## 2019 LIST OF SELECTED PREPAREDNESS & PREVENTION PROJECTS

**PREPAREDNESS projects – Internal budget:**

| Seq. No. | GRANT AGREEMENT NO. | COORDINATOR | BENEFICIARIES | Title and description of the project | EU contribution (€ /EUR) |
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| 1. | 873240 | **University of Cyprus (CY)** | 1. MINISTRY OF INTERIOR **(CY)**<br>2. UNIVERSITE DE LILLE **(FR)**<br>3. KENTRO MELETON ASFALEIAS **(EL)**<br>4. ENTENTE POUR LA FORÊT MÉDITERRANÉENNE **(FR)**<br>5. MINISTERO DELL'INTERNO **(IT)** | Real-time Artificial Intelligence for Decision support via RPAS data analytics **(AIDERS)**<br><br>Currently, the majority of first responders seeking to introduce remotely piloted aircraft system (RPAS) units into their operations are quickly stumbled upon the deluge of collected data and reside merely on snapshots to inform incident commanders of the situation in the field. The AIDERS project aims at developing application-specific algorithms and novel mapping platform that will harness the large volume of data that first responders are now able to collect through heterogeneous sensors (including visual, thermal and multispectral cameras, LIDAR, CBRN sensors, etc.) on-board RPAS units, and converting that data into actionable decisions for improved emergency response. To address this challenge, this project will capitalize on: 1) the long-lasting collaboration of the first responder and technical partners in the consortium to identify which information needs to be extracted from the collected data, 2) design online machine learning algorithms to process and analyse the received data in real-time in order to build situational maps, and 3) implement novel visualizations that higher-command can use to take intelligent decisions. The AIDERS project activities will result in 4 main outputs, namely: 1) knowledge on potential use of AI techniques and algorithms for acquiring valuable information of the incident, 2) a novel AI toolkit will be developed to provide relevant, reliable, and timely information from the available aerial sensor data, 3) field | 920.406,73€ |

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| | | | | exercises will be conducted to evaluate the integration and performance of the AI toolkit, and 4) conduct a number of training activities to first responder experts. These outputs will be the drivers of the project to achieve its objects. All the project outputs have an international outreach and are applicable to civil protection as well as other first responder agencies which will have the chance to access and integrate in their own mission cycle. | |
| 2. | 874387 | **Norwegian Coastal Administration**<br>Moloveien 7, 3187 Horten<br><br>https://www.kystverket.no/ | 1. Swedish Coast Guard **(SE)**<br>2. Institut Royal des Sciences Naturelles **(BE)**<br>3. Forsvaret og Forsvarsministeriets Styrelser **(DK)**<br>4. Centre de Documentation de Recherches et d'Experimentation sur les Pollutions Accidentelles des Eaux Association (**FR)**<br>5. Authority for Transport in Malta **(MT)** | Improving response capacities and understanding the environmental impacts of new generation low sulphur MARine fuel Oil Spills **(IMAROS)**<br><br>Successful oil spill response after ship incidents will reduce the impacts on the marine environment and socio economic impacts on affected coastal communities. Present changes in IMO regulations to reduce air emissions from ships have resulted in a "new generation" of fuel oils. These new fuel types may be challenging during accidental oil spills, and their behaviour after a spill are not well known. Laboratory and basin testing so far revealed a substantial diversity of the fuel oils with regard to physical and chemical properties, as well as toxicity. Practical experience is still scarce, but the experience from 2 ship incidents underlines the relevance for responders. A ship incident involving the new generation of oil, may result in severe impacts on the marine and coastal environment with subsequent challenges for responders, since it might be difficult to recover the oil with conventional oil spill response equipment and methods. This project aims to bring together knowledge and experiences from different countries in the UCPM. The project will identify the most relevant products of the new generation of fuel oils used by ships in Europe. These oils will be analysed to identify different characteristics. Furthermore, the suitability of different response technologies | 747.507,71€ |

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| | | | | and methods for spills of these new products will be identified through practical tests of equipment. The overall aim is to develop recommendations for oil spill response involving the new generation of fuel oils. This includes capacities and methods for response at sea as well as on shorelines. This will enable the participating states of the UCPM to invest in the most proper equipment and gain knowledge about the best possible methods within oil spill response when it comes to this new generation of oil. An effective at sea response will also reduce the amount of oil, which will reach the shorelines. The results may contribute to the development of more environmentally friendly marine fuels. | |
| 3. | 874391 | **Centre Tecnologic de Telecomunicacions de Catalunya (ES)**<br>Avinguda Carl Friedrich Gauss, 7, Building B4, 08860 Castelldefels, Spain<br><br>www.iopes-project.eu | 1. ATHONET SRL **(IT)** **www.athonet.com**<br>2. CATUAV SL **(ES)** **www.catuav.com**<br>3. SCARABOT TECHNOLOGIES GMBH **(DE)** **www.scarabot.de/en**<br>4. SAREYE EHF **(IS)** **www.sareye.com**<br>5. FUNDACIO D'ECOLOGIA DEL FOC I GESTIO D'INCENDIS PAU COSTA ALCUBIERRE **(ES)** **www.paucostafoundation.org**<br>6. FREDERIKSBORG BRAND OG REDNING **(DK)** **www.fbbr.dk** | Indoor-Outdoor Positioning for Emergency Staff **(IOPES)**<br><br>IOPES aims at strengthening the preparedness of civil protection and emergency teams (CPET) involved in disaster-related operations. The targets are (1) to provide continuous, time-tagged information about the location of CPETs, either indoors or outdoors (2) as a new feature of an already operational emergency management system (EMS), (3) relying in existing cartography, or new maps (fast mapping + Remotely Piloted Aircraft Systems (RPAS)) (4) using its own communication system to avoid the need of existing (possibly damaged/inoperative) infrastructures (5) to better the decision-making process. The following activities are planned: users' needs assessment, integration of existing indoor/outdoor positioning devices in a wearable unit; its integration in the EMS through an API and the use of a portable LTE communication network. Exercises have been planned to check the suitability of the whole system. Communication & dissemination are also part of the project. These activities will result in (1) an enhanced EMS able with indoors/outdoors tracking capabilities as well as (2) a protocol to connect the positioning device to | 773.246,00€ |

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| | | | | other EMSs. To do this the consortium includes a research center, CTTC (ES), 4 SMEs, ATHONET (IT), SAReye (IS), SCARABOT (DE), CATUAV (ES), the FBBR (DK, civil entity), PCF (ES, fire ecology & management); the Civil Protection (CP) entities and related organizations provide their knowledge of highrisk areas, and examples of disasters of natural hazards. The final beneficiaries are: CP agencies and CPETs. The first outcome of the project will be an IT-based solution, the enhanced EMS mentioned above; the data collected by such an EMS lead to the second outcome of IOPES: the later dissection of such information to trace the behavior of the teams, linking variables as time, position & events, making possible a post-mortem analysis of the emergency and thus the development or refinement of strategies aiming at the improvement of emergency management. | |
| 4. | 874380 | **Ministro dell'interno – Fire National Corps (CNVVF) (IT)**<br><br>www.vigilfuoco.it | 1. ERICAM – COMUNIDAD DE MADRID **(ES)** http://www.comunidad.madrid/servicios/seguridad-emergencias/ericamemergencia-respuesta-inmediata-comunidad-madrid<br>2. EcASC - ENTENTE POUR LA FORÊT MÉDITERRANÉENNE **(FR)** https://www.valabre.com/<br>3. DPC – DIPARTIMENTO | Data Management System for USAR Operations **(Prometheus)**<br><br>The project stems from operational needs from both real emergency as well as exercises carried out in the last years by USAR Assessment teams and their coordination cells (UCC). During a USAR emergency operation (i.e. earthquakes, volcanic eruption, high snow) the UCC performs its work relying usually on data provided by the teams from the affected site. The quality and quantity of these data, their sources and their destination may vary according to the type of: emergency, in-country disaster management system, deployed resources. It is of key relevance to manage and merge data timely and effectively to make them available for the support in rescue operations. The strategic Consortium is composed by 3 end-users (CNVVF, Fire National Corps IT; ERICAM, Emergency and Immediate Response of Madrid Community ES, EcASC, École d'Application de Sécurité Civile FR) and 1 CP Authority (DPC, Italian Civil Protection Department). Their active contribution | 580.515,67€ |

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| | | | DELLA PROTEZIONE CIVILE **(IT)** http://www.protezionecivile.gov.it | leads to: implementing, testing and completing an innovative data management system, "Prometheus," that has been developed from 0 to alpha version by the CNVVF own resources. It complements, integrates and improves some areas that remain uncovered by the currently used data management system so as becoming a more effective toolkit for USAR Assessment teams and UCC during the first phase (the so-called "Golden day") when the toll of victims can be reduced by a more rapid intervention and timely exchange of information flow between the UCC and the deployed teams. "Prometheus" by providing an IT tool will complement two DG ECHO funded actions (EASeR for procedures, BELICE for training) toward a multi-side improvement of the assessment phase. "Prometheus" is free as to contribute to the Sendai Framework on DRR also outside the EU, providing low income-countries with an instrument to mitigate emergencies through cooperation and collaboration (Priority 2. Strengthening disaster risk governance to manage disaster risk). | |
| 5. | 874435 | **Ilmatieteen Laitos (FI)** Erik Palménin aukio 1, P.O. Box 503, FI-00101 HELSINKI, FINLAND<br><br>www.tamir-project.eu/<br><br>https://fmi.fi/en | 1. EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS **(UK)** **www.ecmwf.int/**<br>2. UNIVERSITAT POLITECNICA DE CATALUNYA **(ES)** **www.crahi.upc.edu/**<br>3. Kymenlaakson pelastuslaitos **(FI)** **www.hympe.fi** | Advanced Tools for pro-Active Management of Impacts and Risks Induced by Convective Weather, Heavy Rain and Flash floods in Europe **(TAMIR)**<br><br>Hazards induced by convective storms and heavy rains (e.g. floods) become disasters when and where they interact with exposed and vulnerable societal systems, e.g., human life and activities, assets, and infrastructure. Recent progress in seamless probabilistic multi-source hazard forecasting induced by heavy rainfall has made it possible to produce predictions from the nowcast (several minutes) to short-medium ranges (5 days), enabling consistent decision making at both emergency response and planning level. However, Civil Protection agencies still face multiple challenges hampering their active decisions. These challenges include high false alarm rates, absence of | 987.140,21€ |

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| | | | | multi-hazard forecasts (e.g. heavy rainfall, flood, lightning, wind gusts, hail) including their simultaneous risk assessment, and difficulty in translating hazard forecasts into impact-based decisions. This project aims to address those three main challenges using innovative, state-of-the-art science, and integration of developed products in the existing systems (e.g. the European Flood Awareness System (EFAS) platform) to support pro-active emergency management at different scales. This will be achieved by (i) improving the existing products and tools with enhanced impact assessment and warning capacity, and (ii) delivering them through operational platforms and new web services, for effective integration into existing Civil Protection systems. The products and tools developed in the project will be assessed against their usefulness for decision making through case study evaluation and real-time demonstration in regional Civil Protection Agency systems. There are four beneficiaries in the project: the European Centre for Medium-Range Weather Forecasts (ECMWF), the Polytechnic University of Catalonia (UPC) and the Kymenlaakso Rescue Department (Kympe), together with the coordinator Finnish Meteorological Institute (FMI). Additionally, there are five stakeholders from three countries, including Civil Protection operators in Finland and Catalonia as well as a national environmental authority. | |
| | | | | **Total (EUR):** | **4,008,816.32€** |

**PREPAREDNESS projects – External budget:**

| Seq. No. | GRANT AGREEMENT NO. | COORDINATOR | BENEFICIARIES | Title and description of the project | EU contribution (€ /EUR) |
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| 1. | 874439 | **Universita degli studi di Genova (IT)**<br>Via Montallegro 1 16122, Genova, Italy<br><br>**www.dicca.unige.it/** | 1. FUNDACION INSTITUTO DE HIDRAULICA AMBIENTAL DE CANTABRIA **(ES)** **https://ihcantabria.com**<br>2. EUROPEAN RESEARCH INSTITUTE ASSOCIAZIONE **(IT)** **www.europeanresearchinstitute.eu/**<br>3. OFFICE D'EXPLOITATION DU PORT DE TRIPOLI **(LB)** **www.oept.gov.lb/index.php/en/**<br>4. UNIVERSITY OF JORDAN **(JO)** **https://mss.ju.edu.jo/Home.aspx** | BEst Rapid Environmental Assessment Decision sYstem **(Be-Ready)**<br><br>The marine environment is continuously and increasingly threatened by pollution derived from maritime accidents that frequently causes spills of dangerous substances. A great amount of work has been devoted to endow the EU-Member States with common protocols, action plans and operational tools regarding either oil or HNS spill. So far, however, it is not available a unified platform that covers the Oil and HNS spills. This is the main gap that BE-READY project aims to fill implementing an Environmental Decision Support System (EDSS), easily exportable to different geographical contexts, which models the most common sources of pollutions. | 397.600,00€ |
| 2. | 873108 | **ZAGREBACKA ZUPANIJA (HR)** | 1. BASHKIA TIRANE **(AL)**<br>2. GRAD TUZLA **(BA)**<br>3. CITY OF SKOPJE **(MK)**<br>4. GLAVNI GRAD | Commanding and Operations Mechanism for Multisector Analysis of Nexus Disaster data **(COMMAND d)**<br><br>Commanding & Operations Mechanism for Multi-sectoral Analysis of Nexus Disaster Data - COMMAND d is a project supporting Command and Operations Centre (hereafter COC) in disaster | 387.676,98€ |

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| | | | PODGORICA **(ME)** | preparedness at local level. It will facilitate rapid multi-sectoral data reception, GIS supported analysis/simulation and transfer of emergency data. It will be standardized for all emergency preparedness actors and linked between all project countries via joint IT platform. COMMAND d will enable Capacity Analysis of local level COCs in Croatia, North Macedonia and Montenegro (UCPM countries), Bosnia & Herzegovina and Albania (IPA II countries). Respective Needs Assessments will present basis for development of methodology detailing mechanisms in support of decision-making process and standardized crisis communication procedures in the civil protection systems at local level. Innovative IT emergency response tool will enable consolidation of data from various sources (firefighters, water management agencies, emergency medical centers, 112 centers), faster collection and analysis of data delivered to COC aiming for more accurate data monitoring and information transfer. It will encompass real-time analysis, accelerate the exchange of key data among all project partners in the region through standardization process, be linked with national early warning systems, supported by GIS tools and as such enable predictions and simulations whilst harmonized with ERCC procedures. As a result, 5 respective COCs will increase overall preparedness by facilitating decision-making process for command structures, ensuring speedy/timely activation and coordination of operational forces. COMMAND d will result with best practice EU example of stationary COC allowing for independent communication via multiple and separate systems, having independent power supply and securing quick dislocation in case of disasters via mobile component which will support IPA II countries in COC development at local level. | |
| 3. | 874374 | **OSTERREICHISCHES ROTES KREUZ (AT)** ÖSTERREICHISCH | 1. UKRAINIAN RED CROSS SOCIETY **(UA)** **https://redcross.or** | Strengthening Civil Protection Systems through Volunteer Capacities **(StrengthVOL)**<br><br>With increasing numbers of disasters and growing needs for better | 400.000,00€ |

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| | | ES ROTES KREUZ, GENERALSEKRETARIAT Wiedner Hauptstraße 32, 1040 Wien<br><br>www.roteskreuz.at | g.ua<br>2. STATE EMERGENCY SERVICE OF UKRAINE **(UA)** **www.dsns.gov.ua**<br>3. GEORGIA RED CROSS SOCIETY **(GE)** **https://redcross.ge**<br>4. ARMENIAN RED CROSS SOCIETY **(AM)** **www.redcross.am**<br>5. MINISTRY OF EMERGENCY SITUATIONS **(AM)** **http://mes.am**<br>6. RESILIENCE ADVISORS (EUROPE) LIMITED **(IE)** **www.resilienceadvisors.co.uk** | response capacities in Europe and its neighbourhood, civil protection authorities and governments are looking to partner with volunteer organisations in addressing these needs. In the Southern Caucasus region (Armenia/Azerbaijan/Georgia) as well as in Ukraine the Red Cross societies have implemented programmes and projects in the last decade with the objective to establish volunteer teams to strengthen disaster preparedness and response capacities. However, the systematic integration of these volunteer response teams into governmental civil protection systems still needs to be improved. The StrengthVOL project's main outcome, linking to Priority 1 of the call, will be to develop action plans for the increased deployability of volunteer teams in Armenia, Georgia and Ukraine. On the basis of existing recommendations and lessons learnt in the countries a research report and a set of guiding principles for the development of cooperation models & agreements between the national Red Cross societies and the CP authorities will be compiled. After signing these agreements, the models will be piloted by recruiting volunteer teams that will be assigned to newly established stations for fire & rescue services in Armenia and Georgia or to new security centres in Ukraine. Building on the developed models for the integration of volunteer teams and the evaluated pilots, action plans for increased deployability of volunteer teams will provide the basis for rolling out similar volunteer teams throughout Armenia, Georgia and Ukraine after the completion of the project. The impact of the project will be that remote areas will be better served through a volunteer-based system complementing efforts of the national CP authorities, the density of the national CP networks will be increased, remote areas become more self-sufficient in respect of emergency response capacities and response times will be considerably reduced. | |
| | | | | **Total (EUR):** | **1.185.276,98€** |

**PREVENTION projects – Internal budget:**

| Seq. No. | GRANT AGREEMENT NO. | COORDINATOR | BENEFICIARIES | Title and description of the project | EU contribution (€ /EUR) |
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| 1. | 874421 | **SVEUCILISTE U ZAGREBU GRADEVINSKI FAKULTET (HR)** fra Andrije Kacica Miosica 26, 10 000 Zagreb, Croatia<br><br>**www.grad.unizg.hr/en** | 1. INFRA PLAN KONZALTNIG JDOO ZA USLUGE **(HR)**<br>2. GEKOM - GEOFIZIKALNO I EKOLOSKO MODELIRANJE DRUSTVO S OGRANICENOM ODGOVORNOSCU ZA RACUNALNE DJELATNOSTI **(HR)** **www.gekom.hr**<br>3. VEILIGHEIDSREGIO ZUID-HOLLAND ZUID **(NL)** **www.zhzveilig.nl**<br>4. INGEO BV **(NL)**<br>5. ZAVOD ZA GRADBENISTVO SLOVENIJE **(SI)** **www.zag.si/en**<br>6. Uprava RS za zaščito in reševanje, Ministrstvo za obrambo **(SI)** **www.sos112.si/e** | Vulnerability assessment of embankments and bridged exposed to flooding hazards **(oVERFLOw)**<br><br>Flooding is a significant threat to human-life, ecosystems, cultural heritage and society. In recent years Europe has experienced some of the largest flood events in its history. The three partner countries in the oVERFLOW project are particularly vulnerable to cross-border flooding from major European river systems. The resilience a flood defence system is controlled by the weakest link. Whilst the risk based method for assessing flood defences VNK2 developed in the Netherlands is the state of the art, the determination of the probability of failure is critically dependent on a number of highly uncertain parameters. The most significant uncertainties relate to length effects and the location of potential seepage. A number of recent collapses of major bridges due to scour shortly after inspection highlight the limitation of risk assessments based on periodic inspection. During flood induced failures the condition of a bridge or levee changes in a matter of minutes. The oVERFLOw project will implement a number of technologies developed by the applicants in recent EU projects to reduce these uncertainties and move to real-time risk assessment. The work will be performed by a consortium including 2 Civil Protection Agencies, 3 R&D focussed SMEs, a University and a Research Institute. The main output will be an improved method for assessing the vulnerability of levees and bridges to floods. This will be achieved by: 1. Reducing the known uncertainties in the VNK2 approach using techniques and procedures developed by the applicants in recent H2020 projects including sensors and drones to provide real-time response. 2. The technology will be deployed | 498.260,00€ |

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| | | | ng | and demonstrated at two pilot sites in the Netherlands and Croatia in order to (i) validate the new technologies and increase the TRL levels, (ii) transfer the state of the art risk based approach from the Netherlands to Slovenia/Croatia and (iii) to provide validation and buy-in from a range of stakeholder. | |
| 2. | 874402 | **CONSORCI CENTRE DE CIENCIA I TECNOLOGIA FORESTAL DE CATALUNYA (ES)**<br>Crta. de St. Llorenç de Morunys a Port del Comte, km 2; 25280 Solsona<br><br>https://recipe.ctfc.cat<br><br>http://ctfc.cat/en/ | 1. FUNDACIO D'ECOLOGIA DEL FOC I GESTIO D'INCENDIS PAU COSTA ALCUBIERRE **(ES)** www.paucostafoundation.org<br>2. Departament d'Interior - Generalitat de Catalunya **(ES)** https://interior.gencat.cat/ca/arees_dactuacio/proteccio_civil<br>3. FORSTLICHE VERSUCHS- UND FORSCHUNGSANSTALT BADEN-WUERTTEMBERG **(DE)** www.fva-bw.de/startseite<br>4. Centro Internazionale in Monitoraggio Ambientale - Fondazione CIMA | Reinforcing civil protection capabilities into multi-hazard risk assessment under climate change **(RECIPE)**<br><br>Under climate change scenarios, disaster risk management is getting more complex, as the potential impacts of natural hazards on citizens and infrastructures increases, meanwhile decision-making process deals with higher levels of uncertainty. Consequently, risk management agencies have to deal with unknown or more severe events. The proper inclusion of emergency response requirements into risk assessment and planning contributes to reinforce Disaster Risk Reduction Strategies. Based on the above, the project "Reinforcing civil protection capabilities into multi-hazard risk assessment under climate change" (RECIPE) seeks to develop operational recommendations and tools to reinforce civil protection in emergency management and risk planning of different natural hazards across Europe while simultaneously adressing climate change impacts through an integrated risk management approach and the exchange of lessons learned and best practices sharing. By means of putting together multi-hazards' expertise from science and practice of wildfires, floods, storms, avalanches, rock-falls and landslides, the main impacts of climate change in risk management will be identified. The interaction between prevention-preparedness-response actions in projected climate change scenarios will be analysed with an active participation of practitioners and other users. Accordingly, civil protection requirements to face new risk management challenges about climate change impacts will also be identified. Within the expected | 597.642,46€ |

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| | | | **(IT)** www.cimafoundation.org<br>5. BUNDESFORSCHUNGS UND AUSBILDUNGSZENTRUM FUR WALD NATURGEFAHREN UND LANDSCHAFT **(AT)** https://bfw.ac.at<br>6. INSTITUT CARTOGRAFIC I GEOLOGIC DE CATALUNYA **(ES)** https://icgc.cat<br>7. INSTITUTO SUPERIOR DE AGRONOMIA **(PT)** www.isa.ulisboa.pt/ | results, transferable guidelines will be edited to incorporate the projected multi-risk impacts of climate change into operational decision support systems that are used for risk management. Complementary specific tools will be developed at pilot site level to reinforce civil protection capabilities. Participation of public agencies will be promoted from the beginning to achieve an end-user oriented focus. The results will be actively disseminated into civil protection systems. Furthermore, the project's workshops will promote the knowledge exchange in the existing networks to reinforce European landscapes' resilience to natural hazards. | |
| 3. | 874398 | **ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA (IT)**<br><br>Via di Vigna Murata 605, 00143, Rome, Italy<br><br>www.ingv.it | 1. CENTRO DI GEOMORFOLOGIA INTEGRATA PER L'AREA DEL MEDITERRANEO **(IT)** www.cgiam.org<br>2. FONDAZIONE CENTRO EURO-MEDITERRANEO SUI CAMBIAMENTI CLIMATICI **(IT)** | Sea Level Rise Scenarios Along the Mediterranean Coasts – 2 **(SAVEDMECOASTS-2)**<br><br>The project focus on the Prevention topic and the disaster risk assessment caused by the combined effects impact of sea level rise (SLR) and land subsidence (LS) in the major river deltas, lagoons and reclamation areas previously identified in the SAVEMEDCOASTS project (www.savemedcoasts-eu), being the most exposed coastal zones of the Mediterranean region. Project activities will be carried out in the following areas: the Ebre (SP), Rhone (FR) and Nile (EG) river deltas; the lagoons of Venice (IT), Cabras (IT) and Larnaca (CY); the reclamation area of Basento (IT) | 624.963,85€ |

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| | | | www.cmcc.it<br>3. ISOTECH LTD **(CY)** www.isotech.com.cy<br>4. ARISTOTELIO PANEPISTIMIO THESSALONIKIS **(EL)** www.auth.gr<br>5. CENTRE TECNOLOGIC DE TELECOMUNICACIONS DE CATALUNYA **(ES)** www.cttc.es<br>6. COMUNE DI VENEZIA **(IT)** www.comune.venezia.it<br>7. FONDAZIONE AMBIENTE RICERCA BASILICATA **(IT)** www.farbas.it | and the coastal plain of Chalastra (GR). Expected results are: 1) maps of flooding scenarios for the next 20-30 years and up to 2100 for the targeted areas through the analysis of remote sensing, geodetic and topographic data, Digital Surface Models and IPCC sea level projections; 2) multi-hazard scenarios incorporating vulnerability, exposure, hazard frequency and intensity to translate climate change impacts into socio-economic loss; 3) dissemination and education actions (capitalizing the KnowRisk and Tsumaps projects) through workshops with stakeholders and KnowRiskFlood campaigns to people to raise the awareness and preparedness in three representative subsiding environments: the Ebre river delta (SP), the Venice lagoon (IT), the Basento reclamation area (IT) and the Chalastra coastal plain (GR). Scenarios will support policy-makers and land planners to develop joint strategies for sustainable use of ecosystems by a disaster-resilient development. The multi-hazard approach for risk assessment will allow to evaluate cascading effects of multi temporal events expected in the coastal population living in the targeted areas that will benefit of the project outcomes (1000 to >1M people). Outputs will include SLR projections, map of flooding scenarios, assessment of risk data end users, decision support systems, hazard and risk assessment, vulnerability analysis, disaster risk management plans. | |
| | | | | **Total (EUR):** | **1.720.866,31€** |

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| **GRAND TOTAL:** | **6.914.959,61 €** |