# WATERWORKS2014 ERA-NET COFUNDED CALL:

## **16 Projects Recommended for Funding**

The aim of the WaterWorks2014 Cofunded Call is to enable transnational, collaborative research, development and innovation projects addressing questions relating to the water challenges faced by European society.

The call focuses on the theme "Research and Innovation for Developing Technological Solutions and Services for Water Systems", a topic that partially covers the five priority themes described in the Strategic Research and Innovation Agenda (SRIA) of the Water JPI (http://www.waterjpi.eu).

A total of 16 transnational collaborative research projects were selected for funding by the Call Steering Committee:

Acronym	Title	Duration	Consortium Coordinator and PI's Organizations		Countries			
ACWAPUR		36m -	Jens Aamand	Geological Survey of Denmark and Greenland (GEUS)	Denmark			
	Accelerated Water Purification during Artificial Recharge of Aquifers - A Tool to Restore Drinking Water Resources		Jesus Carrera	Instituto de Diagnóstico Ambiental y Estudios del Agua	Spain			
			Sara Hallin	Swedish University of Agricultural Sciences (SLU)	Sweden			
			Caterina Levantesi	Italian National Council of Research (CNR)	Italy			
			Xavier Sanchez-Vila	Universitat Politècnica de Catalunya (UPC)	Spain			
Biorg4WasteWaterVal+	Bioorganic novel approaches for food processing waste water treatment and valorisation: Lupanine case study		Carlos Alberto Afonso	arlos Alberto Afonso FARM-ID, Faculty of Pharmacy, University of Lisbon (FF-UL) Associação do Instituto				
			Frederico Ferreira	Ambiental y Estudios del AguaAmbiental y Estudios del AguaAguaa HallinSwedish University of Agricultural Sciences (SLU)erina LevantesiItalian National Council of Research (CNR)erina LevantesiUniversitat Politècnica de Catalunya (UPC)rlos Alberto AfonsoFARM-ID, Faculty of Pharmacy, University of Lisbon (FF-UL)derico FerreiraAssociação do Instituto Superior Técnico para a Investigação e Desenvolvimento (IST-ID/UL)ncesca MalpeiPolitecnico di Milano (POLIMI)omas SchäferBasque Centre for Macromolecular Design & Engineeringhalis KoutinasCyprus University of Technologya BastosA Tremoceira Estrela da Piedade, Lda.tro RubinoAgencia Estatal Consejo Superior de Investigaciones Científicas (CSIC) - CEBAS				
		36m	36m Francesca Malpei Politecnico di Milano (POLIMI)	Politecnico di Milano (POLIMI)	Italy			
			Thomas Schäfer	Basque Centre for Macromolecular Design & Engineering	Spain			
		-	Michalis Koutinas	Cyprus University of Technology	Cyprus			
			Dina Bastos	A Tremoceira Estrela da Piedade, Lda.	Portugal			
DESERT	Low-cost water DEsalination and SEnsoR Technology compact module		Pietro Rubino	Università degli Studi di Bari Aldo Moro	Italy			
			Emilio Nicolás Agencia Estatal Consejo Superior de Investigacia Científicas (CSIC) - CEBA	Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC) - CEBAS	Spain			
		36m	Philippe Lebailly	Univesité de Liège	Belgium			
			Anna Maria Stellacci	Aria Stellacci Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria				
			Lucas Galera Quiles	NOVEDADES AGRICOLAS SA	Spain			
DOMINO	Dikes and Debris Flows Monitoring by	34	Luca Palmieri University of Padova		Italy			
DOMINO	Novel Optical Fiber Sensors	36M	Thom Bogaard	Delft University of Technology	The Netherlands			

			Miguel Gonzalez-Herraez	Universidad de Alcala	Spain	
			Alessandro Pasuto	National Research Council - Research Institute for Geo- Hydrological Protection	Italy	
			Sergio Vicente-Serrano	Consejo Superior de Investigaciones Cientificas	Spain	
			Ricardo Trigo	Fundação da Faculdade de Ciências da Universidade de Lisboa (FFCUL)	Portugal	
			Chris Reason	University of Cape Town	South AfricA	
IMDROFLOOD	Improving Drought and Flood Early Warning, Forecasting and Mitigation using real-time hydroclimatic indicators	36	Roxana Bojariu	National Meteorological Administration	Romania	
		-	Jaak Jaagus	University of Tartu	Estonia	
			Boris Boincean	Research Institute of Field Crops "Selectia"	Moldova	
			Jainme Ribalaygua	Farisa Asesores y Consultores S.L.	Spain	
			Luis Gimeno	University of Vigo	Spain	
			Tone Merete Muthanna	Norwegian University of Science and Technology	Norway	
			Maria Viklander	Luleă University of Technology	Sweden	
INXCES	INnovations for eXtreme Climatic EventS	36m	John Dehls	Geological Survey of Norway	Norway	
			Floris Cornelis Boogaard	Hanze University of applied science in Groningen	The Netherlands	
			Radu Constantin Gogu	Technical University of Civil Engineering Bucharest	Romania	
IRIDA	Innovative remote and ground sensors, data and tools into a decision support system for agriculture water management		Diego S. Intrigliolo	Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC) - CEBAS	Spain	
			Daniel Rodriguez	Innovati Servicios Tecnologicos, SL	Spain	
		36m	Pablo J. Zarco-Tejada	Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC) - IAS	Spain	
			Simona Consoli	University of Catania	Italy	
			Giancarlo Roccuzzo	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria	Italy	
			Elena Mateescu	National Meteorological Administration	Romania	
			Johannes Deelstra	NIBIO, Norwegian Institute of Bioeconomy Research	Norway	
MEPROWARE	Novel Methodology for the Promotion of Treated Wastewater Reuse for Mediterranean Crops Improvement		Alfieri Pollice	IRSA CNR, Water Research Institute of the National Research Council of Italy	Italy	
		Novel Methodology for the Promotion of Treated Wastewater Reuse for Mediterranean Crops Improvement	24m	Nicola Lamaddalena	CIHEAM-IAMB, Centre International de Hautes Etudes Agronomiques Mediterraneennes - Istituto Agronomico Mediterraneo di Bari	Italy
			Gonçalo Rodrigues	ISA LEAF, Instituto Superior de Agronomia - University of Lisbon	Portugal	
			Jorge De las Heras	UCLM, University of Castilla- La Mancha	Spain	
	Multi Scalo I Ishan Eload Easternis		Jonas Olsson	Swedish Meteorological and Hydrological Institute (SMHI)	Sweden	
MUFFIN	From Local Tailored Systems to a Pan-	36m	Soren Thorndahl	Aalborg University	Sweden	
	European Service		Herman Russchenberg	Delft University of Technology	The Netherlands	
			Teemu Kokkonen	Aalto and Helsinki University	Finland	

Pioneer_STP			Juan M. Lema	University of Santiago de Compostela	Spain	
	The Determining of law southing		Francesco Fatone	University of Verona	Italy	
	Technologies to Improve Sustainability of Sewage Treatment Plants	36m	Gürkan Sin	Technical University of Denmark	Denmark	
			Elzbieta Plaza	Royal Institute of Technology	Sweden	
			Jose R. Vazquez-Padin	FCC Aqualia	Spain	
			Donald Pierson	Uppsala University	Sweden	
	Predicting In-Lake Responses to Change Using Near Real Time Models		Eleanor Jennings	Dundalk Institute of Technology	Ireland	
			Elvira de Eyto	Marine Institute	Ireland	
PROGNOS		36m	Erik Jeppesen	Aarhus University	Denmark	
			Raoul-Marie Couture	Norwegian Institute for Water Research - NIVA	Norway	
			Gideon gal	Israel Oceanographic and Limnological Research	Israel	
	Smart Irrigation from Soil Moisture Forecast Using Satellite and Hydro- Meteorological Modelling		Marco Mancini	Politecnico di Milano	Italy	
			Giacomo Branca	Università della Tuscia	Italy	
			Massimo Menenti	Delft University of Technology	SpainItalyDenmarkSwedenSpainSwedenIrelandIrelandIrelandIrelandIrelandIrelandIrelandSpainIsraelIsraelIsraelItalyItalyItalyItalyJohnarkSpainItalyItalyJohnarkSpainItalyJohnarkSpainJohnarkSpainItalyJohnark	
			Li Jia	RADI-CAS	China	
SIM		36m	Romualdo Romero	University of the Balearic Islands	China Spain Spain Italy	
			José A. Sobrino         University of Valer           Stefania Meucci         Modellistica e Mor Idrologico	University of Valencia	Spain	
				Modellistica e Monitoraggio Idrologico	Italy	
			Raffaele Salerno	Meteo Operations Italia - Centro Epson Meteo	Italy	
	Solid Transport Evaluation and Efficiency in Prevention: Sustainable Techniques of Rational Engineering and Advanced MethodS	24m	Aronne A. Armanini	Universita' degli Studi di Trento	Italy	
STEEP STREAMS			Giuliano Di Baldassarre	Uppsala Universitet	Sweden	
			Antonio Heleno Cardoso	CEris, IST-ID, Universidade de Lisboa	Portugal	
			Franceisco Javier Batlles Garrido	University of Almeria (UAL)	Spain	
TH.E.R.BIO.R	Thermal Energy Recovery from a Novel Sequencing Batch Biofilter Granular Reactor	24m	Franceisco Javier Batlles     University of Almeria (U       Garrido     CNR-IRSA National Research       Claudio Di Iaconi     CNR-IRSA National Research       Institute     Institute		Italy	
			Ivan Munoz	2.0LCA Consultants	Denmark	
			Inaki Acasuso Perez	Hedera Helix Ingenieria y Biotecnologia S.L.	Spain	
	Smart decentralized water management through a dynamic integration of tecnologies		Ignasi Rodriguez-Roda Layret	Catalan Institute for Water Research (ICRA)	Spain	
				Teresa de la Torre Garcia	ACCIONA Agua S.A.	Spain
watintech		36m	Giuseppe Luigi Cirelli	Universita' di Catania (UNICT)	Italy	
			Krist V. Gernaey	Technical University of Denmark (DTU)	Denmark	
			Adrian Oehmen	NOVA.ID. FCT Universidade Nova de Lisboa	Portugal	
	WatEr NEEDs, availability, quality and sustainability		Monica Riva	Politecnico di Milano	Italy	
WE-NEED		36m	Brian Berkowitz	Weizmann Institute of Science	Sweden Portugal Spain Italy Denmark Spain Spain Italy Denmark Portugal Italy Israel Portugal Spain	
		5011	Susana Loureiro	Universidade de Aveiro	Portugal	
			Daniel Fernandez-Garcia	Universitat Politecnica de Catalunya	Spain	

The funding of these projects involve all 17 Funding Partner Organisations (FPOs) from the 15 different countries participating in the call – with the European Commission participation: Belgium (French-speaking community) (F.R.S.-FNRS), Cyprus (RPF), Denmark (IFD), Estonia (MoE-EE and ETAg), Ireland (EPA), Israel (MoE-IL), Italy (MIUR), Moldova (CIP), Norway

(RCN), Portugal (FCT), Romania (UEFISCDI), South Africa (WRC), Spain (MINECO and CDTI), Sweden (FORMAS) and The Netherlands (NWO).

Grants will be awarded to each consortia partner by their national funding organizations according to national rules and procedures. The kick-off of the projects will be scheduled after the conclusion of all national funding procedures and the signature of a Consortium Agreement between the consortia partners.

#### **Call Statistics**

A total of 118 pre-proposals were successfully submitted to the Water Works2014 ERA-NET Cofund, the Water JPI 2015 Joint Call. In Table 1 are depicted the key figures in this Two Step Evaluation Process:

General Information	
Number of submitted pre-proposals	118
Number of applicants (Coordinators and Partners)	649
Average number of Partners per Consortium (submitted proposals)	4.50
Number of registered users in the Linkedin Group	211
Number of eligible pre-proposals evaluated in Step 1	106
Number of full-proposals evaluated in Step 2	41
Number of proposals selected for funding	16

 Table I – General statistics on the participation level.

A **gender analysis** of the 118 submitted pre-proposals shows a male dominance in the consortia coordination, with around 75% of the pre-proposals being coordinated by male researchers and only 25% by female researchers. This rate decreases when we proceed to the second phase, with 20% of the approved proposals being led by female researchers.

In what concerns the **countries participation** in the call, it was observed that 97% of the submitted pre-proposals involve partners from the funding countries exclusively. The remaining 3% of the pre-proposals include partners from non-funding countries, specifically, China, Canada, Poland and Finland, whose collaboration was based in their own funding (Figure 1).



Figure I – Countries participation in the call, namely funding countries and non-funding countries.

If one analyses the number of partners per country among the submitted pre-proposals, it is observed a strong engagement of partners from Spain, Italy and Portugal, a pattern that is confirmed in the number of Consortia Coordination's per country, as depicted in Figure 2.



**STEP I - Number of Coordinators and Partners per Country** 

Figure 2 – Total number of Coordinators and Partners per country, considering the 118 submitted pre-proposals.

Considering the strong participation of Spain, Italy and Portugal in this call, it comes as no surprise that among the 41 pre-proposals selected to proceed to the second phase, the weight of these countries prevail (Figure 3).



#### Selected Pre-Proposals - Number of Coordinators and Partners per Country

**Figure 3** – Total number of Coordinators and Partners per country in the group of 41 pre-proposals selected to proceed to Step 2.

Regarding the **typology of the participating organizations**, we can see in Figure 4 that non-profit organizations are the predominant coordinators/partner's organization type (93%-80%). Only 20% of the proposals involve partners from private enterprises. This number decreasess in which regards the coordination of pre-proposals. Only 7% of the pre-proposals submitted are coordinated by enterprises.



**Figure 4** – Total number of Coordinators and Partners per organisation type in the group of 118 preproposals submitted to Step 1.

Concerning the **financing plan**, the total requested funding in this call amounts to close to  $\in 104$  million, which corresponds to about 76% of the total costs declared, and to circa of 7 times more when compared to the available funds ( $\in 15$  million).

#### **Financing Plan: Overall Numbers**



**Figure 5** – Financing Plan: Overall requested funding, own contribution and total costs estimated in the group of 118 pre-proposals submitted to the call.

In sync with the strong participation of non-profit organisations in the call, 87% of the total requested funding comes from this type of organizations (Figure 6).



### Requested Funding per Organisation Type

**Figure 6** – Overall requested funding by organization type estimated in the group of 118 pre-proposals submitted to the call.

At the end of Step 1, 41 proposals were selected to advance to Step 2 and submit a full proposal, i.e., about 39% of the eligible pre-proposals proceeded to Step 2.

The analysis of the **distribution of the call topics** shows that the array of topics covered by the 106 eligible pre-proposals and the 41 proposals that advanced to Step 2 follow a similar distribution, as depicted in Figure 7. Topic I on *Water Treatment, Reuse, Recycling and Desalination*, had a large dominance over the other Call topics. Although speculative, the fact The Netherlands limited their funding to proposals covering Topic 3, may have been determinant to increase the participation level in this particular topic. Out of the 20 proposals submitted covering Topic 3, 14 had Dutch partners.



■ T1 ■ T2 ■ T3 ■ Multiple topics

**Figure 7** – Distribution of Call Topics in the group of submitted pre-proposals and in the group of proposals that advanced to Step 2, namely, Research and Innovation for Developing Technological Solutions and Services: T1. for Water Treatment, Reuse, Recycling and Desalination; T2. for Water Resources Management; T3. to Mitigate Impacts of Extreme Events (Floods and Droughts) at Catchment Scale.

Step 2 was concluded on the 29-30 October 2015. The Evaluation Panel (EP) met in Lisbon and reached a final consensus evaluation of all 41 full-proposals. The distribution of total scores among the 41 proposals is depicted in Figure 8.



Figure 8 - Distribution of total scores among the 41 proposals.

In the group of 14 proposals scored 9, 13 ranked equally (scored 3 in all three evaluation criteria). The EP re-examined these 13 proposals, distinguish them and unanimously

recommended for funding 6 proposals ranked in high category. Due to budget limitations, the CSC could only propose 3 proposals within this group.

The **shortlist of 16 proposals** selected for funding by the CSC, represents about 39% of the 41 full proposals submitted in this Step. The distribution of topics among these 16 proposals is described in Figure 9. It is interesting to observe the balanced distribution of topics among the proposals recommended for funding.



**Figure 9** – Distribution of topics among the 41 proposals selected for the second step (left). Distribution of topics among the 16 shortlisted proposals recommended for funding (right).

In Table 2 is presented a summary of the WaterWorks2014 Evaluation Process, specifically, the number of pre and full proposals submitted per country, and the distribution of the proposals recommended for funding.

**Table 2** – Summary of the evaluation process of the WaterWorks 2014 Cofunded Call. The last row of the Table includes average percentages based on the number of countries involved (15 countries).

	SUBMISSION STEP		ELIGIBILITY CHECK		FIRST STEP		SECOND STEP	
Country	Submitted Proposals	Proposals Coordinated	Submitted Proposals	Coordinated Proposals	Advancing to STEP2	Coordinated Advancing to STEP 2	Shortlisted to be Funded	Coordinated Shortlisted to be Funded
Spain	94	37	87	34	35	12	12	5
Italy	80	30	72	25	30	10	12	6
Portugal	64	17	62	16	22	9	6	I
Sweden	29	8	28	8	13	3	6	2
Romania	34	6	28	5	7	0	3	0
Norway	32	6	29	5	10	2	3	I
Denmark	25	3	23	3	12	3	6	I
Ireland	15	I	12		6	0	I	0
Israel	15	2	15	2	4	0	2	0
The Netherlands	14	I	13		8	0	4	0
Cyprus	17	3	15	3	7	2	I	0
South Africa	10	I	9		3	0	I	0
Estonia	8	I	8	1	2	0	I	0
Belgium	8	I	8		I	0	I	0
Rep. Moldova	5	l	4	0	l	0		0
AVERAGE %		19%	91%	89%	37%	27%	46%	38%

One can observe that all partner countries are presented in the top 16 shortlisted proposals recommended for funding. Considering the total number of proposals submitted to the WW2014 Call (106), we have a success rate of about 15%. The total funding invested in the projects amounts to  $\in$ 13.979.751, including the EC contribution. The efforts made by the funding partners participating in this call guaranteed the maximisation of the allocated EC funds (ca. 4.6 M $\in$ ).