidelines.

At the latest three months after the start of a project, a consortium agreement has to be signed by all partners and sent to the CHIST-ERA Secretariat. Some funding organisations require that the consortium agreement is signed before the grant agreement can be finalised.

# **Reporting and Publications**

Consortia must present the status of their project at each yearly event organised by CHIST-ERA. The related costs are eligible.

Furthermore, the coordinators of funded projects have to submit a scientific report on each 12-month period of the project. The reports must be sent to the CHIST-ERA Secretariat within two months after the end of each period.

Some funding organisations require separate reports for individual project partners. This is specified in their grant agreements.

Any publications resulting from CHIST-ERA projects must acknowledge CHIST-ERA, and an electronic copy must be sent to the CHIST-ERA Secretariat.

# National Annex: Funding Organisation's Contact Points and Regulations

#### AT – Austria

**FWF** 

FWF—Der Wissenschaftsfonds Sensengasse I 1090 Wien

http://www.fwf.ac.at/ Fax: +43 | 505 6739

#### **National Contact Point**

Dr. Stefan Mühlbachler +43 I 505 6740 8408 stefan.muehlbachler@fwf.ac.at Mag. David Miksits +43 I 505 6740 8410 david.miksits@fwf.ac.at

#### **Funding Criteria and Regulations**

All Austrian partners must contact FWF prior to submission.

For Austrian proposers hold the same application criteria as for regular stand-alone projects (see pages I and 5-7 of "application guidelines" available at the FWF website:

 $\underline{http://www.fwf.ac.at/fileadmin/files/Dokumente/Antragstellung/Einzelprojekte/\underline{p\_application-guidelines.pdf}}$ 

Applications forms can be found following this link:

 $\underline{\text{http://www.fwf.ac.at/de/forschungsfoerderung/antragstellung/internationale-programme/joint-projects-era-net-calls}$ 

#### mandatory are:

- Scientific Abstract of the joint project in E and PR-Abstract of the joint project in D and E
- Application form (incl. signature and stamp of the research institution)
- Programme specific data
- Attachment Co-Authors
- Itemisation of requested funding (only FWF part)

#### If existing:

- National research partner
- Itemisation form-Equipment
- Transferred equipment form

Filled and signed FWF forms have to be sent to the FWF office concurrent to the submission of the joint CHIST-ERA proposal.

# BE – Belgium FNRS

#### **Contact Point**

Mrs. Freia Van Hee Dr. Arnaud Goolaerts
Policy Officer Scientific Advisor
+32 2 504 93 09 +32 2 504 93 28

<u>freia.vanhee@frs-fnrs.be</u> <u>arnaud.goolaerts@frs-fnrs.be</u>

#### **Funding Criteria and Regulations**

**Project duration:** The maximum amount of requested funding per project is 200.000 EUR for a total period of three years. If the project involves the recruitment of a PhD student, the project duration of the F.R.S.-FNRS sub-project could be up to four years.

**Eligibility of the proposal:** Additional national eligibility criteria for the proposal beyond the general criteria in the Terms of Reference of the joint call

- Basic research (low Technology Readiness Level) carried out in a research institution from the "Fédération Wallonie-Bruxelles"
- The FNRS will not fund industrial partners or any activity related to the private sector.

#### Eligibility of applying scientists

The applicant must be affiliated to a research institution from the Fédération Wallonie-Bruxelles. The applicant should also:

- be a permanent researcher of F.R.S. FNRS (Chercheur qualifié, Maître de recherches or Directeur de recherches),
- or hold a tenure track position (or an assimilated position including pending tenure track) within a research institution from the Fédération Wallonie-Bruxelles,
- or be a permanent research staff member of a federal scientific institution in which case he can act as a co-promotor only.

The applicant should not have reached retirement at the starting date of the project. If the applicant reaches the age of retirement in the course of the project, he should precisely describe in the proposal how the handover will be managed. A single applicant may only participate once in a consortium applying to this call.

#### Eligible cost items

The maximum amount allocated per project is 200.000 EUR. The following costs are eligible:

#### • Personnel:

- o Scientifique doctorant € 37.200/year
- o Scientifique non postdoctoral € 63.300/year
- o Scientifique postdoctoral € 73.800/year
- Technicien € 53.700 (full time/year) € 27.200 (half time/year)
- o Chercheur temporaire postdoctoral € 47.600/year

The categories "scientifique doctorant" and "chercheur temporaire postdoctoral" can only be Full time positions. The three other positions can be filled in either Full time or part-time.

- Equipment (max. 10.000 EUR/year)
- Running costs: (max. 15.000 EUR/year): travel expenses; organisation of small scientific events in Belgium; consumables and the following support costs: conception d'ouvrage, réalisation de dictionnaire, achat de livre, encodage, location de licence de logiciel, inscription à un congrès, ordinateur, scannage.

"Overhead" is not an eligible cost. If the project is selected for funding, these costs will be subject to a separate agreement between the institution of the beneficiary and the F.R.S.-FNRS. General rules and regulations of FNRS apply: www.frs-fnrs.be

See also: http://www.ncp.fnrs.be/index.php/appels/era-nets

# **BE** – **Belgium**

**FWO** 

Research Foundation - Flanders

http://www.fwo.be/

**Contact Point** 

Dr. Olivier Boehme Toon Monbaliu
Science Policy Advisor Advisor Research Affairs

+32 2 550 15 45 +32 2 550 15 70 <u>eranet@fwo.be</u> <u>eranet@fwo.be</u>

#### **Funding Criteria and Regulations**

FWO will fund one project in total. FWO will not fund industrial partners.

Art. 9 of the FWO-regulation on the regular research projects is applicable. Art. 16-22 give more information on the cost categories. You can find the FWO-Regulations for Research Projects on the FWO-website:

http://www.fwo.be/en/fellowships-funding/research-projects/research-projects/

#### **CH – Switzerland**

**SNSF** 

Swiss National Science Foundation

Division II – Mathematical, Natural and Engineering Sciences Wildhainweg 3 P.O. Box 8232 CH-3001 Berne

http://www.snf.ch

#### **National Contact Point**

Dr Georges Klein Scientific Officer +41 31 308 21 68 georges.klein@snf.ch

#### **Funding Criteria and Regulations**

Projects must comply with SNSF Project Funding (division II) regulations and practices.

In particular, all Swiss applicants and co-applicants must be eligible for Project Funding. Swiss applicants who have not previously obtained a Project grant in division II must contact the national contact point.

Please note that article 15 of SNSF funding rules (multiple parallel grants) applies.

Grants will be managed according to <u>standard SNSF rules</u>; reporting requirements duplicating those of CHIST-ERA will not be enforced. Follow-up applications may not be submitted.

#### Forms to be submitted

Applicants must provide basic administrative data by submitting an administrative application in the online mySNF tool on or before the day the consortium application is submitted. Please select the Programmes/ERANET funding instrument when creating the administrative application.

ES – Spain MINECO

Subdirección General de Proyectos Internacionales Paseo de la Castellana 162 ES-28046 Madrid (Spain)

+34 916037990

**National Contact Point** 

Administrative and technical issues: Scientific issues: Representative:

Watse Castelein Severino Falcón Dr. Federico J. Mompeán

+34 9160 38876 <u>severino.falcon@mineco.es</u> <u>sgint.fm@mineco.es</u>

era-ict@mineco.es

#### **Funding programme**

Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad, <u>Plan Estatal de Investigación Científica Técnica y de Innovación 2013-2016</u>.

The instrument for funding the Spanish groups will be the Spanish Call on International Joint Programming Actions (Acciones de Programación Conjunta Internacional), which will be launched in 2016 (APCIN 2016). Only as a reference, the beneficiaries are advised to read the call APCIN 2015.

The Spanish legal entities granted are obliged by the regulations established in this APCIN call and by the funding limits specified below.

Call will be managed by the Deputy Directorate General for International Projects (SGPINT).

#### Purpose of funding

The projects granted by the MINECO must be aligned with the main objectives described in the <a href="Programa">Programa</a>
<a href="Estatal">Estatal</a>.

#### **Funding commitment**

Maximum funding for the CHIST-ERA call 2015: 800.000 €

#### Eligible criteria

Eligible legal entities for MINECO funding:

Non-profit research organizations according to the APCIN call

I) Although enterprises won't be funded through the APCIN Call, the Spanish industrial sector is much welcome to participate in the transnational consortia using their own funds. Nevertheless, MINECO may establish an additional support in order to promote cooperation between the Spanish public and private sectors.

Final rules on eligibility will be described at the APCIN2016 call, to be published here.

#### Additional eligibility criteria

#### Mandatory:

Spanish Principal investigators **must be** eligible according to the APCIN 2016 call and must have experience as investigators in projects funded by the *Plan Nacional I+D+I 2008-2011*, the *Plan Estatal I+D+I 2013-2016*, ERC Grants, or European Framework Programmes.

#### Not allowed:

- <u>Principal Investigators</u> are not allowed to apply for funding in more than one proposal of the CHIST-ERA call 2015.
- <u>Principal investigators</u> are not allowed to apply for funding in more than one proposal in APCIN 2016 call. This must be taken into account when participating in different ERA-Nets or other international initiatives.
- Important note: Principal investigators granted in the APCIN 2015 call are not allowed to apply neither in APCIN 2016 nor in the transnational CHIST-ERA call 2015.

MINECO will avoid double funding (overlapping with other EU or National funding), and will not grant projects or parts of projects already funded.

[to be continued on the next page]

#### **Eligible costs**

- Personnel costs for temporary contracts (fellowships are not eligible).
- Current costs, small scientific equipment, disposable materials, travelling expenses and other costs that can be justified as necessary to carry out the proposed activities.
- Indirect costs (overheads) or clinical assays (proofs of concept, proofs of principle) are not eligible for funding in the APCIN call.

#### **Funding rates**

The following funding limits are considered eligibility criteria. Proposals not respecting these limits could be declared non eligible.

- Maximum per legal entity and proposal eligible for MINECO should not exceed 35.000 € per year. If two or more legal entities participate in the same proposal the MINECO part should not exceed 46.000 € per year.
- For entities carrying out experimental work, maximum per legal entity and per proposal eligible for MINECO should not exceed 55.000 € per year. If two or more legal entities participate in the same proposal the MINECO part should not exceed 70.000 € per year.
- If the transnational proposal is led by a PI eligible for MINECO a maximum of 12.000 € per year in addition.

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.

#### Mandatory acknowledgement

Any publication or dissemination activity resulting from the granted projects must acknowledge MINECO funding even after the end of the project: "Project (reference n° XX) funded by MINECO through APCIN 2016".

# FR – France ANR

Agence Nationale de la Recherche 50 avenue Daumesnil 75012 Paris

#### **National Contact Point**

Mathieu Girerd International Scientific Officer

+33 | 7354 8213

mathieu.girerd@agencerecherche.fr

#### **Funding Criteria and Regulations**

The specific appendix for applicants from France will be available by end November on the website of ANR: <a href="http://www.anr.fr/AAPProjetsOuverts">http://www.anr.fr/AAPProjetsOuverts</a>.

IE – Ireland IRC

The Irish Research Council (IRC)

Brooklawn House Crampton Avenue Shelbourne Road Ballsbridge Dublin 4

www.research.ie

#### **National Contact Point**

Dr. Maria O'Brien

+353 | 2317134

mobrien@hea.ie

#### **Funding Criteria and Regulations**

The grants distributed by the Irish Research Council must be administrated by an Irish higher education institution (HEI) that fulfils the Irish Research Councils criteria for an administrating organisation.

Eligibility criteria for regular IRC funding programmes apply (www.research.ie). You must contact IRC prior to submission.

LV – Latvia VIAA

Valsts izglītības attīstības aģentūra Valnu street I Riga LV-1050 LATVIA

http://viaa.gov.lv/

### **National Contact Point**

Dr. Maija Bundule

+371 67785423

Maija.bundule@viaa.gov.lv

#### **Funding Criteria and Regulations**

Eligibility criteria defined in the Regulations of the Council of Ministers of the Republic of Latvia No 259 on the procedure for providing support for participation in international cooperation programs for research and technology (adopted on 26 June 2015) are applied.

Following organisations are eligible for funding: universities, research institutes and research centres and enterprises. They must be listed in the Registry of Research Institutions operated by the Ministry of Education and Science of the Republic of Latvia.

For applicants a maximum of 70 000 Euros can be requested per project year.

The grant can be used to cover all project-related costs, which include salaries (corresponding to the level of activity in the project), travels, purchase of materials, publication costs, minor equipment and depreciations, etc. Overhead costs must not exceed 25% of eligible costs excl. subcontracting.

You must contact VIAA prior to submission if you submit the project proposal to the CHIST-ERA Call for the first time.

#### **NL** – The Netherlands

#### NWO

The Netherlands Organisation for Scientific Research Postbus 93460 2509 AL Den Haag

www.nwo.nl/

#### **National Contact Point**

For information on the 2015 call:

 Mascha Dedert
 Marije Wassenaar

 +31 70 349 47 09
 +31 6-30369762

 m.dedert@nwo.nl
 m.wassenaar@nwo.nl

#### **Funding Criteria and Regulations**

Proposals submitted within the 6th CHIST-ERA call are subject to the general NWO Regulations on Granting.

#### Eligibility of the proposal:

Eligibility criteria for regular NWO funding programmes apply for the Dutch projects, "Regeling Subsidieverlening" see also: <a href="http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo">http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo</a>

Dutch applicants are obliged to contact NWO prior to submission to assess their eligibility.

NWO will avoid double funding and will not finance projects or parts of projects that have been funded through other national, regional or EU calls.

#### **Eligible institutions:**

In particular, all Dutch applicants and co-applicants must be eligible for Project funding. For more information see: <a href="http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo">http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo</a> (article 1.1.1).

TO2 institutes, KNAW (incl. its institutions) and universities of applied sciences – HBO-instellingen – (if paid in accordance with Article 8.1 of the law on higher education and scientific research and a member of the Vereniging Hogescholen) may act as (co-) applicant (see also 1.1.2. of the Regeling Subsidieverlening). They can also receive (part of) the grant applied for.

(Co-)Applicants should have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for. Exceptions to the required employment duration can be made for main applicants holding a "tenure track" position that covers at least half the duration required and for co-applicants if the applicants prove by means of a letter that adequate supervision of all researchers for whom funding is applied for, can be guaranteed for the full duration of the grant. On behalf of a university of applied sciences (HBO-instelling) the lector acts as (co-)applicant.

Industrial participants from the Netherlands can also participate in the consortium and contribute to the project. Industrial participants cannot receive funding.

#### **Eligible costs:**

The maximum amount of requested funding per Dutch project is € 250.000. Projects must comply with NWO Project funding. See also <a href="http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo">http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo</a> (See also article 1.2.2 Budget Structure and article 1.2.3 Fundable Costs). The requested funding for all Dutch applicants and projects should comply with the fixed rates, according to VSNU tariffs. See also: <a href="https://www.nwo.nl/salaristabellen">www.nwo.nl/salaristabellen</a>

Grants will be managed according to standard NWO rules and regulations.

Please take into account when budgeting the project that yearly travel costs will have to be made to attend the yearly CHIST-ERA conference.

NWO will be responsible for taking the final decision regarding the award of funds to the Dutch partners. The final decision will take fully into account the transnational evaluation of the cooperative project and the financial resources available.

[to be continued on the next page]

#### **Project duration:**

The Call text states that projects have a duration of either 24 or 36 months. If the Dutch project involves the recruitment of a PhD student, the project duration of the NWO sub-project could be up to four years.

#### **Open Data:**

In 2015, NWO will make the funding conditions for Open Access more stringent and it will presume a preference for the Golden Road. For the time being, NWO will also accept the Green Road as an alternative. The Open Access policy applies to the 6<sup>th</sup> CHIST-ERA call. For the NWO policy see also: <a href="http://www.nwo.nl/en/policies/open+science/open+access+publishing">http://www.nwo.nl/en/policies/open+science/open+access+publishing</a> see also, article 4.5, <a href="http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo">http://www.nwo.nl/documents/nwo/juridisch/regeling-subsidieverlening-nwo</a>

#### PL – Poland NCN

Narodowe Centrum Nauki

u. Królewska 57 30-081 Kraków Poland

#### **National Contact Point**

Dr. Jakub Gadek +48 (12) 3419152 jakub.gadek@ncn.gov.pl Ms. Sylwia Kostka +48 (12) 3419018 sylwia.kostka@ncn.gov.pl

#### **Funding Criteria and Regulations**

- Only proposals involving basic research may be submitted in response to the call for proposals.
- Polish research institutions as referred to in Art. 10 of the Act of 30 April 2010 on the Principles of Financing Science (Dz. U. z 2010 r. nr 96, poz. 615 z późn. zm.)
   http://www.ncn.gov.pl/sites/default/files/pliki/ustawy/ustawa-o-ncn.pdf
- The applicant who intends to act as Principal Investigator in the CHIST-ERA Consortium must be a researcher with a doctoral degree, with an established scientific record.
- NCN grantees will be requested to complete the following budget table <a href="http://ncn.gov.pl/pliki/chistera">http://ncn.gov.pl/pliki/chistera</a> budget table 2016.xlsx
- Principal Investigator must be employed at a Polish research institution, have necessary qualifications, the required infrastructure and sufficient free capacity to carry out the requested project in full.

#### Forms to be submitted:

 The applicants must fill in NCN UNISONO form via the OSF electronic submission system <a href="http://www.osf.opi.org.pl/">http://www.osf.opi.org.pl/</a>

#### Please note:

- Overhead costs must not exceed a maximum of 30% of eligible costs (excl. equipment) and may not be increased during the course of a research project
- Administrative personnel costs have to be covered from overheads
- Applicants are obliged to adhere to the rules included in the NCN Resolution 84/2015 http://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2015/uchwala84 2015.pdf

# PT - Portugal

**FCT** 

Fundação para a Ciência e a Tecnologia

Av. D. Carlos I, 126 1249-074 Lisboa Portugal

http://fct.pt

National Contact Point

Nuno Miguel Moreira +351213911575

nuno.moreira@fct.pt

**Second contact Point** 

Anabela Isidro +351213911552 anabela.isidro@fct.pt

#### **Funding Criteria and Regulations**

All proposals must be aligned with national regulations.

Eligible criteria can be found in FCT's Regulations for Scientific Research and Technological Development Projects:

- Portuguese version (<a href="https://www.fct.pt/apoios/projectos/regulamento.phtml.pt">https://www.fct.pt/apoios/projectos/regulamento.phtml.pt</a>)
- English version (<a href="http://www.fct.pt/apoios/projectos/concursos/faq.phtml.en">http://www.fct.pt/apoios/projectos/concursos/faq.phtml.en</a>).

**Eligible institutions:** Higher Education Institutions, their institutes and R&D centers; Associate Laboratories; State Laboratories; Private non-profit institutions whose main objective is to carry out S&T activities; Companies, provided they participate in projects headed by public or private non-profit R&D institutions; Other public and private non-profit institutions which carry out or participate in scientific research activities.

**Eligible costs:** Equipment, Personnel, Networks & Consortium Funding, Intellectual Property Rights (e.g. patents), overheads and Mobility.

#### Please note:

- Portuguese teams need to send a Statement of Commitment to the National Contact Point from FCT, duly signed, dated and stamped by the Head of the Portuguese applicant organisation and by the Principal Investigator (the form will be linked in the Call announcement page on the FCT website).
- The maximum funding is 250.000€ for a proposal with Portuguese coordination and 150.000€ for a proposal with Portuguese participation.
- The dedication time of researchers to project is not applicable for this JTC.
- The submission of the proposal at national level will only be required after selection for funding.

#### RO - Romania

#### **UEFISCDI**

Research Funding Directorate

Management and Administration of Exploratory Research Programmes European Science Foundation Department

Executive Agency for Higher Education, Research, Development and Innovation Funding

21-25 Mendeleev Str., sector I 010362 Bucharest Romania

Fax: +40 21 311 59 92 www.uefiscdi.gov.ro

#### **National Contact Point**

Monica Cruceru Expert

+40 21 308 05 61

monica.cruceru@uefiscdi.ro

#### **Funding Criteria and Regulations**

- The leader of Romanian team must have a doctorate. If the doctoral diploma is not officially recognized in Romania, its recognition must be obtained before signing of the funding contract;
- The leader of Romanian team has a fixed term contract with an institute from Romania covering at least the duration of the project or has the agreement of the host institution for his or her employment at least for the duration of the contract;
- It is forbidden to submit a proposal which seeks to fund activities which had already obtained funding from the state budget;
- The host institution does not have a seizure on its accounts; it has not made false declarations concerning the information required by the UEFISCDI; it has not broken the terms of a different contract signed previously with the UEFISCDI;
- The host institution agrees to ensure the necessary administrative support, to provide access to all necessary infrastructures, to support the implementation of the project in good conditions and to employ the members of the Romanian team, while observing all legal provisions in force.
- A Romanian researcher can submit only one proposal per call topic.
- A Romanian PI could not have simultaneously more than one funded project under CHIST-ERA Scheme.

#### **Eligible costs**

- Personnel / Staff costs (including all corresponding state and social contributions) the Romanian team including the PI, will be paid according to the provisions of the Governmental Decision 583/2015 (upper ceilings) and in full compliance with the working contract of Romanian team with its organisation;
- Equipment and consumable costs necessary for the JRP, including equipment, consumables, material expenses, publication, information / bibliography expenses or for access to the research infrastructure of third parties, subcontractors, etc.
- Travel and subsistence allowances (including travel and accommodation costs, allowances, conferences
  fees, medical insurances, visa fees) corresponding to international travel of the Romanian JRP team
  members, for documentation periods, participation in high level scientific conferences thematically
  linked to the JRP, workshops and communications in the field of the JRP;
- Overhead indirect expenses are calculated as a percentage of direct expenses: salaries, inventory and mobility (no more than 25%).

#### **General regulations**

- The Romanian partners awarded in this call are invited to contract under the National Plan for RDI 2014-2020 rules;
- The Romanian partners awarded in this call should submit an annual report (scientific and financial) to UEFISCDI in accordance with the regulations settled in the funding contract.

# **TR** – Turkey

# TÜBITAK

TÜBITAK

**EU Framework Programmes** 

TUBİTAK ULAKBİM YÖK Binası B5 Blok 06539 Bilkent / ANKARA

www.h2020.org.tr http://www.tubitak.gov.tr

#### **National Contact Point**

Hasan Burak Tiftik / Ahmet Furkan Ciftci / Ezgi Bener

+90 312 298 94 05

ncpict@tubitak.gov.tr

burak.tiftik@tubitak.gov.tr

furkan.ciftci@tubitak.gov.tr

#### **Funding Criteria and Regulations**

Information will be available before the call deadline of the TÜBITAK EU website <a href="http://www.h2020.org.tr/">http://www.h2020.org.tr/</a>.

The previous version for the 2014 call is available:

http://www.h2020.org.tr/tr/haber/chist-era-ii-projesi-2014-cagrisi-acilmistir

Projects with industry partners can be funded via 1001 Programme.

# **UK – United Kingdom**

**EPSRC** 

Engineering and Physical Sciences Research Council

www.epsrc.ac.uk

#### **National Contact Point**

Dr Susan Peacock Portfolio Manager, Information and Communication Technologies +44 (0)1793 444578

Susan.Peacock@epsrc.ac.uk

### **Funding Criteria and Regulations**

For UK applicants, the standard RCUK eligibility criteria apply. See the Funding guide on the EPSRC website: <a href="http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/">http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/</a>