

Disaster Resilience & Climate Change topics 2015

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The 2015 Disaster Resilience & Climate Change topics

- DRS 9-2015: Science and innovation for adaptation to climate change: from assessing costs, risks and opportunities to demonstration of options and practices
 - Sub-topic c) 2015 – Innovation actions
- DRS-10-2015: Natural Hazards: Towards risk reduction science and innovation plans at national and European level
- DRS-11-2015: Mitigating the impacts of climate change and natural hazards on cultural heritage sites, structures and artefacts

DRS-9-2015: Disaster Resilience & Climate Change topic - 1

Full title: Science and innovation for adaptation to climate change: from assessing costs, risks and opportunities to demonstration of options and practices



DRS-9-2015: Disaster Resilience & Climate Change topic – 1

- Full Title
Science and innovation for adaptation to climate change: from assessing costs, risks and opportunities to demonstration of options and practices
- Three sub-topics
 - 2014: a) Coordination actions; b) Research & Innovation actions
 - 2015: Innovation actions
- Specific conditions – Sub-topic c)
 - Topic Budget: EUR 15M
 - Indicative budget range for proposals: EUR 6-8M

DRS-9-2015: Disaster Resilience & Climate Change topic – 1

Rationale & context

- A lot of progress at EU, national and regional levels for adapting to climate change
 - 2013 - EU Adaptation Strategy
 - National Adaptation Strategies Local initiatives & actions
 - Wide portfolio of research funded at EU (mainly FP7) and national level on climate change impacts, vulnerabilities, decision-support methods/tools
- Need to consolidate knowledge, develop research and **promote innovation** towards climate change adaptation and the long-term reduction of risks from extreme weather events

DRS-9-2015

Sub-topic c): Innovation Actions

Scope

- Support, test and disseminate technological and non-technological options, including ecosystem-based approaches, to address climate-related risks and climate-proof critical infrastructure assets and systems
- Develop frameworks for monitoring the performance and effectiveness of developed approaches and for ensuring their optimum performance
 - Address also post-implementation requirements, operational and organisational/governance needs for successful replication and follow-up
- Provide innovative solutions for major implementation projects at local, regional or national levels
 - Strengthen complementarity with other EU funding mechanisms, and particularly with the European Structural and Investment Funds

DRS-9-2015

Sub-topic c): Innovation Actions

Expected Impact

- Rapid large-scale deployment and market uptake of innovative **technological and non-technological** climate change adaptation solutions with high replicability
- Contribution to the development of technological and performance standards for adaptation options

DRS-10-2015: Disaster Resilience & Climate Change topic - 2

Full title: Natural Hazards:
Towards risk reduction science
and innovation plans at national
and European level



DRS-10-2015: Disaster Resilience & Climate Change topic - 2

- Full Title
Natural Hazards: Towards risk reduction science and innovation plans at national and European level
- Coordination & Support Action
- Specific conditions
 - Topic Budget: EUR 3M
 - Indicative budget range for proposals: EUR 2-3M
 - Up to one project shall be funded

DRS-10-2015: Disaster Resilience & Climate Change topic - 2

Rationale & context

- More coherent approach to threats and related risks, taking into account efforts at national, European and international level in collaboration with all relevant actors
- Strong risk reduction innovative frame and perspective to contribute to a new vision for future research & knowledge on reducing risks from natural hazards
- Going beyond traditional risk concepts and including resilience

DRS-10-2015: Disaster Resilience & Climate Change topic - 2

Policy References - Examples

- European level, e.g.:
 - A Community approach on the prevention of natural and man-made disasters (COM(2009) 82 final)
 - Risk assessment and mapping guidelines for disaster Management (SEC 21.12.2010)
 - New Union Civil Protection Mechanism (Decision 1313/2013 of the European parliament and of the Council of 17 December 2013)
- International level, e.g.:
 - Hyogo framework for action (2005-2015)
 - Sendai framework for disaster risk reduction (2015-2030)

DRS-10-2015: Disaster Resilience & Climate Change topic - 2

Scope

- Develop an efficient networking and forum to enable interactions with the key players (e.g. scientists, authorities, users, civil protection, UNISDR platforms...) in order to contribute to elaborate a new strategic research vision for natural hazards risk reduction
- Identify the necessary prioritized key actions to be promoted (short to long term perspective), building on new concepts and innovations, in order to improve interdisciplinary scientific knowledge and apply or adapt current tools and methods to a new and effective risk reduction strategy at national/European level
- Take into account the EU and national adaptation strategies as well as the developing disaster risk management planning done at national or appropriate sub-national level

DRS-10-2015: Disaster Resilience & Climate Change topic - 2

Expected impact

- Consolidation of and enhanced synergies between European and Member State funded research and innovation activities for natural hazards/disasters risk reduction
- Contribution to the development of a prioritized strategic research and innovation agenda
- Enhanced implementation of the EU disaster prevention framework including preparatory work supporting guidelines on risk management capability, as called for in the EU Civil Protection legislation (article 5e)
- Targeting the “coordination” needs and requirements of users, such as:
 - UNISDR European national Platforms
 - Commission services dealing with prevention, risks and disasters issues
 - National authorities managing a prospective research agenda related to natural hazards
 - Key actors implementing disaster risk reduction measures related to natural hazards

DRS-11-2015: Disaster Resilience & Climate Change topic 3

Full title: Mitigating the
impacts of climate change and
natural hazards on cultural
heritage sites, structures and
artefacts



DRS-11-2015: Disaster Resilience & Climate Change topic - 3

- Full Title
Mitigating the impacts of climate change and natural hazards on cultural heritage sites, structures and artefacts
- Research and Innovation Action
- Specific conditions
 - Topic Budget: EUR 10M
 - Indicative budget range for proposals: EUR 6-8M

DRS-11-2015: Disaster Resilience & Climate Change topic 3

Rationale & context

- Cultural heritage assets are being lost at an alarming rate and need safeguarding for the future
- Cultural heritage is a non-renewable resource and an important component of individual and collective identity, fuels economic sectors (e.g. tourism) etc.
- Need for improved adaptation and mitigation strategies for the sustainable management and conservation of cultural heritage in Europe due to increased frequency and intensity of extreme weather events and risks associated to natural hazards

DRS-11-2015: Disaster Resilience & Climate Change topic 3

Scope

- Development of
 - Eco-innovative solutions to help mitigate effects of climate change and natural hazards
 - Effective adaptation strategies, systems and technologies for better risk management of heritage materials and for mitigating damage to cultural heritage assets
- Proposals may
 - Include case studies
 - Address research gaps or barriers needed to respond to the challenge, including
 - Innovative environmental assessment methodologies, integrated monitoring technologies and systems, improved non-invasive and non-destructive methods of surveying and diagnosis incl. wide area surveillance, cost-effective conservation and restoration techniques, risk management, disaster prevention, quick damage assessment

DRS-11-2015: Disaster Resilience & Climate Change topic 3

Expected impact

- More sustainable and effective safeguarding and management of European Cultural Heritage
- More effective advice and input to restoration and adaptation policies of government organisations
- Reduced fragmentation through increased collaboration, cooperation and interdisciplinary approach
- Proactively target needs and requirements of users such as decision makers for disaster mitigation and safeguarding of Cultural Heritage assets



HORIZON 2020

Link to call texts

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-drs-2015.html>

<http://ec.europa.eu/programmes/horizon2020/>