RESIN

Topic: DRS-09-2014
Type of Action RIA
Duration (months): 42
Title: Climate Resilient Cities and Infrastructures
Project total tosts 7,466,007.00 €
Project EU contribution: 7,466,007 €

Abstract:

With most of its population and capital goods concentrated in urban areas, cities are key to the European economy. One of the major challenges cities face are more frequent extreme weather events due to climate change.The current diversity of approaches and methods available for cities developing an adaptation strategy limits the comparability between cities of vulnerabilities, adaptation options, infrastructures, etc., and, as a result, the resilience capability. The lack of standardized information to prioritize and select appropriate adaptation options restricts the exchange of experiences between cities. The objective of RESIN is to provide standardised methodologies for vulnerability assessments, performance evaluations of adaptation measures, and for decision support tools supporting the development of robust adaptation strategies tailored to the city. To this end, RESIN aims to create a common unifying framework that allows comparing strategies, results and identification of best practices by• Creating an urban typology that characterises European cities based on different socio-economic and biophysical variables• Delivering standardised methods for assessing climate change impacts, vulnerabilities, and risks; providing an inventory of adaptation measures and developing standardised methods to assess the performance of such adaptation measures• Collaborating closely with 4 ‘case cities’ for practical applicability and reproducibility, and with European Standardisation organisations to ensure a systematic (standardised) implementation• Integrating findings in a coherent framework for the decision making process, with associated methods, tools and datasetsThe consortium consists of 17 partners from 8 different European countries, experienced in urban resilience and climate change, and combining theory (knowledge institutes/universities) with practice (cities, consultancies, network organisation, standardisation institute).

Partners:

Nr	Participant	Country
1	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
2	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
3	FUNDACION TECNALIA RESEARCH & INNOVATION	ES
4	ICLEI EUROPEAN SECRETARIAT GMBH (ICLEI EUROPASEKRETARIAT GMBH)*	DE
5	EIVP	FR
6	ITTI SP ZOO	PL
7	STICHTING NEDERLANDS NORMALISATIE - INSTITUUT	NL
8	ARCADIS NEDERLAND BV	NL
9	BC3 BASQUE CENTRE FOR CLIMATE CHANGE - KLIMA ALDAKETA IKERGAI	ES
10	HLAVNE MESTO SLOVENSKEJ REPUBLIKY BRATISLAVA	SK
11	THE UNIVERSITY OF MANCHESTER	UK
12	UNIVERZITA KOMENSKEHO V BRATISLAVE	SK
13	AYUNTAMIENTO DE BILBAO	ES
14	OLDHAM METROPOLITAN BOROUGH COUNCIL	UK
15	SIEMENS AKTIENGESELLSCHAFT OESTERREICH	AT
16	SIEMENS AKTIENGESELLSCHAFT	DE
17	UNIRESEARCH BV	NL

EU-CIRCLE

Topic: DRS-09-2014
Type of Action RIA
Duration (months): 36
Title: A panEuropean framework for strengthening Critical Infrastructure resilience to climate change
Project total tosts 7,283,526.00 €
Project EU contribution: 7,283,526 €

Abstract:

It is presently acknowledged and scientifically proven than climate related hazards have the potential to substantially affect the lifespan and effectiveness or even destroy of European Critical Infrastructures (CI), particularly the energy, transportation sectors, buildings, marine and water management infrastructure with devastating impacts in EU appraising the social and economic losses. The main strategic objective of EU-CIRCLE is to move towards infrastructure network(s) that is resilient to today's natural hazards and prepared for the future changing climate. Furthermore, modern infrastructures are inherently interconnected and interdependent systems ; thus extreme events are liable to lead to 'cascade failures'. EU-CIRCLE's scope is to derive an innovative framework for supporting the interconnected European Infrastructure's resilience to climate pressures, supported by an end-to-end modelling environment where new analyses can be added anywhere along the analysis workflow and multiple scientific disciplines can work together to understand interdependencies, validate results, and present findings in a unified manner providing an efficient "Best of Breeds" solution of integrating into a holistic resilience model existing modelling tools and data in a standardised fashion. It, will be open & accessible to all interested parties in the infrastructure resilience business and having a confirmed interest in creating customized and innovative solutions. It will be complemented with a webbased portal.The design principles, offering transparency and greater flexibility, will allow potential users to introduce fully tailored solutions and infrastructure data, by defining and implementing customised impact assessment models, and use climate / weather data on demand.

Partners:

Nr	Participant	Country
1	NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS"	EL
2	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
3	METEOROLOGISK INSTITUTT	NO
4	THE UNIVERSITY OF EXETER	UK
5	AKADEMIA MORSKA W GDYNI	PL
6	ARTELIA EAU ET ENVIRONNEMENT SAS	FR
7	SATWAYS - PROIONTA KAI YPIRESIES TILEMATIKIS DIKTYAKON KAI TILEPIKINONIAKON EFARMOGON	EL
8	ENTENTE POUR LA FORÊT MÉDITERRANÉENNE	FR
9	D'APPOLONIA SPA	IT
10	DRZAVNI HIDROMETEOROLOSKI ZAVOD	HR
11	XUVASI LTD	UK
12	MRK Management Consultants GmbH	DE
13	AS CYPRUS COLLEGE LIMITED	CY
14	CENTER FOR SECURITY STUDIES	EL
15	THE UNIVERSITY OF SALFORD	UK
16	Drzavna uprava za zastitu i spasavanje	HR
17	ADITESS ADVANCED INTERGRATED TECHNOLOGY SOLUTIONS & SERVICES LTD	CY
18	Torbay Council	UK
19	MINISTRY OF NATIONAL DEFENCE, GREECE	EL
20	Veleuciliste Velika Gorica	HR
21	PATUAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY	BD

Project presentation: http://www.eu-circle.eu/ECCA2015_EUCIRCLE.pdf