BRIdges the GAp for Innovations in Disaster resilience

Résultats

Informations projet

BRIGAID

N° de convention de subvention: 700699

Site Web du projet

DOI
10.3030/700699

Projet clôturé

Date de signature de la CE
20 Avril 2016

Date de début
1 Mai 2016

Date de fin
30 Septembre 2020

Financé au titre de
SOCIETAL CHALLENGES - Climate action, Environment, Resource Efficiency and Raw Materials

Coût total
€ 8 817 445,10

Contribution de l'UE
€ 7 739 805,79

Coordonné par
TECHNISCHE UNIVERSITEIT DELFT
Netherlands

Ce projet apparaît dans...

CORDIS fournit des liens vers les livrables publics et les publications des projets HORIZON.

Les liens vers les livrables et les publications des projets du 7e PC, ainsi que les liens vers certains types de résultats spécifiques tels que les jeux de données et les logiciels, sont récupérés dynamiquement sur OpenAIRE.

Livrables

Documents, reports (29)

Dissemination and exploitation plan 2019 - 2020
Yearly update of the communication and dissemination plan (D7.1). As the project progresses the exploitation will be of more importance. Hence the updates are called dissemination and exploitation plan.

Stocktaking Report Cycle 3
Stocktaking report of third innovation cycle including the selections for WP2, WP3 and WP4

BRIGAID INC.
Report on the business case for commercialization of (key aspects of) BRIGAID. Also includes update on the PPIF.

Update TIF based on cycle 2
see description D5.2

Development Report Cycle 3 for WP2, WP3 and WP4
Provides an overview of the test demonstration and performance of innovations according to the TIF for cycle 3

Policy briefs on the TIFF

The policy brief on TIF coincides with the first conference in M24.

Stocktaking Report WP4

Stocktaking Report of first innovation cycle. Provides an overview and justification of the stocktaking process and a description of the identified and selected innovations.

Initial version of TIF

Report containing the probable range of (normalized) test conditions and uncertainties (from T5.1), and variability in institutional cultures across Europe on a local, regional and national scale (from T5.2), resulting in guidelines for assessing the general effectiveness of innovations. These guidelines form the initial version of the TIF.

Dissemination and exploitation plan 2017-2018

Yearly update of the communication and dissemination plan (D7.1). As the project progresses the exploitation will be of more importance. Hence the updates are called dissemination and exploitation plan.

Development Report Cycle 1 for WP2, WP3 and WP4

provides an overview of the test demonstration and performance of innovations according to TIF for cycle 1

Policy brief on MAF+ and PPIF

Policy brief on the MAF+ and PPIF coincides with the second conference in M36

Market Scoping Report

Report that contains an assessment of the different geographical regions within Europe on the basis of their vulnerability to climate change and the willingness of their societies to implement (innovative) adaptation measures. Based on this analysis the report identifies the markets that have a high potential of adopting innovative climate change adaptation measures. Delivered in M12.

Clusters of innovations

Report on the assessment of clusters of innovations.

Final report on the activity of Communities of Innovation

Final report on activity of Communities of Innovation (CoI) around risk reduction to different hazards in areas with common problems and environmental conditions

Intermediate report on the activity of Communities of Innovation

Intermediate report on activity of Communities of Innovation (CoI) around risk reduction to different hazards in areas with common problems and environmental conditions

Communication and Dissemination Plan

A draft Communication and Dissemination plan which will be elaborated in accordance with EC guidelines for “communicating Research and Innovation” and will specify key messages, target audiences and communication channels for an efficient design of dissemination activities.

Update Clusters of innovations from 1st and 2nd test phase

see description D5.3

Full version of TIF

Report containing guidelines to apply the TIF, comprising test guidelines, guidelines for identifying potential challenges with respect to social acceptability, guidelines to establish TRLs and levels of social acceptability, and methods to derive sector specific effectiveness of innovations expressed in KPIs.

Project Handbook

Development of project handbook on administrative issues

Societal Impact Report

Report on peoples perception of the impact of BRIGAID on their soceital change

Stocktaking Report WP3

Stocktaking Report of first innovation cycle. Provides an overview and justification of the stocktaking process and a description of the identified and selected innovations.

Design of Communities of Innovation

Report on activity of Communities of Innovation (CoI) around risk reduction to different hazards in areas with common problems and environmental conditions

Update Clusters of innovations from all test phases

see description D 5.3

Development Report Cycle 2 for WP2, WP3 and WP4

Provides an overview of the test demonstration and performance of innovations according to TIF for cycle 2

Update TIF based on cycle 3

see description D5.2

Dissemination and exploitation plan 2018-2019

Yearly update of the communication and dissemination plan (D7.1). As the project progresses the exploitation will be of more importance. Hence the updates are called dissemination and exploitation plan.

Stocktaking Report Cycle 2

Stocktaking report of second innovation cycle including the selections for WP2, WP3 and WP4

Stocktaking Report WP2

Stocktaking Report of first innovation cycle. Provides an overview and justification of the stocktaking process and a description of the identified and selected innovations.

Public Final Activity Report

Summary on the project's achievements, experiences done up during the project and lessons learned.

Demonstrators, pilots, prototypes (5)

Update PPIF and funding applications based on cycle 2

see description D6.3

Update MAF+ based on cycle 2

see description D6.2

PPIF and funding applications

A report on development of PPIF+ including a synthesis of the funding applications, and a business case for commercializing the ISP.

Update MAF+ based on cycle 3

see description D6.2

MAF+ and business plans

Report on the development of MAF+. This report includes the business plans for 20-30 innovations at the end of the project.

Websites, patent fillings, videos etc. (2)

Innovation Sharing Platform (ISP)

The ISP presents the innovations, their performances, requirements, test reports and user experiences. During the project, the BRIGAID platform will be the meeting place and “virtual” shopwindow for innovations and for investors. In addition, a key goal of BRIGAID is to evolve the initial version of the ISP into a marketplace beyond the project lifetime. Delivered in M12, updated in M24, M36 and M48.

Project Website

An external public project website which that can be extended with downloadable/viewable material, information graphics, web banners (to inform about upcoming events and the project’s progress), and links to social media accounts for BRIGAID. Delivered in M6 and regularly updated.

Publications

Conference proceedings (12)

Densified GNSS-based water-vapor monitoring network in Rotterdam using low-cost single-frequency receivers

Auteurs: Krietemeyer, A., ten Veldhuis, M. C., Realini, E., & van de Giesen, N.
Publié dans: EGU General Assembly, Numéro 20th EGU General Assembly, EGU2018, 2018, Page(s) 8961
Éditeur: EGU General Assembly

Investigating the Small-Scale Spatial Variabilty of Precipitable Water Vapor by Adding Single-Frequency Receivers into an Existing Dual-Frequency Receiver Network

Auteurs: Krietemeyer, A., ten Veldhuis, M. C., & van de Giesen, N. (2017).
Publié dans: EGU General Assembly,, Numéro 19th EGU General Assembly, EGU2017,, 2017, Page(s) 14362
Éditeur: EGU General Assembly

Monitoring Soil Water Content via Wireless Underground Communication Networks: the Impact of Uncertainty in Soil Textural Parameters

Auteurs: Di Federico Vittorio, Verdone Roberto, Ciriello Valentina
Publié dans: American Geophysical Union, Numéro "Fall Meeting 2019, abstract #H31C-03", 2019
Éditeur: American Geophysical Union

What we learned for rainfall analysis using tropospheric gradients and slant zenith tropospheric delays

Auteurs: Krietemeyer, A., Veldhuis, M. C. T., van der Marel, H., Realini, E., & van de Giesen, N.
Publié dans: Geophysical Research Abstracts, Numéro Vol.21, 2019, Page(s) 1
Éditeur: Geophysical Research Abstracts

"""The Challenge of Selecting Precipitation Products for Extreme Weather Services in a Data Scarce Environment."""
Auteurs: Ten Veldhuis, Marie-Claire, Sha Lu, and Nick Van De Giesen. AGUFM 2019 (2019): H51V-1837.
Publié dans: American Geophysical Union, Numéro "Fall Meeting 2019, abstract #H51V-1837", 2019
Éditeur: American Geophysical Union

Climate change impacts on urban rainfall extremes: influence of time and space scales
Auteurs: Parisa Hosseinzadehtalaei, Hossein Tabari, Patrick Willems
Publié dans: Proceedings 14th IWA/IAHR International Conference on Urban Drainage (ICUD2017), 2017, Page(s) 92-99 (ICUD-0376)
Éditeur: Czech Water Association (CzWA) and the Czech Technical University in Prague

O projecto BRIGAID promove inovações no combate às alterações climáticas no sector florestal.
Auteurs: Rego, F.C., Nunes, L., Colaço, C., Loureiro, C., Salgueiro, A., Dias, S.
Publié dans: 8º Congresso Florestal Nacional - Proceedings, 2017, Page(s) 29
Éditeur: SPCF

Measuring drought sensitivity of Spanish crop yields
Auteurs: García-León, D., Contreras, S., Hunink, J.E.
Publié dans: Actas del 41 Simposio de la Asociación Española de Economía, Numéro Annual, 2016
Éditeur: Asociación Española de Economía

Recenti sviluppi sul dispositivo OBREC: diga marittima per l'energia dal moto ondoso
Auteurs: Contestabile, P., Ferrante, V., Formentin, S., Palma, G., Zanuttigh, B., & Vicinanza, D.
Publié dans: 2018, ISBN 9788-894379907
Éditeur: IDRA18

Nature Based Circular Economy of Agro-industrial Wastewater
Auteurs: Ezra Orlofsky, Simon Chernoivanov, Iggy Litaor
Publié dans: International Water Association, 15th Specialized Conference on Small Water & Wastewater Systems, Numéro October, 2018, 2018
Éditeur: Technion, Haifa

Improving the antenna performance for Zenith Tropospheric Delay estimations with consumer-grade antennas and a low-cost dual-frequency receiver
Auteurs: Krietemeyer, A., van der Marel, H., ten Veldhuis, M. C., & van de Giesen, N.
Publié dans: EGU General Assembly Conference Abstracts, Numéro 22nd EGU General Assembly,, 2020, Page(s) 9663
Éditeur: EGU General Assembly Conference Abstracts

Using Low-Cost GNSS Receivers to Investigate the Small-Scale Precipitable Water Vapor Variability in the Atmosphere for Improving High Resolution Rainfall Forecasts
Auteurs: Krietemeyer, A., ten Veldhuis, M. C., & van de Giesen, N.
Publié dans: EGU General Assembly, Numéro 19th EGU General Assembly, EGU2017, 2017, Page(s) 14680
Éditeur: EGU General Assembly

Other (4)

BRIGAID: Indicators of climate hazards in Europe (Shapefiles)
Auteurs: Paprotny, Dominik
Publié dans: 2020
Éditeur: 4TU.ResearchData
DOI: 10.4121/12776162.v1

Monitoring Water Productivity: Demonstration Case for ThirdEye Mozambique
Auteurs: Droogers, P., G.W.H. Simons, N.I. den Besten, J. van Til, M. de Klerk
Publié dans: FutureWater Report 169, 2017
Éditeur: FutureWater

Biomimetics- cutting edge environmental technologies
Auteurs: Yael Helfman Cohen, Shlomtzion Shen, Ezra Orlofsky
Publié dans: Ecology and the Environment, Numéro July 2017 Volume 7, Numéro 3, 2017, Page(s) 9-10
Éditeur: Israeli Society of Ecology and Environmental Science (ISSUES)

A Testing and Implementation Framework (TIF) for Climate Adaptation Innovations: Initial Version of the TIF - Deliverable 5.1
Auteurs: Sebastian, Antonia; Lendering, K.T.; van Loon-Steensma, J.M.; Paprotny, D.; Bellamy, Rob; Willems, Patrick; van Loenhout, Joris; Colaço, Conceição; Dias, Susana; Nunes, Leónia; Rego, Francisco; Koundouri, Phoebe; Xepapadeas, Petros; Vassilopoulos, Achilleas; Wiktor, Paweł; Wysocka-Golec, Justyna

Publié dans: Numéro 1, 2017
Éditeur: Tu Delft

Peer reviewed articles (22)

Climate change impact on short-duration extreme precipitation and intensity–duration–frequency curves over Europe

Auteurs: Parisa Hosseinzadehtalaei, Hossein Tabari, Patrick Willems
Publié dans: Journal of Hydrology, Numéro 590, 2020, Page(s) 125249, ISSN 0022-1694
Éditeur: Elsevier BV
DOI: 10.1016/j.jhydrol.2020.125249

Potential of Cost-Efficient Single Frequency GNSS Receivers for Water Vapor Monitoring

Auteurs: Andreas Krietemeyer, Marie-claire ten Veldhuis, Hans van der Marel, Eugenio Realini, Nick van de Giesen
Publié dans: Remote Sensing, Numéro 10/9, 2018, Page(s) 1493, ISSN 2072-4292
Éditeur: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/rs10091493

Social readiness of adaptation technologies

Auteurs: Rob Bellamy
Publié dans: Wiley Interdisciplinary Reviews: Climate Change, Numéro 10/6, 2019, ISSN 1757-7780
Éditeur: John Wiley & Sons Inc.
DOI: 10.1002/wcc.623

A Genetic Programming based formula for wave overtopping by crown walls and bullnoses

Auteurs: Sara Mizar Formentin, Barbara Zanuttigh
Publié dans: Coastal Engineering, Numéro 152, 2019, Page(s) 103529, ISSN 0378-3839
Éditeur: Elsevier BV
DOI: 10.1016/j.coastaleng.2019.103529

Framework for assessing the performance of flood adaptation innovations using a risk-based approach

Auteurs: Kasper T. Lendering, Antonia Sebastian, Sebastiaan N. Jonkman, Matthijs Kok
Publié dans: Journal of Flood Risk Management, Numéro 12/S2, 2019, Page(s) e12485, ISSN 1753-318X

Éditeur: Blackwell Publishing
DOI: 10.1111/jfr3.12485

High Quality Zenith Tropospheric Delay Estimation Using a Low-Cost Dual-Frequency Receiver and Relative Antenna Calibration
Auteurs: Andreas Krietemeyer, Hans van der Marel, Nick van de Giesen, Marie-Claire ten Veldhuis
Publié dans: Remote Sensing, Numéro 12/9, 2020, Page(s) 1393, ISSN 2072-4292
Éditeur: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/rs12091393

Global mortality from storm surges is decreasing
Auteurs: Laurens Bouwer, Bas Jonkman
Publié dans: Environmental Research Letters, 2017, ISSN 1748-9326
Éditeur: Institute of Physics Publishing
DOI: 10.1088/1748-9326/aa98a3

Uncertainty assessment for climate change impact on intense precipitation: how many model runs do we need?
Auteurs: Parisa Hosseinzadehtalaei, Hossein Tabari, Patrick Willems
Publié dans: International Journal of Climatology, Numéro 37, 2017, Page(s) 1105-1117, ISSN 0899-8418
Éditeur: John Wiley & Sons Inc.
DOI: 10.1002/joc.5069

Local impact analysis of climate change on precipitation extremes: are high-resolution climate models needed for realistic simulations?
Auteurs: Hossein Tabari, Rozemien De Troch, Olivier Giot, Rafiq Hamdi, Piet Termonia, Sajjad Saeed, Erwan Brisson, Nicole Van Lipzig, Patrick Willems
Publié dans: Hydrology and Earth System Sciences, Numéro 20/9, 2016, Page(s) 3843-3857, ISSN 1607-7938
Éditeur: Copernicus Publications
DOI: 10.5194/hess-20-3843-2016

HANZE: a pan-European database of exposure to natural hazards and damaging historical floods since 1870
Auteurs: Dominik Paprotny, Oswaldo Morales-Nápoles, Sebastiaan N. Jonkman
Publié dans: Earth System Science Data Discussions, 2017, Page(s) 1-25, ISSN 1866-3591
Éditeur: COPERNICUS GESELLSCHAFT MBH
DOI: 10.5194/essd-2017-105

Efficient pan-European river flood hazard modelling through a combination of statistical and physical models

Auteurs: Dominik Paprotny, Oswaldo Morales-Nápoles, Sebastiaan N. Jonkman
Publié dans: Natural Hazards and Earth System Sciences, Numéro 17/7, 2017, Page(s) 1267-1283, ISSN 1684-9981
Éditeur: COPERNICUS GESELLSCHAFT MBH
DOI: 10.5194/nhess-17-1267-2017

Precipitation intensity–duration–frequency curves for central Belgium with an ensemble of EURO-CORDEX simulations, and associated uncertainties

Auteurs: Parisa Hosseinzadehtalaei, Hossein Tabari, Patrick Willems
Publié dans: Atmospheric Research, Numéro 200, 2018, Page(s) 1-12, ISSN 0169-8095
Éditeur: Elsevier BV
DOI: 10.1016/j.atmosres.2017.09.015

Trends in flood losses in Europe over the past 150 years

Auteurs: Dominik Paprotny, Antonia Sebastian, Oswaldo Morales-Nápoles, Sebastiaan N. Jonkman
Publié dans: Nature Communications, Numéro 9/1, 2018, ISSN 2041-1723
Éditeur: Nature Publishing Group
DOI: 10.1038/s41467-018-04253-1

Comparison of meteorological and satellite-based drought indices as yield predictors of Spanish cereals

Auteurs: David García-León, Sergio Contreras, Johannes Hunink
Publié dans: Agricultural Water Management, Numéro 213, 2019, Page(s) 388-396, ISSN 0378-3774
Éditeur: Elsevier BV
DOI: 10.1016/j.agwat.2018.10.030

Numerical Simulations of the Hydraulic Performance of a Breakwater-Integrated Overtopping Wave Energy Converter

Auteurs: Giuseppina Palma, Sara Mizar Formentin, Barbara Zanuttigh, Pasquale Contestabile, Diego Vicinanza
Publié dans: Journal of Marine Science and Engineering, Numéro 7/2, 2019, Page(s) 38, ISSN 2077-1312
Éditeur: J. Mar. Sci. Eng
DOI: 10.3390/jmse7020038

REDUCTION OF THE WAVE OVERTOPPING DISCHARGE AT DIKES IN PRESENCE OF CROWN WALLS WITH BULLNOSES

Auteurs: Barbara Zanuttigh, Sara Mizar Formentin
Publié dans: Coastal Engineering Proceedings, Numéro 1/36, 2018, Page(s)

110, ISSN 2156-1028
Éditeur: Coastal Engineering Research Council
DOI: 10.9753/icce.v36.papers.110

A NEW FULLY-AUTOMATIC PROCEDURE FOR THE IDENTIFICATION AND THE COUPLING OF THE OVERTOPPING WAVES
Auteurs: Sara Mizar Formentin, Barbara Zanuttigh
Publié dans: Coastal Engineering Proceedings, Numéro 1/36, 2018, Page(s) 36, ISSN 2156-1028
Éditeur: Coastal Engineering Research Council
DOI: 10.9753/icce.v36.papers.36

Accuracy of pan-European coastal flood mapping
Auteurs: D. Paprotny, O. Morales-Nápoles, M. I. Vousdoukas, S. N. Jonkman, G. Nikulin
Publié dans: Journal of Flood Risk Management, Numéro 12/2, 2018, Page(s) e12459, ISSN 1753-318X
Éditeur: Blackwell Publishing
DOI: 10.1111/jfr3.12459

Pan-European hydrodynamic models and their ability to identify compound floods
Auteurs: Dominik Paprotny; Michalis I. Vousdoukas; Oswaldo Morales-Nápoles; Sebastiaan N. Jonkman; Luc Feyen
Publié dans: Natural Hazards, Numéro 101, 2020, Page(s) 933-957, ISSN 0921-030X
Éditeur: Kluwer Academic Publishers
DOI: 10.1007/s11069-020-03902-3

Flow Depths and Velocities across a Smooth Dike Crest
Auteurs: Formentin, Gaeta, Palma, Zanuttigh, Guerrero
Publié dans: Water, Numéro 11/10, 2019, Page(s) 2197, ISSN 2073-4441
Éditeur: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/w11102197

Latitudinal heterogeneity and hotspots of uncertainty in projected extreme precipitation
Auteurs: Tabari, Hossein; Hosseinzadehtalaei, Parisa; AghaKouchak, Amir; Willems, Patrick
Publié dans: Environmental Research Letters, Numéro Volume 14, Number 12, 2019, ISSN 1748-9326
Éditeur: Institute of Physics Publishing
DOI: 10.1088/1748-9326/ab55fd

Satellite-based data driven quantification of pluvial floods over Europe under future climatic and socioeconomic changes.

Auteurs: Parisa Hosseinzadehtalaei; Hossein Tabari; Patrick Willems
Publié dans: Science of The Total Environment, Numéro Volume 721, 2020, ISSN 0048-9697
Éditeur: Elsevier BV
DOI: 10.1016/j.scitotenv.2020.137688

Non-peer reviewed articles (1)

BRIGAID - a research project funded by the European program HORIZON 2020
Auteurs: Ioan Bica, Sorin Randasu, Dan Constantin
Publié dans: Hidrotehnica, Numéro 4-5, 2016, 2016, Page(s) 43-48, ISSN 0439-0962
Éditeur: Romanian Water Administration

Droits de propriété intellectuelle

Patent (1)

BATARDOU DE INTERVENTIE PENTRU PREVENIRE INUNDATII
Numéro de demande/publication: RO a2015-00654
Date: 2015-12-19
Demandeur(s): SPECTRUM CONSTRUCT SRL

Ensemble de données

Ensemble de données via OpenAIRE (2)

Ublox Neo M8T dataset (NMi campaign 2017-2020: 15-second resolution data) related to the publication: Potential of Cost-Efficient Single Frequency GNSS Receivers for Water Vapor Monitoring
Auteurs: Krietemeyer, Andreas; Veldhuis, Marie-Claire ten; van de Giesen, N.C. (Nick)
Publié dans: 4TU.ResearchData

BRIGAID: Indicators of climate hazards in Europe (Shapefiles)

Auteurs: Paprotny, Dominik
Publié dans: 4TU.ResearchData

Autres produits de recherche

Autres produits de recherche via OpenAire (1)

HANZE: a pan-European database of exposure to natural hazards and damaging historical floods since 1870

Auteurs: Paprotny, Dominik; Morales-Nápoles, Oswaldo; Jonkman, Sebastiaan N.

Dernière mise à jour: 6 Septembre 2024

Permalink: https://cordis.europa.eu/project/id/700699/results/fr