



# SUSTAINABILITY OF ERA-NETS: DUBLIN CASTLE

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As part of its ongoing activities to provide the ERA-NET and related community with learning tools and opportunities, the ERA-LEARN team organised a mutual exchange workshop to better understand the future needs of the more mature networks. It was held in February at Dublin Castle before the 2013 Joint Programming Conference.

The workshop involved 25 participants from a variety of networks, most of which had commenced in FP6, and others from the ERA-LEARN and NETWATCH projects teams. This included several that have continued without FP7 co-funding. Guiding questions were aimed at fostering discussions on key issues such as the rationale for selection of the route to sustainability, the primary success factors for sustained activities and the main sustainability issues and obstacles that they have encountered.

Some fascinating insights were gained from case evidence provided by 11 networks that have achieved some degree of sustainability and how they hope to continue in the future. Some have FP7 co-funding that will sustain them until 2017. Others are coming to the end of their current EU funding

cycle or have been self-financing. All of them are hoping to secure some kind of co-funding from Horizon 2020. In general, those that have ‘experienced’ a period of self-sufficiency realise that it is extremely difficult (if not impossible) to maintain an effective network without Commission co-funding, especially for the essential network management and network functions to support joint calls. It appears that the benefits of Commission funding outweigh the cost of the associated bureaucracy.

A short report on the event and conclusions (Needs of the Mature ERA-NET Community) is available on the NETWATCH Learning Platform. This includes a [frequently asked questions](#) overview of the proposed ERA-NET instrument for Horizon 2020.



On 18-19 September 2013, ERA-LEARN will organise a training workshop focusing on the implementation of Joint Calls in ERA-NET, ERA-NET Plus and JPIs. The training session will be based on the online toolbox developed by ERA-LEARN, available on the NETWATCH website. The workshop will take place in Brussels. Participants would be coordinators and participants in new ERA-NETs, JPIs or other ERA instruments working with joint calls. Participation is free of charge, but participants have to take care of their own travel arrangements. Please find the programme for download and the registration facility [here](#)

## IMPLEMENTATION OF COST-BENEFIT ANALYSIS

The ERA-LEARN assessment tool for the analysis of costs and benefits of call implementation went online this June on NETWATCH.

It assesses the efforts and workforce deployed in the set-up and operation of joint calls and the benefits generated in return, with benefits measured in cooperation generated within the ERA and/or project costs of funded cooperation projects. Indices have been developed to demonstrate the effort-outcome relation and thus the effectiveness of call implementation.

The intention of the tool is to benchmark individual ERA-NET calls and to allow call managers to critically analyze their calls step by step, since each preparatory

or operative phase of a call is assessed separately. Thus, the effectiveness of a call is not only interpreted on the basis of a single overall figure, but at the level of the particular phase of a call; this makes mutual learning through comparison with other performers possible.

A derived application is the informative benchmarking of calls between and among ERA-NET calls of similar scope or structure. This information provides actors and policy makers, but also initiatives like JPIs, with basic data on call implementation

costs. Finally, the data can easily be deployed for an impact assessment of joint calls by both individual and groups of ERA-NETs, as will be done in the PLATFORM project for KBBE related ERA-NETs.

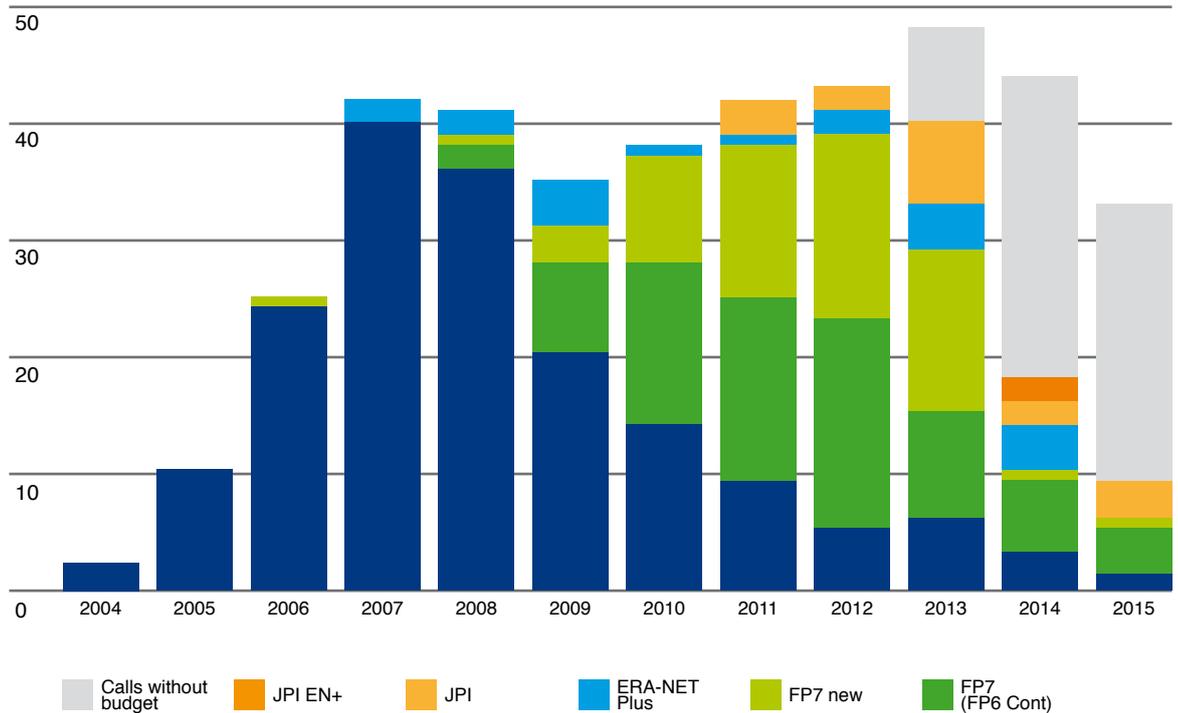
The functionality of the tool depends on the data being provided by the users, as more data will foster a better comparison in a more relevant context of the ERA-NET landscape. With the launch of the cost-benefit analysis tool ERA-NET coordinators (or call organizers) can start to provide data in order to receive interactive feedback on their call performance. You are encouraged to do so.

[See here for more details](#)



The European Commission issued its annual report on ERA-NET, ERA-NET Plus and JPIs and their joint calls in June 2013. The report looked at statistical data on the number of networks and the funding they receive, as well as data on the joint calls for transnational research implemented by those networks.

**Number of implemented calls per year**



In total 71 ERA-NETs have been funded under FP6. Under FP7, 82 ERA-NETs and 23 ERA-NET Plus actions are funded or expected to be funded. In total, 51 ERA-NETs will have started under FP7 on topics that were not covered formerly. The ERA-NET scheme under FP7 will be funded with around €308m for the period 2007-2013, of which €154m are for coordination in ERA-NETs and almost €154m as well for topping-up of calls in ERA-NET Plus actions.

The reports also show a total public funding for the years 2004 to 2012 of more than €2.06bn dedicated to trans-national calls. For the period 2013-2015, calls with a total volume between €845m and €1.2bn public funding are currently planned.

A total of 278 calls have been implemented by ERA-NETs, ERA-NET Plus and JPIs in 2004-2012 and more than 125 are currently planned for 2013 – 2015. The number of implemented calls is relatively stable from 2007 to 2012 with 35 - 40 calls per year.

For 2013, 40 calls foreseeing a dedicated budget are already planned and 8 more calls are announced by the networks without any precise budget as yet.

Finally, the average budget per call is almost three times higher for ERA-NET Plus instruments (€23m) as for ERA-NET actions (€8m). Joint Programming Initiatives' calls have an average budget of €13m.

See here for more information.



The last FP7 call for proposals for ERA-NET and ERA-NET Plus actions closed in February 2013 and evaluation took place last April. In total, 15 projects passed the evaluation successfully and are expected to start in 2013. They cover a total budget of €61.1m in seven FP7 themes:



### Food, agriculture and fisheries, and biotechnology

- SUMFOREST: Tackling the challenges in sustainable and multifunctional forestry through enhanced research coordination for policy decisions
- C-IPM: Coordinated Integrated Pest Management in Europe
- ARIMNet2: Coordination of the Agricultural Research in the Mediterranean
- ICT-AGRI 2: Information and Communication Technologies and Robotics for Sustainable Agriculture
- FACCE Era Net Plus: Food security, Agriculture, Climate Change ERA-NET Plus
- CORE Organic Plus: Coordination of European Transnational Research in Organic Food and Farming Systems
- ERA-MBT: Marine Biotechnology ERA-NET

### Energy

- BESTF2: Bioenergy Sustaining the Future 2
- NEWA: New European Wind Atlas Joint Programme
- OCEANERA-NET: The coordination of national research activities of Member States and Associated States in the field of Ocean Energy

### Nanosciences, nanotechnologies, materials and new production technologies

- INCOMERA: Innovation and Commercialisation in the NMP thematic area

### Environment

- HERITAGE PLUS: ERA-NET Plus on Cultural Heritage and Global Change Research

### Sustainable Surface Transport

- INFRAVATION: ERA-NET Plus on Infrastructure Innovation

### Science in Society

- GENDER-NET: Promoting gender equality in research institutions and the integration of the gender dimension in research contents

### Socio-economic sciences and the humanities

- WSF: Welfare State Futures, from NORFACE network

### Furthermore 4 ERA-NET and ERA-NET Plus actions in the field of international cooperation are expected to start in 2013:

- ERA-Net RUS Plus: Further linking Russia to the ERA - Coordination of MS/AC S&T programmes towards and with Russia
- ERANet-LAC: Network of the European Union, Latin America and the Caribbean Countries on Joint Innovation and Research Activities
- ERANETMED: Euro-Mediterranean Cooperation through ERA-NET Joint Activities and Beyond
- INNO INDIGO: Innovation driven Initiative for the Development and Integration of Indian and European Research

ERA-NET under Horizon 2020 is designed to support public-public partnerships (including JPIs) in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of joint calls (one call per Grant Agreement). It is based on the merger of the existing ERA-NET and ERA-NET Plus actions with implementation via “programme co-fund actions” (new under H2020). It allows for transnational programme collaboration in any part of the entire research-innovation cycle.



## 01.

### **Is the future (Horizon 2020) ERA-NET instrument just a new name for the FP7 ERA-NET Plus?**

No. Whilst one of the options is a stand-alone call with top-up funding, the Horizon 2020 ERA-NET instrument will have the flexibility for two options:

- only implementation and follow-up of the co-funded call
- or, in addition to the co-funded call, networking and other activities including further calls without top-up funding (simplified description and reporting)

It can therefore be regarded as a merger of the FP7 ERA-NET and ERA-NET Plus instruments and will be implemented through a new action under Horizon 2020 to be known as ‘programme co-fund actions’.

## 02.

### **What are ‘programme co-fund’ actions?**

This is a new action under Horizon 2020 to supplement individual calls or programmes funded by entities that manage research and innovation programmes. It will be mandatory that these will include at least one substantial call or joint action with top-up funding from the EU. It will no longer be possible to secure ERA-NET funding for networking alone.

## 03.

### **Will it be possible to secure funding for a future ERA-NET in any domain?**

The identification of topics must take into account Horizon 2020 priorities and, of course, the priorities of the national/regional research and innovation funding bodies. This means that the future ERA-NET instrument will move further from coordination of national programmes alone to coordination between national programmes and Horizon 2020.

## 04.

### **What level of EU grant funding can be secured for an ERA-NET under Horizon 2020?**

The proposed grant will probably be 33% of the call budget, which will also be usable for the support to coordination activities. This will include simplified financial rules including output based co-funding for the calls and probably lump sums for other activities (i.e. fixed amount per partner per year). The main features of this new ERA-NET scheme will be confirmed and further detailed once Horizon 2020 is formally adopted.

## 05.

### **What will be the rules for the co-funded calls?**

Co-funded calls continue to use Framework Programme standards for proposals evaluation and selection (internal peer review, obligation to follow the ranking list for proposal selection, etc). However, ERA-NETs will be able to continue using national rules for the funding of selected projects.

## 06.

### **Can a network use multiple sources of funding from Horizon 2020 and other 2014-2020 funding frameworks?**

Yes. It is Commission Services policy to encourage synergies between Horizon 2020 projects and other funding sources, especially the European Structural and Investment Funds (ESIF). It is expected that the Commission will publish guidelines on how to make best use of the different funding sources.



The Commission makes it crystal clear that thriving and innovative enterprises are crucial to put the European economy back on track. “We must commercialise our scientific and technological advances faster and more fully so that we can face and, indeed, profit from global competition,” Commissioner Máire Geoghegan-Quinn told a gathering of the 2nd European SME Convention in Brussels last October when speaking about the goals of Horizon 2020.



One engine of commercially relevant innovation is [CORNET](#), which bolsters research activities across national borders. Here’s how it works: SME groups come up with practical problems in need of a solution, and European researchers get to work solving them.

A recent project sought to increase the safety of cars by improving the crash resistance of adhesives; another developed coatings for the European textile industry that better resisted abrasion. There is also a project which aims to treat wastewater from the paper industry using algae; if successful, this process will deliver cost and efficiency savings for the paper and related industrial sectors across Europe.

CORNET already boasts high success rates and short times to contract as compared to other European funding programmes. It enables consortia of SMEs, SME associations and research organisations from at least 2 European countries to work together in transnational projects; there are calls for proposals twice a year.

“The SMEs we are aiming at don’t have the capacity to do the research themselves, so they give the input regarding the topics they would like to have support for,” explains Dr Viktoria Cvetkovic, of the German Federation of Industrial Research Associations, who is in charge of coordination. They do this through SME associations, rather than directly. “The demand for

these collective research projects is bottom up. Challenges like sustainable energy and climate change mitigation affect entire industry sectors. Industry associations lobby and approach their ministries with ideas on how to tackle such problems. SMEs are able to join forces and benefit from the knowledge created,” she explains.

The payback to industry is clear. CORNET helps SMEs gain technological know-how, link up with partners across Europe and step across that gap between basic research and commercially relevant innovation. As an example, a project to end this September looked to develop more efficient wheat varieties in Europe and saw breeders in countries such as Germany, Austria and Hungary join forces. Wheat varieties with just the right mix of high nitrogen use efficiency, dependable yields and high baking quality were sought.

Companies themselves don’t get any funding; rather, they cooperate with research centres. “The people there are use to writing up research proposals and do a lot of paperwork. So it is not the task of SMEs to write and apply directly,” Cvetkovic explains, but they form the industrial advisory boards in projects. The latest call opened in June and will close on September 27th. There is also a partnering event scheduled for October 29th and 30th; Cvetkovic will attend as chief matchmaker and research

organisations, national funders and SMEs organisations will be there and on the lookout for partners.

Although working as a self-sustaining network since 2011, funding in CORNET follows the ERA-NET in principle, Cvetkovic says. “Funding comes from funding bodies like ministries or agencies and there is no money going across borders. Every agency or ministry supports participants from their own country.” Cvetkovic, who is a civil engineer by training, is enthusiastic about the breadth of projects covered and says for scientists it is an opportunity to see their work applied in real life.

“It is something beyond doing basic research which looks long term and writing only publications on your own work,” she says. “When you are part of one of these projects, which are more applied, you are able to contribute through your results to society and to your neighbours,” and all within a timeframe of 2 to 5 years. The make-up of the project’s community is quite mixed; there is a stable community of associations who apply with perhaps 2 to 3 projects for every call, but there are also new organisations joining. [See here for more details](#)



The issue of food security shot up the agenda when world food prices spiked in 2007 and early 2008, creating a global crisis and global unrest in many countries. It became apparent that one country could not tackle this momentous issue alone.



Global demand for food is now expected to increase by 50% by 2030 and to double by 2050. The drivers will be population growth, urbanisation and increasing affluence in parts of the developing world. At the same time, sustainably meeting demand will be made more complicated by climate change.

To minimise duplication on this grand problem in Europe, it was agreed in 2008 to have a Joint Programming Initiative on agriculture, food security and climate change; this initiative merged proposals from the UK and France in the main and saw the creation of the Joint Programming Initiative on Agriculture, Food Security and Climate Change ([FACCE-JPI](#)). Bringing together 21 countries, this JPI announced approval for its first joint action in April 2012.

This action, a knowledge hub called MACSUR, embraces 67 research groups from 17 countries under one virtual roof and will strive to improve the characterization of European food security due to climate change and boost adaptation readiness by improving modeling of the impacts of climate change.



“There will be a research component, a networking component and a capacity building component for countries that are less advanced in the area of modeling impacts of climate change,” Dr Heather McKhann of the JPI secretariat explains. Included in this project will be crop modeling, livestock and grassland modeling but also economic and trade modeling. “The idea is to bring all those people from the modeling community together, including subcommunities of modellers,” says McKhann, who has experience in research as a plant biologist.

Countries can even participate without coming up with ready cash. The idea was to bring together research groups that are already working in this area and adding just enough money so they can network and work together. Some countries have put in new money, but many countries arrived with just their research groups that were already being funded nationally. With government's keeping a tight hold of purse strings, this Joint Programming Initiative hopes to help dissuade countries from retreating from the European Research Area.

“Because we are talking about big global challenges, there is a certain incentive to work together. Effectively these are questions that countries can't necessarily address on their own,” says McKhann.

The world's population is projected to increase from today ~7 billion to 9 billion by 2050. Food supply must increase sustainably to meet this demand, and is made more complicated by climate change. The FACCE JPI is split into five core themes,

though the overarching theme is in the thatch of Core Theme 1 - Sustainable food security under climate change. This will ask how climate variability and change will affect regional farming systems in the near and far future and what are the risks and the opportunities for European food security and agriculture.

The JPI's strategic research agenda was launched last December and details the 5 core themes. McKhann describes themes 2 and 3 as the pillars of the project. Theme 2 will look at environmentally sustainable growth and intensification of agriculture. To this end, it will for example offer new approaches for improving farm management and for the sustainable intensification of agricultural systems, but also for low-input high natural value systems in Europe under current and future climate and resource availability. Other strands include the development of low input, higher efficiency seeds and breeds.

Asked if there is a contradiction in intensifying agriculture in a sustainable way, McKhann acknowledges that it is a title that has caused some “quite lively discussion,” but the JPI is to be guided by its scientific advisory board. Theme 3 will assess and reduce trade-offs between food supply, biodiversity and ecosystem services; it will assess these trade-offs and develop ways of optimising them. The final two themes are on adaptation to climate change and mitigation.

“There has been an international call on climate change mitigation,” says McKhann, “and we are also working on a joint action with another ERA-NET, Biodiversa.



“Also, we were recently informed by the Commission that we received funding for an ERA-NET Plus on adaptation of European agriculture to climate change.”

Altogether there are 16 ERA-NETs that have some thematic complementarity with this JPI, and McKhann and others are striving to work out the best way they might work together. We may have co-branded calls and this would be a way of having synergy between the initiatives and a way of economising resources, both financial and human, and moves us a step closer to the European Research Area, adds McKhann.

Given the weighty issues in play, this JPI does not expect to address each of its core themes over 2 to 3 years. “We are talking about a decade long or more process and this will involve a number of joint actions,” says McKhann. Bringing together a JPI and an ERA-NET also offers a diversification of funders, as well as combining skills, so assuming there is a point of common interest, the approach offers a win-win scenario for all players.

[See here for more details](#)

Growing energy sounds an ideal solution, but some biofuel crops have attracted criticism for consuming more energy than they deliver back.



Bioenergy though is a renewable source that – if produced sustainably – saves on greenhouse gas emissions and could play a key role for EU emissions targets. It already accounts for more than two-thirds of total renewable energy in the EU, and importantly, is a reliable source of energy; it is not intermittent like wind or wave, which is a useful feature for the electricity grid.

To push forward sustainably, eight EU member states and associated countries are implementing an ERA-NET Plus activity entitled Bioenergy Sustaining the Future (BESTF). This aims to make advanced bioenergy commercially available at a large scale by 2020; this will mean reducing production costs so that they are competitive with fossil fuels at economic and regulatory market conditions.

The plan aims to drive forward the European Industrial Bioenergy Initiative, which wants to see bioenergy demonstrated commercially as soon as possible, explains coordinator Dr Megan Cooper in the UK. “We are looking to fund demonstrator plants that are big enough to be commercialised and will produce energy in any form. That could be biofuels or heat or maybe electricity and they need to have a certain output.”

There are some criteria that must be met. For instance, the plant must be close to commercialisation but in need of public support. They could, says Cooper, be at the prototype stage, but require a final push to get over that commercialisation line. “The rationale behind this ERA-NET Plus is to provide the financing required to get them past this valley of death, this difficult place where applied research projects struggle to get to commercialisation,” Cooper explains.

The feedstocks for such plants must be biologically based, so this could be agricultural waste for example, and they must be sourced in a sustainable fashion. “We need to be sure that the feedstock is sustainable, so you can’t just say cut down trees that can’t then be replaced. Also, we need to ensure that we are not affecting land that could be used for food or – in for example the UK – that could be used for housing,” Cooper says.

This summer national bodies were scrutinising proposals to see if they were eligible for national funding; as of early July, national eligibility checks were ongoing. The final list of proposals will then have until August 16th to submit stage 2 proposals. Projects are expected to take off from January 2014. Eleven proposals were

initially received.

The ERA-NET Plus will examine applicants to see if they have a good business case. So far, a mixture of applicants have stepped forward, including SMEs, large companies and universities.

“One reason for taking this approach is that the European Commission is aware that there are a number of innovative companies out there that could be contributing to targets [for increasing renewable energy production and addressing climate change], but can’t because of a lack of funding. If this wasn’t the case, then there wouldn’t be a need for public investment. According to our criteria, there has to be market failure and that is why you fund it with public investment.”

The payback should arise in the form of a fully built, pre-commercial demonstration plant, with biological material flowing in one end, and bioenergy pumped out as product. This should serve to turbocharge the contributions of bioenergy to the EU climate and energy ambitions.

[See here for more details](#)



## An opportunity for funders of Russian-European cooperation to join forces in funding research and innovation projects



The upcoming “ERA. Net Plus with Russia” ([ERA. Net RUS Plus](#)) will facilitate networking of Russian and European programme owners in research and innovation to jointly fund multilateral research and innovation projects between the two regions. The goal of the single joint call for S&T and innovation projects is to create long-term research collaboration between EU MS/AC and Russia. ERA. Net RUS Plus is therefore targeted at stakeholders at policy and programme level, the research community and industry (SME’s).

ERA.Net RUS Plus is expected to start in November 2013 along with the launch of the call in spring 2014. The call will cover two types of joint activities, namely S&T projects and Innovation projects. This effort is led on behalf of the Federal Ministry of Education and Research by the Project Management Agency at the German Aerospace Centre (DLR). According to the present stage of discussion, research and innovation proposals regarding the following thematic fields can be submitted:

### 01.

Nanotechnologies: Advanced nano-sensors for environment and health; novel functional nanomaterials based on design and modelling; and nanomaterials for efficient lighting

### 02.

Environment/Climate Change: Increasing the reliability of regional climate projections; environmental impact and risk of raw materials extraction and transportation; and extreme climate events and their impact on the environment



### 03.

Health: Molecular mechanisms of brain function and pathology; regenerative medicine and biomaterials; and drug discovery for cancer, cardiovascular and infectious diseases.

### 04.

Social Sciences and the Humanities: Understanding conflict, identity, and memory - past and present; demographic change, migration and migrants; opportunities for and challenges to regional development and social cohesion

### 05.

Innovation projects (no sub-topics)

The consortium of the funding parties consists of ministries and public funding institutions from currently 12 countries such as Finland, France, Germany, Israel, Latvia, Moldova, Poland, Romania, Russia, Slovakia, Switzerland and Turkey. The Single Joint Call will be implemented with a clear financial commitment from currently 21 programme owners from EU MS/AC and Russia. The financial volume of the call adds up to around €22m (as of June 2013) including a topping-up by the European Commission.

Twenty-four institutions make up the consortium; 21 have confirmed to financially contribute to the joint call. A new dimension brought by the "Plus" instrument is that the European Commission (EC) provides an incentive for the organisation of a single joint call by "topping-up" joint transnational funding with Community funds.

The consortium stays open for additional partners willing to join until the launch of the call.

#### **How do you get involved in ERA.Net RUS Plus?**

It is advised that interested funding parties indicate their willingness and financial commitment for the participation based on the present terms of reference of the Single Joint Call. If this is done before the launch of the call, the present group of funding parties will be open to accept this interest. We are especially seeking for funding parties supporting small and medium sized enterprises (SMEs) in the fifth funding line "Innovation projects".

#### **If interested in joining please contact:**

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#### **Further information on ERA.Net RUS Plus:**

<http://www.eranet-rus.eu/>





**Tip: If you enter a new call and this is similar with a previous one, you can duplicate the available information and edit/update the current information. Please follow the description below:**

1. Browse to NETWATCH and log in as a Coordinator.
2. Browse to the Call Calendar.
3. Open the call that you want duplicated.
4. Click on the Review button.
5. Click on the Edit button.
6. It's important to enter new Title and deadlines for the new call to help distinguish the new call from its original.
7. Check the option labelled Generate a new draft copy next to the Cancel button before pressing Save as draft, and a new draft version will be generated. The call needs to be in an Approved status to have this option available.

The NETWATCH database has recently been expanded and now includes 142 ERA-NETs, 17 ERA-NET Plus, 10 Joint Programming Initiatives and five Article 185 initiatives. This allows for comprehensive analysis covering a wide range of Public-Public-Partnerships.

In order to have their respective networks up to date and visible all coordinators are invited to check regularly the networks database for most recent information on their consortia and joint calls.

[See here for more details](#)