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# EUROPEAN AND MEDITERRANEAN MAJOR HAZARDS AGREEMENT (EUR-OPA)

## **NETWORK OF SPECIALISED EURO-MEDITERRANEAN CENTRES**

Revised compilation of 2018-2019 Projects following the reduction of funds

Document prepared by the Secretariat of the EUR-OPA Major Hazards Agreement

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## **EUR-OPA SPECIALISED CENTRES** 2018 - 2019 PROJECT PROPOSALS

## Algeria - CRSTRA

## SPECIALIST CENTRES – PROPOSED PROJECTS 2018-2019

### **MEDIUM-TERM ACTION PLAN PRIORITIES**

Using scientific and technological knowledge to assess more effectively evolving risks and adapt the resilience strategies accordingly

Strengthening co-operation among all decision-makers to better define the appropriate role of the authorities in disaster risk reduction (DRR)

Promoting "risk culture" among the population (children, adults and particularly vulnerable groups)

Fostering the active participation of the population (individually and as a community) in DRR

## **PROJECT No.:**

NAME OF THE CENTRE	Centre for Scientific and Technical Research on Arid Regions (CRSTRA)		
COUNTRY	Algeria		
REPRESENTED BY	Ms F. Lakhdari		
PROJECT TITLE	Heat-wave risk and adaptation strategies		
DURATION	2018□ 2019□		
PARTNERS	BUDGET IN €		
Co-ordinating centre			

## 1. Context

The studies conducted by the CRSTRA under the EUR-OPA Major Hazards Agreement have pinpointed the trend in heat-waves against the background of climate change, highlighting an increase in the length, frequency and intensity of heat-waves since the 1980s. At the same time, the workshops on heat-wave risks and adaptation held by the CRSTRA as part of the activities of the EUR-OPA programme (2014-2015) for the various stakeholders involved in dealing with these risks (Civil Defence, health service, National Climate Change Agency (ANCC), etc.) have produced various recommendations. Some have been implemented; for instance, for the first time in Algeria, alerts have been issued in the media to warn the public about impending heat-waves and the precautions to be taken. At present, the CRSTRA is developing tools to aid decision-making (heat-wave risk maps for Algeria) and also drawing up an inventory of best practices based on traditional local skills in terms of heat-wave risk adaptation and mitigation. In addition, the CRSTRA is developing outreach media for national institutions, local authorities and vulnerable population groups (children, elderly persons and persons with chronic diseases).

For the next phase (2018-2019), we intend to move on from defining the heat-wave risk to establishing a heat-wave geographical information system (GIS) for risk evaluation. To reach as many people as possible, we will use social media for awareness-raising, outreach, alerts and promoting the relevant risk culture.

## 2. Specific objectives

[Description of the specific objectives of the project for each year – Maximum 8 lines]

#### 2018

## Using scientific and technological knowledge to assess more effectively evolving risks and adapt the resilience strategies accordingly

- Updating and expansion of the heat-wave database for Algeria. Could be a benchmark for the Mediterranean region for this risk because of the size of its territory and its geographical location.
- GIS: development of the conceptual model for the heat-wave GIS for Algeria.
- Inventory of local skills in the region of Adrar (Touat), Oued Souf (Souf) and Touggourt (Rhir).

## Promoting "risk culture" among the population (children, adults and particularly vulnerable groups)

- Awareness-raising through the tools and media developed (heat-wave risk platform on the www.crstra.dz website, posters, radio broadcasts, etc.).

#### 2019

## Using scientific and technological knowledge to assess more effectively evolving risks and adapt the resilience strategies accordingly

- Updating and expansion of the heat-wave database for Algeria.
- Heat-wave risk GIS (multicriteria analysis) for drawing up the heat-wave risk map for Algeria.

## Promoting "risk culture" among the population (children, adults and particularly vulnerable groups)

 Awareness-raising through social media and heat-wave risk platform on the www.crstra.dz website).

#### 3. Activities

[Detailed description of the activities to be carried out in line with the budget – Maximum 24 lines]

## 2018

## Co-ordinating centre:

- Updating of the database of days with heat-waves in Algeria and expansion with additional stations.
- Development of the conceptual model for the heat-wave GIS for Algeria.
- Preparation of data layers for the GIS.
- Carrying out of a survey on local skills in the region of Ghardaïa and El Oued.
- Creation of the risk platform on the www.crstra.dz website.

The project is open to all Euro-Mediterranean Agreement centres which wish to take part.

#### 2019

## Co-ordinating centre:

- Updating and expansion of the heat-wave database for Algeria.
- Select expert workshop for the heat-wave GIS and the multicriteria analysis.
- Production of risk maps on the basis of the multicriteria analysis.

- CRSTRA platforms on heat-wave risk with at least five outreach videos.
- Production of a guide to local skills based on local know-how, with possible optimisation if necessary.

The project is open to all Euro-Mediterranean Agreement centres which wish to take part.

## 4. Anticipated results

[Description of the anticipated results of the project for each year – Maximum 8 lines]

### 2018

- Updating of the database on days with heat-waves and expansion with additional stations so as to complete the coverage of Algeria.
- Development of the conceptual model for the heat-wave GIS for Algeria.
- Creation of a platform on the <u>www.crstra.dz</u> website covering climate risks in general and the heat-wave risk in particular.
- Extending study of the inventory of local skills in the region of Adrar (Touat), Oued Souf (Souf) and Touggourt (Rhir). The choice of the entities for the survey is based on an agri-ecological and socio-economic distribution cutting across the Sahara from East to West.

#### 2019

- Updating of the database on days with heat-waves and expansion with additional stations so as to complete the coverage of Algeria.
- Production of heat-wave risk maps.
- Further development of the heat-wave risk platform on the www.crstra.dz website.

#### 5. Deliverables

[Description of the specific results/products of the project (meeting and workshop reports, maps, guidelines, recommendations, brochures, leaflets, website, etc.) – Maximum 24 lines]

#### 2018

Co-ordinating centre:

- Methodological report on the development of the conceptual model for the heat-wave GIS for Algeria.
- Development of a heat-wave risk platform on the crstra.dz website.
- Guide to local heat-wave risk adaptation skills.

The project is open to all Euro-Mediterranean Agreement centres which wish to take part.

#### 2019

Co-ordinating centre:

- Updating and expansion of the heat-wave database for Algeria.
- Heat-wave risk maps for Algeria.
- CRSTRA platforms on heat-wave risks with at least five outreach videos.

The project is open to all Euro-Mediterranean Agreement centres which wish to take part.

## **Armenia - ECRM**

## PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

## PROJECT N°: 4.2. Awareness campaigns and public participation.

NAME OF THE CENTRE		European Interregional Scientific and Educational Centre on Major Risk Management (ECRM)		
COUNTRY	Republic of A	rmenia		
REPRESENTED BY	Stepan Badal	yan, Director of ECRM		
TITLE OF THE PROJECT	Development of the "Methodology and Action plan to prepare and regularly hold national and municipal "Campaigns" on informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning for all groups of the population about emergencies".			
DURATION	2018 🗆	2019 🗆		
PARTNERS				
Coordinator Centre: ECRM, Yerevan, Armenia				
Partner Centre 1: TESEC, Kiev, Ukraine				
Partner Centre 2: CERU, Lisbon, Portugal, or GHHD, Tbilisi, Georgia				
Partner Centre 3: Specialised Centre, Croatia				

## 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters – Maximum 10 lines]

By taking into account the significance of the provision of knowledge to enhance awareness and preparation of all groups of the population, to promote effectiveness of actions in disaster risk reduction, and of the complexity of the issues in this area, it is necessary to note, that these issues can be resolved in the most effective way only on the system based approach within the regularly functioning and upgraded national and municipal systems for informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning all groups of the population about emergencies, including the most vulnerable groups.

One of the most effective ways for the setting up and improvement of the above system is launching well prepared and regularly held relevant national and municipal "Campaigns" being inter-combined and mutually supported and enhanced.

## 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

Developing a preliminary version of the "Methodology and Action Plan to prepare and regularly hold national and municipal "Campaigns" on informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning all groups of the population about emergencies" in English and Russian.

Preparation of preliminary versions of some information-educational materials, assigned to be utilized while holding both: national and municipal "Campaigns", including the basic (national) materials for door-to-door distribution and corresponding materials for the municipalities at special risk and for the most vulnerable groups of population.

Distribution of the above documents to partner-centres and concerned national institutions for comments and proposals, discussions at a national level.

## 2019

Collecting comments and proposals to analyse them.

Developing a final version of the above "Methodology and Action plan" in English and Russian. Preparation of final versions of the above information-educational materials.

Such "Campaigns" are called to combine awareness raising and teach people in working places of their enterprises and establishments; in educational institutions; in other public places, where people usually congregate; in each family through a common policy of inter-combined basic (national) and additional (municipal) information-educational materials, assigned for dissemination through all mass media.

### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

## **Coordinator Centre:**

Substantiation of the need for development of the Project under the priorities set by the World Conference on Disaster Risk Reduction.

Acknowledgement of experience gained by the state-members of the EUR-OPA Major Hazards Agreement, European Union and other states in the field under consideration.

Analyses of the state of the corresponding National System.

Revision of the Action Plans for the population (individual plans, family plans, collective residential plans, plans for establishments, organizations, schools and other educational institutions) given the specifics of the region, the municipalities under special risk, and the most vulnerable groups of the population, as well as the level to which theses plans are related to the municipal plans.

Development of the preliminary version of the methodological documents, aimed to prepare and regularly hold national and municipal "Campaigns". Formulation of the Project short- and long term goals, as well as objectives, aiming at their achievement. Bringing in the key elements, Project basic principles and the steps required for their implementation, detailed consideration of the Project phases: planning, preparation, implementation and assessment.

Creation of the preliminary versions of the information-educational materials, assigned for use in holding both: national and municipal "Campaigns".

Holding discussions regarding the preliminary versions of the above methodological documents and information-educational materials in the Academy of Crisis Management of the Ministry of Emergency Situations of RA with the involvement of experts in the relevant fields. Preliminary correction of the above documents and materials, drawn on the feedback from discussions, as an intellectual contribution.

Edition of the above documents and materials, their translation into English and Russian.

Distribution of the documents and materials to partner-centres and national institutions for comments and proposals. Collection of the comments and proposals to analyze them.

#### Partner 1:

Analyze the preliminary versions of the "Methodology and Action Plan" as well as some informationeducational materials: basic (national) and relevant materials for the municipalities at likely radiological risks and for the municipalities in whose territories some hazardous substances are being produced, used or stored.

Develop comments and proposals to improve the above documents.

#### Partner 2:

Analyze the preliminary versions of the "Methodology and Action Plan" as well as some informationeducational materials: basic (national) and relevant materials for the municipalities, situated in flood prone vicinities (with reservoirs adjacent to inundation areas) and materials for the population on how to act when an earthquake is real or seems imminent.

Develop comments and proposals to improve the above documents.

### Partner 3:

Analyze the preliminary versions of the "Methodology and Action Plan", as well as some informationeducational materials: basic (national) and relevant materials for the groups of population most vulnerable to disasters (in particular people with disabilities and especially children).

Develop comments and proposals to improve the above documents.

#### 2019

#### Coordinator Centre:

Develop a final version of the "Methodology and Action plan" by given comments and proposals from partner-centres and experts of national institutions (see more above: 2018).

Prepare final versions of the basic (national) and corresponding municipal (for the municipalities at special risk) information-educational materials, as well as materials for the most vulnerable groups of

the population.

#### Partner 1, 2 and 3:

Contribute to the development of the final versions of the above-mentioned (see 2018) documents.

## 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

## 2018

The preliminary version of the "Methodology and Action plan to prepare and regularly hold national and municipal "Campaigns" on informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning all groups of population about emergencies" in English and Russian.

The preliminary versions of relevant information-educational materials, assigned to be utilized while holding both: national and municipal "Campaigns

Comments and proposals from the partner-centres and experts of concerned national institutions.

#### 2019

The final version of the "Methodology and Action plan to prepare and regularly hold national and municipal "Campaigns" on informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning all groups of population about emergencies" in English and Russian, with contributions made by the partner-centres and experts of the concerned national institutions.

The final versions of relevant information-educational materials: the basic (national) and for the municipalities at special risk, assigned to be utilised while holding both: national and municipal "Campaigns", as well as for the most vulnerable groups of population.

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

## Coordinator Centre:

A preliminary version of the "Methodology and Action plan to prepare and regularly hold national and municipal "Campaigns" on informing, awareness raising, acquisition and consolidation of adequate behavior skills and warning all groups of population about emergencies" in English and Russian.

Within the framework of the above document will be presented inter alia:

Recommendations on involving all groups of the population into undertaking associated individual or collective action to prevent or mitigate the consequences and to prepare to face disasters, including the ones dealing with drafting of individual emergency and collective action plans, as well as their consistence with municipal evacuation plans.

Recommendations on the development of adequate communication tools for mass media and cooperation with mass media within all phases pursued in preparing and holding national and municipal "Campaigns": 1. Planning, 2. Preparation, 3. Execution, 4. Evaluation of "Campaign".

Additionally, preliminary versions of the below documents will be presented:

Some "basic" (national) information-educational materials for door-to-door distribution, assigned to be utilized while holding both: national and municipal "Campaigns" (a leaflet and two brochures: short and more detailed).

Three additional information-educational Modules (brochures) for the municipalities at special risk: one

for the municipalities at radiological risk; another for the municipalities in whose territories some hazardous substances are being produced, used or stored, and the third for the municipalities, situated in flood prone vicinities (with reservoirs adjacent to an inundation area).

The "Manual for the population on how to act when an earthquake is real or seems imminent.

## Partner 1:

Recommendations, comments and proposals to improve the preliminary versions of the "Methodology and Action Plan", as well as some information-educational materials: "basic" (national) - a leaflet and two brochures, and two Modules (brochures) for the municipalities at likely radiological risk and for the municipalities in whose territories some hazardous substances are being produced, used or stored.

#### Partner 2:

Recommendations, comments and proposals to improve the preliminary versions of the "Methodology and Action Plan", as well as some information-educational materials: "basic" (national) - a leaflet and two brochures, and two Modules (brochures) for the municipalities, situated in flood prone vicinities (with reservoirs adjacent to an inundation area), and for population, concerning how to act, when an earthquake is real or seems imminent.

## Partner 3:

Recommendations, comments and proposals to improve the preliminary versions of the "Methodology and Action Plan", as well as some information-educational materials: "basic" (national) - a leaflet and two brochures, and Module (brochure) for the groups of population, being most vulnerable to disasters (in particular people with disabilities and including children).

#### 2019

## Coordinator Centre:

The final version of the "Methodology and Action Plan" with the recommendations presented within the frameworks of the mentioned document (see more above: 2018), by given comments and proposals from partner-centres and national experts.

The final versions of relevant information-educational materials: a leaflet and six brochures (see more above: 2018).

## Partner 1, 2 and 3:

Contribution to the final versions of the "Methodology and Action Plan", as well as to relevant information-educational materials (brochures, see more above: 2018).

## **Bulgaria - ECRP**

#### SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

## PROJECT N°: 2.1

NAME OF THE CENT	ΓRE	European Centre for Risk Prevention (ECRP), Sofia – (Partner 1)			
COUNTRY		Bulgaria	Bulgaria		
REPRESENTED BY		Kolio Kolev			
TITLE OF THE PROJ	IECT	Identification of good governance practices in the management of nuclear disasters and cross-border technology. (Coordinated TESEC, Kiev)			
DURATION		2018 x 2019			
PARTNERS	BUDGET IN EURO		BUDGET IN EURO	TOTAL BUDGET 2018 - 2019	
Coordinator Centre: TESEC Ukraine					
Partner Centre 1: ECRP Bulgaria					

## 1. Background

In 2011, after Fukushima nuclear accident, the meeting of the EUR-OPA Permanent Correspondents requested the network of scientific centers to develop a booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" in order to better inform and protect people against nuclear or radiation disasters. The Booklet has been developed, translated in 12 languages, successfully presented in more than 20 countries and became an information tool for better protection of people. This is a good basis for harmonising the response of nuclear hazards in case of an accident involving different countries, which is extremely important for cross-border cooperation. Unfortunately, in case of nuclear accident people do not feel directly the radiation and has to trust information, which could be different in neighbouring countries and need to be harmonised, as well as early warning and other implemented countermeasures.

## 2. Specific objectives

We continue collecting and distributing best international experience for the protection of people against nuclear disasters, also using good governance practices in the management of nuclear disasters and cross-border technology. National and international regulation (like IAEA conventions) defined some key points in cross-border cooperation in case of nuclear accident but precise studies of Chernobyl and Fukushima disasters on international exercises in neighbour countries, demonstrated that some important issues for better protection of people still need improvement. Like the harmonisation of early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others. The aim is to develop a questionnaire on all these issues - for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states and neighbouring countries for collecting different practices and problems, and be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

As Chernobyl and Fukushima demonstrated that citizens of countries far away from Chernobyl or Fukushima also worry about health effects of disasters, such system of governance and information is of interest to many counties.

#### 2018

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters. Reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire and analyse it.

Develop proposals for good governance practices.

Prepare document for adopting by EUR-OPA and distribution to member States.

## 3. Activities

## 2018

#### Coordinator Centre:

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire of different countries and analyse it.

Develop proposals for good governance practices. Prepare document for adoption by EUR-OPA and distribution to member states.

### Partner 1:

#### **ECRP Bulgaria**

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 2:

## **ECBR** Romania

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

## Partner 3:

#### **ECRM** Armenia

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 4:

## **AFEM Turkey**

Translate into Turkish the "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA"Booklet to present it to national authority.

## 4. Expected Results

Better protection of people against nuclear disasters using good governance practices in the management of nuclear disasters and cross-border technology.

A questionnaire will be developed for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states for collecting data on different practice and problems, and will be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 2018

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 5. Deliverables

Development of a questionnaire, distribution of the questionnaire to the member states, report on replies obtained, drafting of Recommendations to be addressed to EUR-OPA member states.

## 2018

#### Coordinator Centre:

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed.

## Partner 1:

## **ECRP Bulgaria**

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonies early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

## Partner 2:

#### **ECBR** Romania

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 3:

## **ECRM** Armenia

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 4:

#### **AFEM Turkey**

Booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" translated to Turkish and presented to National authority.

## Cyprus – Be Safe Net

## SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENTRE		European Centre for Disaster Awareness with the use of Internet; Nicosia		
COUNTRY		Republic of Cy	prus	
REPRESENTED BY		Demetris Christou, Civil Engineer, Cyprus Civil Defence, Ministry of Interior, Republic of Cyprus		
TITLE OF THE PROJ	ECT	Protect yourself from hazards - BeSafeNet.		
DURATION	2	2018 □ <b>X</b> 2019 □ <b>X</b>		
PARTNERS	BUD	GET IN EURO	BUDGET IN EURO	TOTAL BUDGET 2018 - 2019
Coordinator Centre: BeSafeNet				
Partner Centre 1: TESEC				

## **Background**

Natural and technological disasters cause great human and economic losses and we cannot prevent many of them (especially those natural) but there are ways to minimize the risk of disaster, in particular by distributing to all countries the best international experience on Emergency Management.

The main aim of the BeSafeNet initiative is to better protect people from hazards through an improved information process on the nature, causes and consequences of natural and technological hazards. A wide distribution of such knowledge will help people to better understand the potential risks and consequently to better protect themselves against them.

The BeSafeNet initiative represents an opportunity for networking to provide e-learning material on natural and technological hazards and related risks.

## 6. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

In order to foster knowledge on hazards and the associated preventive measures among secondary school students, an Olympiad on Natural and Technological Hazards will be organized in March/April 2019. The Olympiad will consist of an online competition.

The Quiz will be based on the content of BeSafeNet.net, a web-portal on Risk Awareness.

Based on Specialized Centers' respective fields of expertise (earthquakes, landslides, nuclear accidents, etc.), it provides trusted educational material about hazards, risks and preparedness.

In 2018 the final version of Multiple-choice Questions and Answers for Earthquake, Landslides and Nuclear Hazards will be developed and verified.

Dissemination for the Olympiad competition using digital posters, social media, Permanent Correspondents and Council's Network.

#### 2019

Dissemination for the Olympiad competition using digital posters, social media, Permanent Correspondents and Council's Network etc.

Promote participation in the Olympiad.

Olympiad procedure will be tested by EUR-OPA network of Specialized Centers and their feedback will be collected.

Launch Olympiad Competition on March/April 2019

#### 7. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

## 2018

## **Coordinator Centre:**

In 2018 the final version of Multiple-choice Questions and Answers (MCQ) for Earthquake, Landslides and Nuclear Hazards will be developed and verified.

Launch the registration for the Olympiad.

Disseminate the Olympiad competition using digital posters, social media, Permanent Correspondents and Council's Network etc.

Promote participation in the Olympiad.

Editorial Board meeting on April/May in Strasburg.

Joint meeting of the Permanent Correspondents and Director of the Specialized Centers.

#### Partner 1:

Develop and verify final version of Multiple-choice Questions and Answers for Nuclear Hazards:

## 2019

#### **Coordinator Centre:**

Disseminate the Olympiad competition using digital posters, social media, Permanent Correspondents and Council's Network etc.

Promote participation in the Olympiad.

Organize the Olympiad competition.

Editorial Board meeting.

Joint meeting of the Permanent correspondents and Director of the Specialized Centers.

## Partner 1:

Supervising, monitoring and evaluation of participants replies to MCQ for Nuclear Hazards

## 8. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

## 2018

To achieve the aim of the website which is to become a multilingual educational tool in the hands of teachers focusing on risk prevention, preparedness, immediate reaction and rehabilitation.

BeSafeNet to become an interactive tool.

Enroll as many participant teams as possible.

## 2019

BeSafeNet to become an interactive tool.

Enroll as many participant teams as possible.

Test and finalize the Olympiad competition based on feedback.

A successful Olympiad Competition.

### 9. **Deliverables**

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

## 2018

## **Coordinator Centre:**

To produce a Digital Poster.

A list of participants, as many as possible.

Final version of Multiple-choice Questions and Answers

Dissemination of the Olympiad Competition.

#### 2019

#### Coordinator Centre:

A list of participants, as many as possible.

Dissemination of the Olympiad Competition.

Lunch the final version of Olympiad (to be used for future competitions).

## Georgia – GHHD

#### **SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019**

## PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

**PROJECT N°: 1.1. Social networks serving to inform the population and vulnerable groups in the management of major hazards.** Possible actions: Development of early warning systems and monitoring tools with a focus on inter-institutional partnership and coordination.

NAME OF THE CENTRE	Geodynamical Ha	Geodynamical Hazards of High Dams (GHHD)			
COUNTRY	Georgia				
REPRESENTED BY	Prof. T. Chelidze				
TITLE OF THE PROJECT		Development of innovative cost-effective autonomous telemetric early warning system for detecting floods, mudflows and rockfall initiation			
DURATION	2018 x	2019 x			
PARTNERS	BUDGET IN €	BUDGET IN €	TOTAL BUDGET 2018 - 2019		
Coordinator Centre: GHHD					
Partner Centre 1: CERG					
Partner Centre 2: ECMNR					

## 10. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

Flashfloods, rapid mudflows and rockfalls occur in most countries in the world, including Europe.

They can cause gross damage and heavy human losses: as was the case in recent catastrophic events in Germany, Poland, Hungary, France, Italy etc. According to the new data, catastrophic events have occured more and more frequently over the last decades due to global climate change. Georgia, France and Moldova are prone to such catastrophes. Flashfloods, mudflows and rockfalls Early Warning Systems (EWS) can save many lives and reduce damage. Existing EWS systems for such events are as a rule expensive. Development of effective and cost-effective telemetric autonomous EWS is very important, especially for developing countries, which are most vulnerable to hydrogeological catastrophes. Creation of such systems became possible last years thanks to development of compact, precise and very cheap high-tech devices (MEMS, Arduino) or through the use of low-cost optical cameras and open sources processing libraries (e.g. structure-from-motion).

## 11. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

**WP1.** Analysis of existing water level monitoring systems' sensors for selection of modern cost-effective and accurate sensors for monitoring water level in rivers as well as multi-channel data acquisition module (GHHD)

Analysis of existing cameras systems for monitoring water levels, mudflows and rockfalls and creating times series of images (CERG)

- **WP2.** Assembling and testing the water level monitoring prototype module including sensors and data acquisition system and testing it in laboratory conditions (GHHD). Deployment of a series of permanent terrestrial cameras on-site for mudflow and rockfall monitoring (CERG).
- **WP3.** Assembling and testing of existing cost-effective power sources (solar batteries etc) to provide autonomous regime of water level monitoring system in rivers in laboratory conditions (GHHD)
- **WP4.** Testing open source librairies for an automated processing of stacks of images in order to detect changes (e.g. slope erosion, mass in moverment) and possibly create digital surface models (CERG)

#### 2019

- **WP5.** Analysis, assembling and testing of existing cost-effective telemetry systems to provide close to real-time transmission water level monitoring system in rivers in laboratory conditions (GHHD).
- **WP6.** Selection of appropriate site with high risk of flooding for installation of field monitoring station and information on seasonal safe, increased and critical water levels (GHHD).
- **WP7.** Development of on-site processing tools for rapid identification of possible changes in the slope surface morphology (e.g. integration of the processing algorithm on low-cost PCs) and testing the systems on the sites of year 2018 (*CERG*).
- **WP8.** Assembling field monitoring station and testing of autonomous telemetric early warning system for detecting flood initiation to provide close to real-time transmission of water level in rivers in natural conditions

#### 12. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

WP.1. 1. Analysis of existing water level monitoring systems' sensors for selection of modern cost-effective and accurate sensors for monitoring water level in rivers

- WP.1.2. Analysis of existing modern cost-effective multi-channel data acquisition modules for accumulation of water level data.
- WP.2.1. Assembling the working monitoring prototype module including water level sensors
- WP.2.2. Assembling the working monitoring prototype module including sensors and data water level acquisition system and testing it in laboratory conditions
- WP.3.1. Analysis of existing cost-effective power sources (solar batteries etc) to provide autonomous regime of water level monitoring system in rivers
- WP.3.2. Assembling and testing of existing cost-effective power sources (solar batteries etc) to provide autonomous regime of water level monitoring system in rivers in laboratory conditions

#### Partner 1:

CERG: WP.1.1.Contribute to the selection of modern cost-effective and accurate sensors for monitoring water level in rivers. Analysis of existing cameras systems for monitoring mudflows and rockfalls and creating times series of images. Benchmark of several cameras and comparisons to reference high resolution datasets.

CERG: WP.1.2. Contribution to the selection of modern cost-effective multi-channel data acquisition modules for collecting water level data and times series of photographs.

CERG: WP.2.1. Deployement of 3 permanent terrestrial cameras in the field (site prone to mudflow and rockfall monitoring). Testing of the systems in terms of energy consumption, performance, and data quality. Acquisition of external datasets (LiDAR) for creating reference data for comparisons. Definition of optimal storage systems (e.g. database) for archiving all the data (raw, corrected, processed) and provide data requests.

CERG: WP.4.1. Testing open source librairies (MicMac, PCL) for an automated processing of stacks of images in order to detect qualitative changes in the morphology of the slope (e.g. monoscopic approach). Identification of the best strategy to create digital surface models from pairs of imags (e.g. stereo-scopic approach) and derive quantiative measures of changes. Comparisons of the results to ancillary data.

#### Partner 2:

ECMNR: WP.1.1. Taking part in selection of modern cost-effective and accurate sensors for monitoring water level in rivers

ECMNR: WP.1.2. Taking part in selection of modern cost-effective multi-channel data acquisition modules for accumulation of water level data.

#### 2019

#### Coordinator Centre:

- WP.5. Analysis, assembling and testing of existing cost-effective telemetry systems to provide close to real-time transmission water level monitoring in rivers in laboratory conditions.
- WP.6. Selection of appropriate site with high risk of flooding for installation of field monitoring station
- WP.8. Assembling field monitoring station and testing of autonomous telemetric early warning system for detecting flood initiation to provide close to real-time transmission of water level in rivers in natural conditions

#### Partner 1:

CERG: WP.5. Analysis of existing cost-effective telemetry systems to provide close to real-time transmission water level monitoring in rivers in laboratory conditions.

CERG: WP.6. Selection of appropriate site with high risk of flooding for future installation of field monitoring station

CERG: WP.7. Integration of the proposed algorithms of WP4 on-site processing on low-cost PCs for rapid transmission of 1<sup>st</sup> order information. Testing the systems on the sites equiped in 2018. Comparisons to other datasets.

#### Partner 2:

ECMNR: WP.5. Analysis of existing cost-effective telemetry systems to provide close to real-time transmission water level monitoring in rivers in laboratory conditions.

ECMNR: WP.6. Selection of appropriate site with high risk of flooding for installation in future field monitoring station

## 13. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

## 2018

- WP.1. Selection of modern cost-effective and accurate sensors for monitoring water level in rivers, and slope morpholofy changes (e;g. camzras) as well as multi-channel data acquisition module
- WP.2. Assembled and tested in laboratory conditions monitoring prototype module for water levels in rivers; tested cameras systems on site (real conditions) for mudflow and rockfalls monitoring and return of experience (ReX)
- WP.3. Assembled and tested in laboratory conditions cost-effective power sources
- WP.4. Tested open source libraries for processing image time series. Report on the best strategy to install cameras on site and to detect changes using both monoscopic '1 camera) and stereoscopic (2 cameras) approaches.

## 2019

- WP.5. Selection of modern cost-effective telemetry systems
- WP.6. Selection of appropriate site at the river with high risk of flooding for installation of field station and information on seasonal safe, increased and critical water levels.
- WP.7. Integration of the algorithms of WP4 for on-site processing and transmission of 1<sup>st</sup> order information.
- WP.8. Installation in the selected site of the assembled and tested autonomous telemetric early warning system for detecting flood initiation to provide close to real-time transmission of water level in rivers in natural conditions with different levels of alarm: safe, attention, danger.

#### 14. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

### 2018

## Coordinator Centre:

- i. Operating water level monitoring/early warning system prototype module including sensors and data acquisition system for detecting flood initiation tested in laboratory conditions
- ii. Cost-effective power source (with solar panel, batteries etc) to provide autonomous regime of water level monitoring system in rivers in laboratory conditions

#### Partner 1:

- i. Report and leaflets on the best strategy to install permanent cameras on site for long-term monitorign and early-warning
- ii. Report and leaflets on the algorithms developed to detect changes using both monoscopic (1 camera) and stereo-scopic (2 cameras) approaches.

## Partner 2:

- i. Selection of modern cost-effective and accurate sensors for monitoring water level in rivers
- ii. Selection of modern cost-effective power sources

#### 2019

## **Coordinator Centre:**

- i. Operating autonomous telemetric early warning system for detecting flood initiation to provide close to real-time transmission of water level in rivers in natural conditions with different levels of alarm: safe, attention, danger.
- ii. Delivering workshop report, brochures, leaflets, development of websites with information on autonomous telemetric early warning system for detecting flood initiation and poroviding close to real-time transmission of water level in rivers

#### Partner 1:

i. Workshop reports, brochures, leaflets, development of websites with information on autonomous optical (cameras) based early warning system for detecting mudflow and rockfall initiation.

## Partner 2:

i. Delivering workshop reports, brochures, leaflets, development of websites with information on autonomous telemetric early warning system for detecting flood initiation and providing close to real-time transmission of water level in rivers

# **Germany - GFMC**

PRIORITY FOR ACTION OF T				
☐Using scientific and technologaccordingly the resilience st	•	better assess evolving	risks and adapt	
☑ Developing cooperation amount in DRR.	ong all decision-mak	ers to better define aut	thorities' adequate role	
☐Promoting risk culture amon vulnerability).	g population (childre	en, adults and groups v	vith special	
☐Fostering population's active	e participation (as inc	dividuals and as comm	unity) to DRR.	
PROJECT N°: 1				
NAME OF THE CENTRE	Global Fire Monito	ring Center (GFMC)		
COUNTRY	Germany			
REPRESENTED BY	Prof. Dr. Johann G	Georg Goldammer		
TITLE OF THE PROJECT Improving governance of wildfire disaster risk reduction through croborder cooperation between CoE member states, with adjoining countries and globally			oss-	
DURATION	2018 🗵	2019 🗵		
PARTNERS	BUDGET IN EURO	BUDGET IN EURO	TOTAL BUDGET 2018 - 2019	•
Coordinator Centre: GFMC				
Partner Centre 1: Regional Eurasia Fire Monitoring Center (REFMC)	To be catered by GFMC (logistics for meeting)	To be catered by GFMC (travel)	Remarks: REFMC was established in 2017 by contract between the ho	st and
Partner Centre 2: Regional SE Europe / Caucasus Fire Monitoring Center (RFMC)	To be catered by GFMC (travel)  To be catered by GFMC established in 2010 under aegis of GFMC / EUR-OP			
Partner Centre 3: Regional Eastern Europe Fire Monitoring Center (REEFMC)	To be catered by GFMC (travel)	To be catered by GFMC (travel)	Remarks: REEFMC was established in 2013 und aegis of GFMC / EUR-C	er the
Partner Centre 4: Regional Central Asia Fire Management Resource Center (RCAFMRC)	To be catered by GFMC (travel)	To be catered by GFMC (travel)	Remarks: RCAFMRC w established in 2015 und aegis of GFMC / OSCE	

## Participation of Associated Centres (not financed by this project)

Other Associated Centres from inside and outside Europe will not be sponsored by the project funding. Their participation and inputs into the 2018-19 meetings will be sponsored by external sources.

**Partner Centre 5**: The European Center for Forest Fires (ECFF) (Greece) will be invited to attend the 2019 activities at the 7<sup>th</sup> International Wildland Fire Conference.

**Partner Centre 6**: Regional Fire Management Resource Center – South East Asia Region (FMRC-SEA) (FMRC-SEA was established in 2017 under the aegis of GFMC / IWPM). The Center will cover its participation in 2018-19 activities by own budget.

**Partner Centre 7**: Regional Fire Management Resource Center – South America Region (FMRC-SAR). The Center will cover its participation in 2018-19 activities by own budget.

	2018 ⊠	2019 🗵		
PARTNERS				
Partner Centre 5: European Center on Forest Fires (ECFF)		Travel to the global conference is requested to be financed by own project resources	Remarks: ECFF will be involved if the specific expertise will be require notably in the 2019 activ	
Partner Centre 6: Regional Fire Management Resource Center – South East Asia Region (FMRC-SEA)	Travel to the second meeting at GFMC to be financed by external sources	Travel to the global conference to be financed by external sources	Remarks: FMRC-SEA v established in 2017 und aegis of GFMC / IWPM	
Partner Centre 7: Regional Fire Management Resource Center – South America Region (FMRC-SAR)	Travel to the second meeting at GFMC to be financed by external sources	 Host of the global conference	Remarks: FMRC-SAR is established in 2017 und aegis of GFMC / IWPM	_

## 1. Background

Fires burning in forests and in other ecosystems often cross borders between different jurisdictions within a country and borders between neighboring countries. Following the <u>UNECE/FAO Regional Forum on Cross-boundary Fire Management</u>, organized by the GFMC in 2013 and supported by the CoE EUR-OPA Secretariat, representatives of the CoE Member States (also in their function as UNECE and OSCE Member / Participating States) recommended the establishment of the <u>UNISDR International Wildfire Preparedness</u>

Mechanism (IWPM), aimed at enhancing governance of wildfire emergency management across borders (IWPM was established 2014; Interim Secretariat: GFMC). Between 2010 and 2017 the EUR-OPA Secretariat provided seed funding for the GFMC to establish two regional branches of GFMC in Europe (RFMC & REEFMC); RCAFMRC in Mongolia was established with funding of OSCE (2015); and the REFMC, the FMRC-SEA and the FMRC-SAR are being established by support of the GFMC in 2017. The last major wildfire emergencies within Europe and along the borders with neighbour regions, as well as in other regions (Israel 2016, Chile 2017), revealed the need to further develop or refine guidelines, Standard Operating Procedures (SOPs) and protocols aimed at enhancing inter-operability, effectiveness and efficiency of cross-border cooperation in fire management. The process of intensifying and further refining capacity building and preparedness within Member States and globally. The experience of GFMC and its core partners gained in the frame of the work under the sponsorship of the EUR-OPA increasingly demanded within the CoE Member States. However, vice-versa, Europe is profiting from experiences gained in regions outside Europe. Sharing of experiences in cross-boundary cooperation in fire management with other regions of the world will be a significant benefit for the CoE Member States.

## 2. Specific objectives

#### 2018

Organization of two consultations:

- (1) 2018 Activity I: A national workshop and consultation in Russia will be organized at the newly established REFMC in Krasnoyarsk (Russia). Objectives: (a) Discussion of the lessons identified by the EUR-OPA/GFMC project Enhancing the national interagency and international cross-boundary dialogue and inter-operability in fire management in Southeast Europe and Eastern Europe (2016-17) and applicability in the Eastern region of CoE Member States; (b) Use of satellite-derived fire information processed and distributed by REFMC within Russia and neighbouring countries; (c) Intensifying of cooperation between the REFMC, other Russian institutions and relevant institutions of neighbouring countries.
- **(2) 2018 Activity II**: Conducting a regional consultation between CoE Member States, to be convened at GFMC (Germany). Objective: Discussion of progress and further sharing of experience in cross-boundary cooperation in fire management of CoE Member States. This consultation will be organized with the OSCE (in following-up the OSCE Ministerial Council Decision 6/2014) and the UNISDR Wildland Fire Advisory Group).

## 2019

Organization of a consultation in the format of a side event at the 7th International Wildland Fire Conference (Brazil, May 2019) entitled: Sharing experience in enhancing national interagency and international cross-boundary dialogue and inter-operability in fire management in Europe with other regions. This event will follow the format of a similar CoE/EUR-OPA side event at the 6th Conference in Korea 2015 (http://www.fire.uni-freiburg.de/korea-2015/Files-Korea-2015/Agendas/Side-Event-CoE-UNESCO-OSCE.pdf). Objective: To promulgate achievements in cross-border cooperation gained by EUR-OPA projects during the (then) last decade. Most importantly for choosing this conference is the expected exchange with the experiences of cross-boundary cooperation in wildfire emergencies between countries of other regions of the world and the benefits for European countries for learning the experiences of other regions with regards to bilateral and multilateral legal and voluntary agreements, and vice-versa, other regions globally to share experiences with Europe. The overall aim of the consultation will be to increase the political awareness for the need of developing targeted and effective preparedness for managing large wildfire emergencies that will require multinational assistance and cooperation.

## 3. Activities

## 2018 (1)

<u>Coordinator Centre</u>: The GFMC as coordinator will administer the complete budget (costs for catering, accommodation and travel), but source out different preparatory and logistical tasks to the Partners 1 and 2. GFMC will take the overall responsibility of preparing, moderating and reporting.

<u>Partner 1</u>: Host of the consultation: The Regional Eurasia Fire Monitoring Center (REFMC), established in Krasnoyarsk (Russia) in 2017 will organize the local logistics of the workshop & consultation.

<u>Partner 3</u>: The head of the Regional Central Asia Fire Management Resource Center (RCAFMRC) (founded 2015 and based in Ulaanbaatar, Mongolia) is a former staff member of GFMC and has worked for EUR-OPA-sponsored activities of GFMC and has supported building the regional centers in FYROM and Ukraine. He is now the head of the first Regional Fire Center outside of Europe. For the future work of the Russian REFMC his participation and inputs are vital, especially since the two centers have different fundamental tasks (Russia: Satellite Fire Monitoring; Mongolia: Fire Management Capacity Building, Fire Management Policy development). He shall be invited to share the experience and success of the work of his Center. His Center will work with and benefit Partner 1 in the preparation and organization of the consultation and the future work programme. The sponsoring of his travel costs to the two meetings in 2018 are justifiable because of the expected value added to the performance of the new center in Russia.

## 2018 (2)

<u>Coordinator Centre</u>: The GFMC as coordinator will administer the complete budget (costs for catering, accommodation and travel), serve as host and take the overall responsibility of preparing, moderating and reporting.

Partners 1 to 4: Attend and contribute to the consultation.

## 2019

<u>Coordinator Centre</u>: The GFMC as coordinator will administer the complete budget (costs for catering, accommodation and travel), but source out different preparatory and logistical tasks to Partner 6 (Brazil). GFMC will take the overall responsibility of preparing, moderating and reporting.

Partner 6: Host of the Side Event.

<u>Partners 1 to 5</u>: The other five Regional Fire Monitoring Centers / Regional Fire Management Resource Centers will attend and contribute. Note: The centers outside of Europe will NOT be financially sponsored.

## 4. Expected Results

## 2018 (1)

Foster dialogue and cooperation in the field of wildland fire early warning, monitoring, capacity building and management, including wildfire emergency situations, between CoE Member States, represented by Russia, with emphasis on border-crossing fires and transboundary smoke pollution. The Russian Center established in Krasnoyarsk 2017, which by mandate shall synergize with the Central Asian Center in Mongolia (RCAFMRC) (operational since 2015), will establish formal ties and agree on details of cross-boundary cooperation in fire management by a MoU or LoI.

## 2018 (2)

Evaluation of progress made in establishing dialogue and mechanisms in cross-boundary cooperation in fire management in SE Europe, Eastern Europe and Central Asia, with emphasis on border-crossing fires and transboundary smoke pollution, notably transboundary transport of Black Carbon and radioactivity activated and transported by fire smoke. Sharing of experiences and development of recommendations for future coordinated bilateral and multilateral agreements.

#### 2019

Evaluation of progress made in establishing dialogue and mechanisms in cross-boundary cooperation in fire management in Europe and other regions at international level, with emphasis on border-crossing fires and transboundary smoke pollution. Sharing of experiences, lessons identified in successful and failed activities in cross-boundary fire management, and development of recommendations for future coordinated bilateral and multilateral action. Focus: Development of bilateral agreements, multilateral voluntary frameworks (guidelines, standards, and SOPs).

#### 5. Deliverables

## 2018 (1)

<u>Coordinator Centre</u>: GFMC will deliver the report summarizing the results of the consultation and provide recommendations and good practices to improve governance and cross-border cooperation on wildfire disaster risk reduction with emphasis on Eastern Europe.

<u>Partner 1</u>: The Regional Eurasia Fire Monitoring Center (REFMC) (Krasnoyarsk, Russia) has established a web portal for their wildland fire early warning and monitoring products to be made publicly available and has signed a MoU or LoI with the Central Asian Center.

## 2018 (2)

<u>Coordinator Centre</u>: GFMC will deliver the report summarizing the results of the second consultation and provide recommendations and good practices to improve governance and cross-border cooperation on wildfire disaster risk reduction among the Council of Europe Member States.

<u>Partners 1 to 4</u>: The heads of the 4 Regional Centers (REFMC, RCAFMRC, RFMC, and REEFMC) have prepared a presentation summarizing the experience and success of the work of their centers, and present these to the host (GFMC) and other attendees at the consultation (regional representatives of the Global Wildland Fire Network). The results will be inputs to the joint report by GFMC.

#### 2019

<u>Coordinator Centre</u>: GFMC will deliver the report summarizing the results of the Side Event and provide recommendations, good practices and guidelines to improve governance and cross-border cooperation on wildfire disaster risk reduction at international level.

<u>Partners 1 to 6</u>: The six Regional Fire Monitoring Centers / Regional Fire Management Resource Centers have prepared a presentation summarizing the experience and success of the work of their centers, and present these at the Side Event. The results will be Regional Statements, which inputs to the joint report by GFMC and enter the recommendations of the 7<sup>th</sup> International Wildland Fire Conference.

## **Greece – ECFF**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENTRE	ECFF			
COUNTRY	GREECE	GREECE		
REPRESENTED BY				
TITLE OF THE PROJECT	Fine and Ultrafine particles from forest fires: Recommendations/Guidelines for protection of vulnerable groups of population			
DURATION	2018 🗆	2019 🗆		
PARTNERS	BUDGET IN €	BUDGET IN €	TOTAL BUDGET 2018 - 2019	
Coordinator Centre: ECFF				

## 1. Background

Large scale forest fires have been correlated with climate change, posing significant risks for the exposed receptors, such as population, critical infrastructures and the environment; i.e. Portugal 2017, Greece 2007 [1]. However, apart from the impacts due to fire expansion, specifically for the areas in forest-surface, there is a critical issue to take into account; the smoke produced and the respective consequences on the relevant exposed receptors. Forest fire smoke is a complex chemical mixture of a variety of substances, e.g. particles or gaseous pollutants, based on the types of materials burnt in the line of fire-front expansion [2]. Fine particles, such as PM<sub>2,5</sub>, can be transferred far away from the fire source, affecting areas over long distances (transboundary effects) [3-4]. According to epidemiological studies, fine particles are known to have adverse health effects and for that reason the International Health Organizations have set the relevant exposure limits for PM2,5 [5-8]. It seems that populations' preparedness against fire and smoke adverse effects is very important, especially for countries frequently affected by forest fires, like the Mediterranean ones. In that framework, a joint project under EUR-OPA framework has delivered a number of proposed guidelines [9].

However, it seems that the issue of toxic effect of fine particles, especially the PM1 and ultrafine (PM0,1), needs further investigation, since so far no exposure limits have been regulated. Though, exposure to nanoparticles due to urban pollution is a priority topic for experts on a global

basis over recent years, along with nanotechnology industry growth [10-11].

The aim of the project is to prepare a catalogue of useful practices and recommendations/ guidelines for the protection of population against exposure to fine and ultrafine particles, specifically as a side effect of forest fires, with special attention to vulnerable groups of population, such as the elderly, pregnant women, children, people with disabilities or hidden disabilities like asthma, or cardiopulmonary diseases.

Updated version of recommendations/guidelines will be achieved by networking with medical, health or other relevant organizations in Europe, as well as in USA, Australia, or Canada. In that framework, state-of-the art knowledge relevant to ultra-fine particles and cutting edge technologies for monitoring their concentration will be recorded and valued.

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http://fiactu.ntua.gr/index.php?option=com\_content&view=article&id=6&Itemid=10

<sup>10</sup>Chen, R., Hu, B., Liu, Y., Xu, J., Yang, G., Xu, D., and Chen, C., 2016. Beyond PM2,5: The role of ultrafine particles on adverse health effects of air pollution. Biochimica et Biophysica Acta, 1860, 2844-2855 Diaz-Robles, L.A., Fub, J.S., Vergara-Fernández, A., Etcharren, P., Schiappacasse, L.N.,

<sup>11</sup>Reed, G.D., and Silva, M.P., 2014. Health risks caused by short term exposure to ultrafine particles generated by residential wood combustion: A case study of Temuco, Chile. Environment International 66, 74-181

## 2. Specific objectives

#### 2018

- Record state-of-the art knowledge on the issue of smoke pollutants and adverse health effects, focusing on vulnerable groups of population.
- Prepare possible evacuation criteria of an area based on particles concentration-indicative field measurements of particulates can be incorporated.
- Discuss on exposure limits of ultrafine particles.

#### 2019

- Training of vulnerable groups on smoke emergency-training in "risk culture".

<sup>&</sup>lt;sup>1</sup>FFNet 5, 2007, "Forest fires in Greece during summer 2007: The data file of a case study", European Center for Forest Fires, Council of Europe, Available at:

<sup>&</sup>lt;sup>2</sup>Statheropoulos, M., Karma, S., 2007. Complexity and origin of the smoke components as measured near the flame-front of a real forest fire incident: A case study. Journal of Analytical and Applied Pyrolysis 78, 430–437

<sup>&</sup>lt;sup>3</sup> Statheropoulos, M., and. Goldammer, J.G., 2007. Vegetation fire smoke: Nature, impacts and policies to reduce negative consequences on humans and the environment, UN-ISDR [64] International strategy for disaster reduction

<sup>&</sup>lt;sup>4</sup> Goldammer, JG., Statheropoulos, M.M., Andreae, M.O., 2008. Impacts of vegetation fire emissions on the environment, human health, and security: A Global Perspective Developments in Environmental Science, Volume 8, p. 1-33.

<sup>&</sup>lt;sup>5</sup>Sapkota A., Symons J.M., Kleiss I.J., Wang L., Parlange M.B., Ondov J., Breysse P.N., Diette G.B., Eggleston P.A., Buckley T.G., 2005. Impact of the 2002 Canadian Forest Fires on Particulate Matter Air Quality in Baltimore City, Environ. Sci. Technol., 39, 24-32.

<sup>&</sup>lt;sup>6</sup>Mott, J.A., Mannino, D.M., Alversona, C.J., Kiyub, A., Hashimb, J., Leec, T., Falterc K., Redda SC., Cardiorespiratory hospitalizations associated with smoke exposure during the 1997 Southeast Asian forest fires. Int J Hyg Environ Health. 208 (2005) 75-85.

<sup>&</sup>lt;sup>7</sup>Angle, J.S., 2005. Occupational safety and health in the emergency services. Thomson Delmar learning, New York, USA.

<sup>&</sup>lt;sup>8</sup>Environmental Protection Agency (EPA IRIS), 2016. Integrated Risk Information System, Available at: http://www.epa.gov/iris/intro.htm).

<sup>&</sup>lt;sup>9</sup>Defence of Villages, Fars and Other Rural Assets against Wilfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders in the Balkan Region, Available at GFMC website: <a href="http://www.fire.uni-freiburg.de/Manag/Village-Rural-Assets-Wildfire-Defense-Guidelines-2013-ENG-web.pdf">http://www.fire.uni-freiburg.de/Manag/Village-Rural-Assets-Wildfire-Defense-Guidelines-2013-ENG-web.pdf</a>

 Informing the population who live nearby forests about possible smoke impacts and protective measures.

#### 3. Activities

#### 2018

#### ECFF:

- Organize a workshop entitled "Fine and Ultrafine particles from forest fires and possible impacts on vulnerable groups of population" with participation of experts to record knowledge and expertise on relevant issues.

#### 2019

#### ECFF:

- Prepare recommendations/guidelines in Greek and English for the protection of population from UFPs/smoke exposure, including vulnerable groups.
- Information and dissemination campaigns of the recommendations/guidelines to citizens, especially those who live in forest-surface municipalities; to specific civil organizations and special groups (e.g. representatives of the disability community).

## 4. Expected Results

#### 2018

- Recording new scientific knowledge on forest fire smoke and specifically nanoparticles impacts, in order to better protect the population and minimize adverse health effects, with special attention to vulnerable groups.
- Networking with medical, health or other relevant organizations

#### 2019

- Promote awareness of the population on UFPs/smoke impacts and personal protective equipment aspects, including vulnerable groups.
- Enhance preparedness and promote risk culture.

#### 5. Deliverables

### 2018

#### ECFF:

- Special volume of Forest Fire Net with the workshop's proceedings.

#### 2019

#### **ECFF**

- Booklet prepared in Greek and English with recommendations to protect population from UFPs/smoke exposure, including vulnerable groups.

(a special edition in Greek Braille language will be considered);

Delivery through social media of the booklet e.g. via Facebook, twitter etc. and also uploaded to relevant websites.

## **Greece – ECPFE**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

☐ Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Project N°:1

Name of the Centre: European Center on Preventing and Forecasting of Earthquakes

Country: Greece

Represented by: Nikhtas Papadopoulos and Linda Pelli

Title of the project: Pre-Earthquake assessment of Monuments, Comparison of Empirical

and Analytical Methodologies

**DURATION: 2018** 

	2018		
PARTNERS	Budget in euro	Budget in euro	Total budget 2018
Coordinator Center	4000		
ECPFE			

## 1. Background

The seismic behaviour of Monuments is very important in earthquake prone areas because of the cultural need to maintain and inherit these Monuments to future generations. Furthermore, the need to ensure seismic resistance to the Monuments is ensued from the legal obligation to protect human life. Greece is the country with the highest seismicity in Europe. It is well known that earthquakes have always represented the main cause of damage and losses to the cultural heritage and thus the Assessment of the vulnerability of the Monuments is of great importance .

This activity is a follow-on from 2016, where out two draft Pre-earthquake Assessment Questionnaires were produced each for the two difference cases of monuments for the estimation of their vulnerability.

## 2.Expected results

#### 2018

a. The protection of human lives (of the neighbours, curators, visitors or even inhabitants of the monument)

- b. The protection of the monument itself
- c. Saving money, as the costs for damage restoration not say for human lives, is much more than that for prevention

## 3.Deliverables

#### 2018

## Coordination Center

The final form of the two different types of questionnaires will be produced including the relevant mark "pathology index" suitable for the pre earthquake assessment, in Greek and in English. A booklet with guidelines (how to fill in), will be also included in Greek and in English.

## 4.Activities

#### 2018

## **Coordination Center**

During 2016, a Scientific Committee nominated for the elaboration of the Pre-earthquake Assessment has carried out two draft Pre-earthquake Assessment Questionnaires each for the two differences cases of monuments and also composed the relevant algorithms for the calculation of the pathology index in each case.

The algorithm derives when taking into account each one of the crucial factors that contribute to the pathology of the structure according to the weight of each factor.

For 2018, the nominated Scientific Committee from 2016, will validate and ameliorate this empirical methodology with "push over" analyses. After comparing the two methodologies the final "pathology index" for each category of the monuments will be calculated. Therefore the final calibration of the monuments will be available and thus the estimation of their vulnerability.

## 5.Budget

DURATION	2018	
	Budget in euro	Total budget
Coordination Center		

## 6. Target groups and community involvement

Engineers and architects

## Italy - CUEBC

## **SPECIALIST CENTRES – PROPOSED PROJECTS 2018-2019**

## **MEDIUM-TERM ACTION PLAN PRIORITIES**

Using scientific and technological knowledge to assess more effectively evolving risks and adapt the resilience strategies accordingly

Strengthening co-operation among all decision-makers to better define the appropriate role of the authorities in disaster risk reduction (DRR)

Promoting "risk culture" among the population (children, adults and particularly vulnerable groups)

Fostering the active participation of the population (individually and as a community) in DRR

#### PROJECT No.:

NAME OF THE CENTRE	Centro Universitario Europeo per i Beni Culturali (CUEBC)		
COUNTRY	ITALY		
REPRESENTED BY	APICELLA EU	GENIA	
PROJECT TITLE	Local Knowled (LoKMeFiND)	ge and Media to	Fight Natural Disasters
DURATION	2018⊐x	2019□x	
PARTNERS	BUDGET IN €	BUDGET IN €	TOTAL BUDGET 2018 - 2019
Co-ordinating centreCentro Universitario Europeo per i Beni Culturali			
Partner Centre Scientific and Technical Research Centre on Arid Regions – Biskra, Algeria			
External partner UNESCO Venice	The Co- ordinating centre will bear the cost of the participation of the UNESCO Venice Centre		

#### 15. Context

[Description of the general objective of the project and what has already been done so far on related issues – Maximum 10 lines]

Following a natural disaster, very often the media report that the local population was well aware of the risks and danger areas, but that nothing had been done.

The existence of such Local Knowledge (LK) is of little interest to the media before a disaster; it only becomes "newsworthy" after the event. Since maintenance of the territory does not grab the headlines, it is not a priority on the policy-makers' agenda.

This results in a vicious circle and, for example, heavy rainfall – which is merely an exceptional event – turns into a disaster.

Furthermore, the people's perception of danger is not always based on scientific fact. It is therefore essential for it to be filtered by means of evaluations by experts so that LK can be capitalised upon and become a genuine and effective means of preventing natural disasters.

However, as the experts need to be remunerated, the provision of platforms for the urgent dissemination of LK would not be profitable for the media. Yet, it would undoubtedly be a public service.

Action to define the means whereby the media could reserve weekly platforms (for example "Protect your territory" pages) for the urgent publication of LK on local risks could prompt decision-makers to attach priority to maintenance of the territory and, consequently, to prevent natural disasters, or at least reduce their impact.

Such action ties in with all the priorities of the EUR-OPA programme and with the current policies of the major international organisations ("Cultural Heritage and Local Knowledge for Building Resilience", UN Global Platform, Cancun 2017; Mobilising local knowledge for climate change observations and solutions, UNESCO Experts Conference, Georgetown, September 2017).

## 16. Specific objectives

[Description of the specific objects of the project for each year – Maximum 8 lines]

#### 2018

- Workshop for experts from the centres involved, local decision-makers and journalists to
  define the criteria for analysing local knowledge, the possible forms of assistance to the
  media and the sites where pilot-actions could be carried out in order to test them, with
  the involvement of local stakeholders, journalists and experts
- Documentation on the LK of the selected sites, in conjunction with UNESCO
- Contacts with local decision-makers and media to launch the pilot-actions
- Dissemination of a mid-term report

#### 2019

- Completion of pilot-actions
- Publication of documentation on the local knowledge analysed, the forms of assistance validated by the pilot actions and the "Protect your territory" pages initiated
- Public conference (experts, decision-makers, journalists) to present the documents resulting from research and the "Protect your territory" pages initiated
- Dissemination of Guidelines to produce "Protect your territory" pages in other EUR-OPA countries
- Impact prevention of natural disasters (as a result of local knowledge and "Protect your territory")

#### 17. Activities

[Detailed description of the activities to be carried out in line with the budget – Maximum 24 lines]

#### 2018

#### Co-ordinating centre

- Documentation of LK appearing in the media of the Amalfi Coast and the Cinque Terre, before and after natural disasters
- Production and dissemination of a preliminary document illustrating the reasons for and purposes of LK, together with the criteria for identifying and analysing the LK to be documented
- Promotion of contacts by e-mail between all the participating centres and UNESCO to draw up the Workshop1 agenda
- Organisation of Workshop1 (in Ravello)
- Involvement of international experts in the workshop1
- Launch of a pilot-action in a UNESCO site (Amalfi Coast, Cinque Terre or Versilia), based on existing contacts between the CUEBC and local stakeholders, and their responses
- Drafting of the mid-term report (based on the reports produced by the participating centres)

## Partner 1:

- Documentation of Algerian local knowledge relating to prevention of climate risks (desertification), and the extent to which it is covered in the national and local media
- Participation in Workshop1 (1 participant)
- · Contacts with local decision-makers and journalists to launch a pilot-action

## External partner

- Assistance in identifying local knowledge
- Co-operation with the centres to launch the pilot-actions
- Participation in Workshop1 (1 participant)

## 2019

## Co-ordinating centre:

- Completion of the pilot-action
- Drafting of the final report (Guidelines), based on the documents drawn up by the other centres
- Organisation of the conference to present the Guidelines and the "Protect your territory" pages (in Ravello)
- Publication and dissemination of the research items.

## Partner 1:

- Completion of the pilot-action
- Drafting of the final report
- Participation in the conference to present the Guidelines and the "Protect your territory" pages

## External partner

- Collaboration in the drafting of the final report
- Collaboration in the organisation of the conference to present the Guidelines and the "Protect your territory" pages
- Dissemination of the Guidelines

## 18. Anticipated results

[Description of the anticipated results of the project for each year – Maximum 8 lines]

#### 2018

- Raising the awareness of local decision-makers and the media of the value of local knowledge in preventing local natural disasters
- Selection and systematisation of local knowledge in the sites involved
- Analysis of the problems to be addressed to launch the "Protect your territory" pages
- Increased resilience to natural disasters

#### 2019

- · Completion of the pilot-actions
- Launch of the "Protect your territory" pages
- Production and dissemination of the Guidelines

#### 19. Deliverables

[Description of the specific results/products of the project (meeting and workshop reports, maps, guidelines, recommendations, brochures, leaflets, website, etc.) – Maximum 24 lines]

#### 2018

#### Co-ordinating centre:

- Production of the mid-term report
- Documentation on local knowledge on the Amalfi Coast the Cinque Terre
- Publication of documents presented at Workshop1

#### Partner 1:

Documentation of Algerian local knowledge relating to reduction of climate risks

#### External partner:

 Document on UNESCO policy on capitalising on local knowledge and its contribution to preventing natural disasters

#### 2019

#### Co-ordinating centre:

- Launching of the "Protect your territory" pages on the Amalfi Coast (or the Cinque Terre or Versilia)
- Publication of research documents (proceedings of Workshop1 and the final Conference)
- Publication of the guidelines for the launch of the "Protect your territory" pages (errors to be avoided, positive experiences, etc.)

#### Partner 1:

- Catalogue of local knowledge reducing climate risks
- Launch of the "Protect your territory" pages of the selected sites

## **Luxembourg - ECGS**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENTRE	European Center for Geodynar	European Center for Geodynamics and Seismology		
COUNTRY	Luxembourg			
REPRESENTED BY	Dr. Adrien Oth			
TITLE OF THE PROJECT	Seismic Studies Based on Data from the Luxembourg National Seismic Network			
DURATION	2018 2019			
PARTNERS				
Coordinator Centre: ECGS				

#### 1. Background

During the past few years, ECGS worked towards building a national seismic network for Luxembourg. Until recently, Luxembourg disposed of only three permanent seismic stations. Even though Luxembourg is located in an area of very low seismic activity, an appropriate seismic monitoring network is nevertheless required to a) record ground motions and monitor the seismic activity in well-known seismogenic areas not far from Luxembourg's territory, b) monitor anthropogenic events such as quarry blasts to be able to respond to regulatory enquiries from the national authorities and c) determine whether there are potential zones of microseismic activity that cannot be detected using sparse existing networks and that may represent an unknown hazard.

At present, ECGS operates 10 stations in Luxembourg (5 permanent, 5 temporary), and 5 more permanent stations are in the process of deployment. The aim of this project is to support the data analysis of the existing network as well as the further development of the network.

#### 2. Specific objectives

#### 2018

The project aims at analyzing existing data acquired over a little more than the past five years for

seismic activity patterns. This involves setting up and applying automatic detection and location routines for seismic events, characterizing these as natural or anthropogenic sources as well as determining their magnitudes. These data will then be interpreted in the tectonic context of the region. Furthermore, the broadband seismic data will be used for structural investigations, for instance through the computation of so-called receiver functions.

With these automatic routines at hand, we will also be able to better and quicker respond to the needs of national authorities in case of earthquake occurrences in or around the country, such as for instance during the 14 February 2011 magnitude 4.4 earthquake near Koblenz.

#### 2019

The 2019 part of the project aims at the continued development of the approaches set up in 2018 as well as the further development of the seismic network. In particular, we will acquire one more broadband seismic station for permanent deployment in Luxembourg. This will further improve the seismic network performance and thus strengthen our seismic monitoring capabilities.

#### 3. Activities

#### 2018

Coordinator Centre: ECGS

At ECGS, a post-doc scientist will work on the data analysis of the Luxembourg seismic network data and characterize the seismicity that can be detected and located in this dataset. This post-doc scientist brings ample experience in this field as he worked already on the seismic data acquired in the Virunga Volcanic Province in the Democratic Republic of the Congo, and we will use the EUR-OPA funding as a contribution to pay 25% of the salary costs of this employee for the duration of six months.

The detailed activities will involve among others traditional manual seismic data analysis (event detection and phase picking) as well as the setting up and comparison with automatic routines for this purpose; analysis of wave field characteristics and the differences between anthropogenic and natural seismicity; event location and magnitude estimation; and potential structural investigations, in particular with the receiver function approach.

#### 2019

Coordinator Centre: ECGS

In 2019, the activities set up during 2018 will be continued, and the funds from the EUR-OPA agreement will be used to acquire and install and new broadband seismic station to densify the existing network.

#### 4. Expected Results

#### 2018

The expected results of this study will be a better understanding of the seismic activity within and around Luxembourg, in particularly also answering to the question whether Luxembourg also shows low seismic activity rates on low-magnitude levels as one might expect from the absence of moderate seismicity. In addition, the project will contribute to the development of the required seismic monitoring tools and the adaptation of these to the specific setting of Luxembourg. The results of these efforts are useful for the European scientific community in filling one of the few remaining gaps on seismological knowledge and instrumentation in the generally low-seismicity region of central Western Europe, and

the approaches taken for instrumentation and data processing can be used by any other interested EUR-OPA member state.

#### 2019

In 2019, the expected result is an additional installed seismic station within the Luxembourg national seismic network.

#### 5. Deliverables

#### 2018

Coordinator Centre: ECGS

The deliverables of the project in 2018 will be software tools for automatic detection and location adapted to the Luxembourg network specificities; a catalogue of seismicity of the past five years; a set of discrimination characteristics between natural and anthropogenic seismic events; and a report on the work carried out to be delivered to the EUR-OPA agreement secretariat.

#### 2019

Coordinator Centre: ECGS

In 2019, the deliverables will consist in an installed permanent broadband seismic station and a report on the work carried out and progress made in relation to the work in 2018 to be delivered to the EUR-OPA agreement secretariat.

### Malta - ICoD

#### **SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENT	RE	European Cen	tre on Urban Risks (CE	RU)
COUNTRY		Portugal	·	
REPRESENTED BY		Paula Teves Costa		
TITLE OF THE PROJ	ECT	Beach and Coastal Resorts Risks		
DURATION	2018		2019	
PARTNERS	BUDGET IN EURO		BUDGET IN EURO	TOTAL BUDGET 2018 - 2019
Coordinator Centre: CERU				
Partner Centre 1: CEPRIS				
Partner Centre 2: ICoD				

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

This project aim to develop and implement seismic, tsunami and coastal risks mitigation. In particular the project intends to contribute for a Tsunami Ready Community working on two programs: a Tsunami Ready Beach (TRB) and a Tsunami Ready Hotel (TRH). Besides, the project also intends to address other risks present on the beach. All involved countries have a large coastal area which beaches are a holiday destination par excellence, and tourists are

one of the most vulnerable groups concerning these risks. All the actions to be developed will be done in close collaboration with the local associations and authorities.

Both initiatives (TRB and TRH) have been already carried out partially by the three involved Centres in previous projects. In Lagos (Portugal) tsunami warning and evacuation signs are implemented in a pilot beach. Questionnaires on tsunami risk were also carried on to hotels and beach concessions in Portugal and Morocco. A workshop devoted to these subjects was organized by CERU with the participation of the other 2 Centres.

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

Awareness of tsunami and beach risks among hotels responsible and beach concessions.

Awareness of local associations and responsible for safety on the beaches (Maritime Authority and lifeguards) to disseminating information residents and floating population (tourist)

Awareness of Tourist Guides and personnel at Tourism Offices

Awareness of local and national authorities to implement preventive measures

Discuss with the Foundation for Environmental Education the integration of all coastal hazards, and particularly tsunamis, on their program for "Blue Flag" as applied to beaches. This can be done by expanding the article 31 of the criteria.

#### 2019

Promoting training courses and programs in disaster risk mitigation for local associations and tourism professionals.

Production and distribution of informative/educational products like posters and leaflets

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Partner 2 (ICoD, Malta):

- Desk study on identification of Tsunami Ready Hotel and Tsunami Ready Beaches local requirements and identification of relevant actors
- Holding of seminar addressed to lifeguard associations, beach management entities and tourism professionals on risk culture, mitigation and dissemination to present the Tsunami Ready concept and requirements.

#### 2019

#### Partner 2 (ICoD, Malta):

- Preparation and dissemination of TRB leaflets and beach signs aimed at raising beach user awareness
- Holding a project seminar to present and discuss works carried out by all project partners

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

Involvement of the local population, associations and authorities on dissemination of tsunami and other beach risks and on the implementation of mitigation measures.

#### 2019

Production of informative documentation on beach risks including mitigation measures.

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Partner 2 (ICoD, Malta):

- Report on desk study on identification of TRB local requirements and identification of relevant actors
- Report on seminar addressed to lifeguard associations, beach management entities and tourism professionals on risk culture, mitigation and dissemination to present the Tsunami Ready concept and requirements.

#### 2019

#### Partner 2 (ICoD):

- TRB leaflets and beach signs aimed at raising beach user awareness
- Report of seminar to present and discuss works carried out by all project partners

### **Moldova - ECMNR**

#### SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

Р	R	O.	ΙF	$\cap$	ΓΙ	N	0	•

NAME OF THE CENTRE	European Cen	European Center for Mitigation of Natural Risks (ECMNR)					
COUNTRY	Republic of Mo	oldova					
REPRESENTED BY	A. Bantus						
TITLE OF THE PROJECT	Promoting risk culture among the population for informing and providing necessary knowledge for preventing the emergency situations generated by floods						
DURATION	2018 x	2018 x 2019 x					
PARTNERS	BUDGET IN EURO	BUDGET IN EURO	TOTAL BUDGET 2018 - 2019				
Coordinator Centre: ECMNR							
Partner Centre 1:							
ECRP							
Partner Centre 2: TESEC							
Partner Centre 3: ECBR							

#### 6. Background

[Describe the general aim of the project and what has been achieved so far on related matters -

Maximum 10 lines]

For the Republic of Moldova and the ECMNR, the prevention and management of emergencies generated by natural disasters depends largely on citizens' participation. They need to be informed and convinced that the effect of risks associated with weather, climate and water continues to grow. The objective is that citizens living in floodplains have to engage themselves in the activities for management of emergencies generated by floods. Over the years, since 2001, the ECMNR has launched knowledge to support the preparation and implementation of several strategies and programs for prevention and management of emergencies generated by floods, discussed and agreed with the line ministries. However, the abundant snow and floods in Moldova, which paralyzed the country in April 2017, have repeatedly highlighted how fragile the state is and how vulnerable citizens can become.

Background: Over the years, since 2001, the ECMNR has carried out within the projects a series of activities in the field of information and education of the population, by developing proposals (tools) to support the preparation and implementation of several strategies and programs of prevention, information and management of emergency events generated by floods, discussed and coordinated with the branch ministries. The snow falls at the end of April 2017 show that Moldova has many weak points unknown to the public and so far overlooked by the authorities. The conventional risks in the country have been previously discussed - energy dependence, lack of drinking water supply, floods, etc. These issues were reflected in the concept of the National Strategy of Disaster Risks Reduction 2013-2020, discussed at the beginning of 2013 (Ministry of Environment, 2013). There is uncertainty about the results of the public consultations on this strategic document and whether it is achievable or not. That is why the last natural disaster is an opportunity to resume the discussions on the establishment of a clear and safe mechanism for mitigating the risks caused by the natural disasters, in particular, in the context of climate change. The issue on natural disasters prevention is mentioned in part in the Individual Action Plan with NATO, but only as to the scientific cooperation. In addition, the partnership with NATO means that Moldova should take good practice in civil emergency events planning with subsequent updating of the civil protection system. The Association Agreement with the EU and the European commitments represent the most lasting and consistent form of cooperation and assistance that Moldova has ever been able to dispose of. The planned prevention activities include also the information, education and training of population through exchange of practical knowledge and skills training (joint training, exercises, study visits).

#### The general aim of the ECMNR project is:

- To bring preventive activities closer to citizens and the community by imposing high standards of knowledge and application, increasing the share of preventive education, to increase the involvement of the population, communities and responsible authorities for achieving a high degree of self-protection, which obviously leads to the improvement of the level of protection of life and nature in the Republic of Moldova.
- To promote risk culture among the population (students, adults and especially vulnerable groups, as children and adults living in flood-prone areas and aggrieved by floods) in accordance with the fourth priority action of the Sendai Framework: "Improving Disaster Preparedness"
- To promote a dialogue on disaster prevention, preparedness and accountability measures by sharing practical knowledge and skills training (joint training, exercises, study visits) in preparing the citizens, schoolchildren, students, collectives, and volunteers for personal, family and group protection at community level for involving the most vulnerable groups of population suffering from disasters.
- To prepare intuitive materials, instructions, booklets used in case of floods and for public information and participation.
- -To promote risk culture among the population and the elderly in order to raise awareness and provide the necessary knowledge concerning the risks, which they are exposed to, and to develop selfprotection behaviors.
- -To promote risk culture and civic responsibility among the population in order to involve those interested in preparation for floods by training volunteers as trainers for others.
- The partners are the EUR-OPA Centers in the neighboring countries that are equally affected by

floods (Bulgaria, Romania and Ukraine).

### 7. Specific objectives 2018

# - Preparing and presenting specific intuitive study materials (guides, instructions, booklets, leaflets, posters that will include information on the flood-producing causes, ways of their prevention, and on individual and group protection and intervention actions for information, training and transfer of knowledge for citizens and volunteers/trainers - in Romanian and English;

- Transferring knowledge through training seminars for citizens / volunteers / students using courses, printed materials and teaching simulators, developing the capacity to face potential floods, minimizing devastating effects on people (physical and mental) as far as possible. These pedagogical tools will be assembled by the ECMNR employees and with the support of SPC and SE.

#### 2019

- Developing specific knowledge transfer / training materials for areas exposed to flood risks using special forms of communication (*verbal, non-verbal (by gestures), written*) with the population, materials instructing the population how to behave before the flood, during the flood, during the evacuation and after the phenomenon cessation, in Romanian and English;
- Transferring knowledge (contemporary academic language proving educational forms of knowledge transfer) through training seminars for citizens / volunteers / students using courses, printed materials and teaching simulators using the School that is a key institution of the community and is a viable dialogue partner for both local authorities and citizens (parents of children and former schoolchildren) in order to mobilize the community at the prevention phase. There is a partnership with some educational institutions, but they are outside the educational system so far.
- Validation of good practice during the final workshop work with associated centers.

#### 3.Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

Coordinator Centre: ECMNR, Chisinău, Republica Moldova

- The ECMNR will organize short-term seminars with teachers, parents and children, including vulnerable groups, in two educational institutions in Chisinau in order to acknowledge and understand the effects of floods on children and adults for attracting volunteers, including teachers, students and schoolchildren, to provide educational support for families affected by floods, etc., and to organize leisure activities for and with the community. We will organize leisure activities for the community in order to recognize and understand the effects of floods on children and adults, by using active participatory methods, group interactive methods, etc. Some planned events are coordinated with the management of the educational institutions as these events are carried out outside the classroom. :
  - Date: March April 2018;
  - Duration: two academic hours in each institution;
- Participants: up to 30 participants, including those from each vulnerable group. (*Vulnerable groups are children and adults living in flood-prone areas and aggrieved by floods*);
- Organizing training seminars for Teachers, students, schoolchildren, citizens / volunteers in order to certify them as *trainers*. (To understand their training as volunteer trainers and not as certified as specialists):

Date: May-June 2018

- Duration: 2-3 days
- Participants: 25-30 people / Moldovan volunteers;
- Organizing swimming lesson primarily for children from families affected by floods. (Organization of

initiation courses in swimming with priority for children from families aggrieved by floods as own measures to reduce the risk of floods and to protect their own lives and protect the lives of others. This choice was generated by German good practice. The group will be completed among the volunteers.)

- Date: May-October 2018
- Duration: One academic hour twice a week
- Participants: 10-15 people
- Organizing a workshop with associated centers and holding an international seminar
- > Date: October 2018
- Duration: 2 days
- Venue: conference: hall at the Best Western Plus Flowers Hotel (optional)
- Participants: 3 directors of the EUR-OPA Associated Centers from Romania, Bulgaria, and Ukraine;

25-30 people from the areas exposed to the risk of floods, teachers, students, schoolchildren / citizens / volunteers / trainers.

Partner 1: ECRP Sofia, Bulgaria - providing expert reports and educational materials to initiate a continuous dialogue on prevention, preparedness and accountability measures in case of floods. (The centers referred to in the project accepted the participation after the consultation of the project. The provision of expertise and the exchange of educational materials will be sent - received by e-mail.)

Partner 2: TESEC Kiev, Ukraine - providing expert reports and educational materials to initiate a continuous dialogue on prevention, preparedness and accountability measures in case of floods.

Partner 3: ECBR Bucharest, Romania - providing expert reports and educational materials to initiate a continuous dialogue on prevention, preparedness and accountability measures in case of floods.

Coordinator Centre: ECMNR, Chsinău, Republic of Moldova

#### 2019

- Organization of short-term seminars directly with citizens in the areas exposed to flood risks and distribution of information materials on the prevention and protection of the population in case of floods with the active participation of educational institutions since the protection against risks involves first of all their knowledge.
- Date: March-June; August-September 2019
- Duration: 2 academic hours
- Venue: directly in the areas exposed to the risk of floods
- Participants: up to 30 people from each vulnerable group
- Organizing a workshop with associated centers and holding an international seminar
- Date: September-October 2019
- Duration: 2 days
- Venue: conference hall at the Best Western Plus Flowers Hotel
- Participants: 3 directors of the EUR-OPA Associated Centers from Romania, Bulgaria, and Ukraine;

25-30 people from the areas exposed to the risk of floods, teachers, students, schoolchildren / citizens / volunteers / trainers.

Partner 1: ECRP Sofia, Bulgaria - providing expert reports and educational materials to initiate a continuous dialogue on prevention, preparedness and accountability measures in case of floods.

Partner 2: TESEC Kiev, Ukraine - providing expert reports and educational materials to initiate a

continuous dialogue on prevention, preparedness and accountability measures in case of floods.

Partner 3: ECBR, Bucharest, Romania - providing expert reports and educational materials to initiate a continuous dialogue on prevention, preparedness and accountability measures in case of floods.

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

- Promoting a national training program inspired by the best practices applied in the Council of Europe member States on the subject of risk management, providing practical knowledge and creating in Council of Europe member States a positive perception of disaster risk reduction for citizens in general and for those living in flooded areas in particular.

There is not a pedagogical program yet to enter the curriculum of the school. The next two years, according to the EU's Association Agenda (2017-2019), the consolidation of the cooperation with the EU could offer more benefits to Moldova. The planned prevention activities include information, education and training of population. A particular attention will be paid to the training of young people in the field of major risks related to disasters management. The list of medium- and long-term priorities also aims at setting up a national training program on risks management. It will be inspired by the best practices applied in the EU countries.

- Performing the direct transfer of accumulated knowledge and good practices to the community and citizens living in floodplains in order to inform and educate them on flood problems, using the guides, guidebooks, leaflets, posters, teaching simulators and direct verbal contacts that will include information on the causes of floods, methods of their prevention, as well as individual and group protection and intervention actions. (The project will be carried out in this specific field. All materials will be prepared by ECMNR and will be submitted in English).
- Raising awareness and increasing knowledge of disaster risks, forms of acquiring knowledge of the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions, and skills for individuals, groups, members of family and community.
- Initiating a dialogue on flood prevention, preparedness and accountability measures with partners based on the received materials and sharing experience on flood risk mitigation at the EUR-OPA Major Risks Centers. (The centers referred to in the project accepted the participation after the consultation of the project. The provision of expertise and the exchange of educational materials will be sent received by e-mail.)

#### 2019

- Performing the direct transfer of accumulated knowledge and good practices to the community and citizens living in floodplains in order to inform and educate them on flood problems, using the guides, guidebooks, leaflets, posters, teaching simulators and direct verbal contacts that will include information on the causes of floods, methods of their prevention, as well as individual and group protection and intervention actions
- Raising awareness and increasing knowledge of disaster risks, forms of acquiring knowledge of the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions, and skills for individuals, groups, members of family and community.
- Increasing and strengthening the resistance and proactive behavior of citizens in floodplains with the assistance of volunteer-trainers.
- Validation of good practices on disaster risk reduction for citizens living in floodplains within the EUR-OPA Centers by a workshop at the ECMNR in Moldova.

-Promoting the official duties of the Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs of the Republic of Moldova and mobilizing the educational institutions, academic potential and civil society in this sense in order to strengthen the resistance and reduce the risks.

(Provision of an effective continuity in increasing awareness of knowledge on disaster risks, of the forms of obtaining knowledge on the causes of floods, of the ways of their prevention, as well as of the individual and group protection and intervention actions, and of the skills for individuals, groups, family members and community. Increase and consolidation of proactive resistance and behavior of citizens in flood-prone areas, with the help of volunteers-trainers; The approval of good practice on disaster risk reduction for citizens living in flood-prone areas within EUR-OPA Centers by a workshop at ECMNR in Moldova;)

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

- Reports from seminars and workshops, which should be delivered to the EUR-OPA Major Risks administrative office and the Partner Centers of Bulgaria, Ukraine and Romania. (Language of communication: Romanian and English)
- Publication of teaching and guiding materials for citizens: guides, recommendations, brochures, leaflets, posters that will include information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions and course support for the participants (founders) at the seminar, targeting areas exposed to the flood risk. (Language of communication: Romanian and English)

Partner 1: ECRP Sofia, Bulgaria - reports, recommendations, brochures, leaflets, including expert reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Bulgaria.

Partner 2: TESEC Kyiv, Ukraine - reports, recommendations, brochures, leaflets, including expert reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Ukraine.

Partner 3: ECBR, Bucharest, Romania - reports, recommendations, brochures, leaflets, including expert reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Romania.

#### 2019

#### Coordinator Centre:

- Reports from seminars and workshops, which should be delivered to the EUR-OPA Major Risks administrative office and the Partner Centers of Bulgaria, Ukraine and Romania.
- Publication of teaching and guiding materials for citizens: guides, recommendations, brochures, leaflets, posters that will include information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions and course support for the participants (founders) at the seminar, targeting areas exposed to the flood risk.

Partner 1: ECRP Sofia, Bulgaria - reports, recommendations, brochures, leaflets, including expert

reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Bulgaria.

Partner 2: TESEC Kyiv, Ukraine - reports, recommendations, brochures, leaflets, including expert reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Ukraine.

Partner 3: ECBR, Bucharest, Romania - reports, recommendations, brochures, leaflets, including expert reports and educational materials, containing information on the causes of floods, ways of their prevention, as well as individual and group protection and intervention actions in Romania. (For the continuity in the educational activity).

### **Morocco - CEPRIS**

#### **SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENTE	RE	European Centre on Urban Risks (CERU)			
COUNTRY		Portugal			
REPRESENTED BY		Paula Teves Costa			
TITLE OF THE PROJE	СТ	Beach and Coastal Resorts Risks			
DURATION		2018	2019		
PARTNERS	BUDGET IN EURO		BUDGET IN EURO	TOTAL BUDGET 2018 - 2019	
Coordinator Centre: CERU					
Partner Centre 1: CEPRIS Morocco		7053,57	5000	12053,57	
Partner Centre 2: ICoD					

#### 8. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

This project aim to develop and implement seismic, tsunami and coastal risks mitigation. In particular the project intends to contribute for a Tsunami Ready Community working on two programs: a Tsunami Ready Beach (TRB) and a Tsunami Ready Hotel (TRH). Besides, the project also intends to address other risks present on the beach. All involved countries have a large coastal area which beaches are a holiday destination par excellence, and tourists are one of the most vulnerable groups concerning these risks. All the actions to be developed will be done in close collaboration with the local associations and authorities.

Both initiatives (TRB and TRH) have been already carried out partially by the three involved Centres in previous projects. In Lagos (Portugal) tsunami warning and evacuation signs are implemented in a pilot beach. Questionnaires on tsunami risk were also carried on to hotels and beach concessions in Portugal and Morocco. A workshop devoted to these subjects was organized by CERU with the participation of the other 2 Centres.

#### 9. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

Awareness of tsunami and beach risks among hotels responsible and beach concessions.

Awareness of local associations and responsible for safety on the beaches (Maritime Authority and lifeguards) to disseminating information residents and floating population (tourist)

Awareness of Tourist Guides and personnel at Tourism Offices

Awareness of local and national authorities to implement preventive measures

Discuss with the Foundation for Environmental Education the integration of all coastal hazards, and particularly tsunamis, on their program for "Blue Flag" as applied to beaches. This can be done by expanding the article 31 of the criteria.

#### 2019

Promoting training courses and programs in disaster risk mitigation for local associations and tourism professionals.

Production and distribution of informative/educational products like posters and leaflets

#### 10. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### **Coordinator Centre:**

#### Partner 1:

Holding of seminars addressed to different associations and tourism professionals on risk culture, risk mitigation and risk dissemination.

Holding a project seminar to present and discuss works carried out by the different partners, (mid-term results).

#### 2019

#### Coordinator Centre:

#### Partner 1:

Study on informative leaflets addressing different risks for different target public.

Implementation tsunami warning and evacuation signs in several beaches in the north of Morocco.

#### 11. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

Involvement of the local population, associations and authorities on seismic, tsunami and other beach risks divulgation and on the implementation of mitigation measures.

#### 2019

Production of informative documentation on beach risks including mitigation measures. This information should be available on different languages (Arabic, French)

#### 12. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

Coordinator Centre:

#### Partner 1:

Reports on informative sessions performed, including potential recommendations.

Guidelines to prepare the informative documentation to be produced during 2019.

#### 2019

Coordinator Centre:

#### Partner 1:

Publication of informative documentation on beach risks including mitigation measures in Arabic and French.

### Portugal – CERU

#### SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°:

NAME OF THE CENTRE		Europe	ean Centre on Urban	Risks (CERU)		
COUNTRY	Portug	al				
REPRESENTED BY	Paula	Teves Costa				
TITLE OF THE PROJECT		Beach	Beach and Coastal Resorts Risks			
DURATION	20	)18	2019			
PARTNERS		DGET EURO	BUDGET IN EURO	TOTAL BUDGET 2018 - 2019		
Coordinator Centre: CERU						
Partner Centre 1: CEPRIS – Euro- Mediterranean Centre for Evaluation and Prevention of Seismic Risk						
Partner Centre 2: ICoD – Euro-Mediterranean Centre on Insular Coastal Dynamics						
Partner Centre 3:						

#### 13. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

This project aims to develop and implement seismic, tsunami and coastal risks mitigation. In particular the project intends to contribute for a Tsunami Ready Community working on two

programs: a Tsunami Ready Beach (TRB) and a Tsunami Ready Hotel (TRH). Besides, the project also intends to address other risks present on the beach. All involved countries have a large coastal areas on which beaches are a holiday destination par excellence, and tourists are one of the most vulnerable groups concerning these risks. All the actions to be developed will be done in close collaboration with the local associations and authorities.

Both initiatives (TRB and TRH) have been already carried out partially by the three involved Centres in previous projects. In Lagos (Portugal) tsunami warning and evacuation signs are implemented on a pilot beach. Questionnaires on tsunami risk were also carried out at hotels and beach concessions in Portugal and Morocco. A workshop devoted to these subjects was organized by CERU with the participation of the other 2 Centres.

#### 14. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

Awareness of tsunami and beach risks among hotels, responsible authorities and beach concessions.

Awareness of local associations and those responsible for safety on the beaches (Maritime Authority and lifeguards) to disseminating information among residents and floating population (tourist)

Awareness of Tourist Guides and personnel at Tourism Offices

Awareness of local and national authorities to implement preventive measures

Discuss with the Foundation for Environmental Education about the integration of all coastal hazards, and particularly tsunamis, on their program for "Blue Flag" as applied to beaches. This can be done by expanding article 31 of the criteria.

#### 2019

Promoting formative seminars, short-courses or programs on disaster risk mitigation for local associations and tourism professionals.

Production and distribution of informative/educational products like posters and leaflets

#### 15. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Coordinator Centre (CERU):

Holding of seminars addressed to different associations and tourism professionals on risk culture, risk mitigation and risk dissemination.

Implementating tsunami warning and evacuation signs in several beaches in the south of Portugal

Informative sessions for general public on the interpretation of risk signs displayed on beaches. Proposal for complementary signs for risks not yet considered.

#### Partner 1 (CEPRIS):

Holding of seminars addressed to different associations and tourism professionals on risk culture, risk mitigation and risk dissemination.

Holding a project seminar to present and discuss work carried out by the different partners, (mid-term results).

#### Partner 2 (ICoD):

Desk study on identification of TRB local requirements and identification of relevant actors

Holding of seminar addressed to lifeguard associations, beach management entities and tourism professionals on risk culture, mitigation and dissemination to present the Tsunami Ready concept and requirements.

#### 2019

#### Coordinator Centre (CERU):

Study on the implementation of evacuation routes of Lagos Historical Centre

Study on informative posters and leaflets addressing different risks for different target public

Holding a project final seminar to present and discuss the results achieved by the different partners.

#### Partner 1 (CEPRIS):

Study on informative leaflets addressing different risks for different target public.

Implementating tsunami warning and evacuation signs in several beaches in the north of Morocco.

#### Partner 2 (ICoD):

Preparation and dissemination of TRB leaflets and beach signs aimed at raising beach user awareness

Holding a project seminar to present and discuss work carried out by all project partners

#### 16. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

Involvement of the local population, associations and authorities on seismic, tsunami and other beach risks and on the implementation of mitigation measures.

#### 2019

Production of informative documentation on beach risks including mitigation measures. This information should be available in different languages (English, Portuguese, Arabic, French,

Italian?)

#### 17. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Coordinator Centre (CERU):

Reports on the seminars and informative sessions performed, including potential recommendations.

Informative leaflets.

Guidelines to prepare the informative documentation to be produced during 2019.

#### Partner 1 (CEPRIS):

Reports on informative sessions performed, including potential recommendations.

Guidelines to prepare the informative documentation to be produced during 2019.

#### Partner 2 (ICoD):

Report on desk study on identification of TRB local requirements and identification of relevant actors

Report on seminar addressed to lifeguard associations, beach management entities and tourism professionals on risk culture, mitigation and dissemination to present the Tsunami Ready concept and requirements.

#### 2019

#### Coordinator Centre (CERU):

Publication of informative documentation on beach risks including mitigation measures (in English and Portuguese)

#### Partner 1 (CEPRIS):

Publication of informative documentation on beach risks including mitigation measures (in Arabic and French)

#### Partner 2 (ICoD):

TRB leaflets and beach signs aimed at raising beach user awareness

Report of seminar to present and discuss works carried out by all project partners

# Romania – ECBR

PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:					
☐Using scientific and accordingly the res	9	e to better assess evolv	ing risks and adapt		
☐ Developing coopera in DRR.	ation among all decision	-makers to better define	authorities' adequate role		
X ☐ Promoting risk vulnerability).	culture among popula	tion (children, adults a	nd groups with special		
X ☐ Fostering popul DRR.	ation's active participa	ation (as individuals a	nd as community) to		
PROJECT N°:					
NAME OF THE CENTRE	ECBR, Bucharest				
COUNTRY	Romania				
REPRESENTED BY	Emil Sever Georgescu				
TITLE OF THE PROJECT	Seismic risk preparedness and disaster risk reduction – DRR training for vulnerable groups of populations, school students and volunteers in neighborhoods in romania				
DURATION	2018⊐x	2019⊐x			
PARTNERS	BUDGET IN € BUDGET IN € TOTAL BUDGET 2018 - 2019				
Coordinator Centre: ECBR, Bucharest, Romania					
Partner Centre 1: ECRP Sofia, Bulgaria					
Partner Centre 2: ECMNR – Chisinau, R. of Moldova					

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

For Romania and ECBR, the "building rehabilitation" against earthquakes impact is dependent not only on the technical and legal background but also on the participation of citizen-owners. They must be convinced about the vulnerability of some building categories and about their risks. The target is people living in old and vulnerable buildings, such as low-rise and high-rise (apartment) buildings. Since 2003, ECBR disseminated knowledge on disaster prevention in support of the enforcement of the strategic Programs for building rehabilitation coordinated by the Romanian Government and concerned ministries. But the number of high-rise rehabilitated buildings is still reduced and people's lives are at risk, especially in Bucharest.

The general aim of the ECBR Project is:

- Promoting risk culture among the population (children, adults and groups with special vulnerability) according to the Fourth Priority for Action of the Sendai Framework: "Enhancing disaster preparedness"
- To foster resilience by investing in the preparedness of citizens, school students and neighborhood volunteers for personal, family and group protection, at community level, involving the most vulnerable groups of population from disasters
- Creating earthquake education, awareness raising and public participation guidelines
- To raise awareness and provide citizens and senior population with knowledge about the risks and inherent self-protection behavior.
- Promoting the advocacy of a risk culture within the population, to create stakeholders for earthquake preparedness by training volunteers to be trainers for other people.
- The partners are EUR-OPA Centers of neighboring countries which are affected by the same Vrancea earthquake as Romania (R. Moldova and Bulgaria).

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

- Development of specific knowledge transfer / training materials for neighborhoods with traditional, old and vulnerable low-rise buildings, for citizens and volunteers - in Romanian language;
- Knowledge transfer by training seminars for citizens / volunteers/ students using courses, printed materials and didactic seismic simulators
- Exchange of experience during a kick-off Workshop with associated centers

#### 2019

- Development of specific knowledge transfer / training materials for neighborhoods with old and vulnerable high-rise buildings erected before 1940 and/or 1977 earthquake disasters, for citizens and volunteers in Romanian language.
- Knowledge transfer by training seminars for citizens / volunteers/students using courses, printed materials and didactic seismic simulators;
- Confirming good practices during a Final Workshop with associated centers

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

Coordinator Centre: ECBR, Bucharest, Romania

- Organization of short time free-field seminars directly with citizens in two neighborhoods traditional, old and vulnerable low-rise buildings
  - Date: May-June 2018
  - Duration: 2 hours in each of the two neighborhoods -
  - Participants: about 20-30 citizens in each vulnerable group
- Organization of training seminar for citizens / volunteers
  - Date: May-June 2018
  - Duration: 2 days
  - Participants: 20 Romanian citizens / volunteers

<u>Partner 1:</u> ECRP Sofia, Bulgaria - providing expertise and educational materials for earthquake preparedness to ECBR

<u>Partner 2</u>: ECMNR – Chisinau, R. of Moldova - providing expertise and educational materials for earthquake preparedness to ECBR

#### 2019

Coordinator Centre: ECBR, Bucharest, Romania

Organization of short time free-field seminars directly with citizens in two neighborhoods – places with old and vulnerable high-rise buildings erected before 1940 and/or 1977 earthquake disasters

- Date: May-June 2019
- Duration: 2 hours
- Venue: near buildings, in each of two neighborhoods in Sector 2 of Bucharest
- Participants: about 20-30 citizens in each vulnerable group

Organization of training seminar for citizens / volunteers to became trainers for other citizens

- Date: May-June 2019
- Duration: 2 days
- Venue: ECBR Room in URBAN-INCERC
- Participants: 20 Romanian students / citizens / volunteers

Organization of a Project Workshop with associated centers

- Date: October 2019
- Duration: 2 days
- Venue: ECBR Room in URBAN-INCERC
- Participants: 2 Directors of EUR-OPA associated centers of Bulgaria and Republic of Moldova

Partner 1: ECRP Sofia, Bulgaria - providing expertise and educational materials for earthquake

#### preparedness to ECBR

<u>Partner 2</u>: ECMNR – Chisinau, R. of Moldova - providing expertise and educational materials for earthquake preparedness to ECBR

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

- Provide practical knowledge and create positive disaster risk reduction perception for citizens.
- Direct transfer of earthquake preparedness knowledge to the community using verbal explanations, didactic mini-simulators and leaflets for citizens in neighborhoods with traditional, old and vulnerable low-rise buildings
- Learning and understanding reason, means and ways of achieving earthquake preparedness knowledge, good practice and skills for persons, groups, family and community members
- Receive materials and have exchange of experience on earthquake disaster risk reduction in neighborhoods at risk within EUR-OPA centers

#### 2019

- Direct transfer of earthquake preparedness knowledge to the community using verbal explanations, didactic mini-simulators and leaflets for citizens in neighborhoods with old and vulnerable high-rise buildings erected before 1940 and/or 1977 earthquake disasters
- Learning and understanding reasons, means and ways of achieving earthquake preparedness knowledge, good practice and skills for persons, groups, family and community members
- Increase resilience and pro-active behaviour of citizens in risky neighborhoods, with assistance of volunteers.
- Confirmation of good practices on earthquake disaster risk reduction in neighborhoods at risk within EUR-OPA centers by an ECBR Workshop in Romania
- Fostering official duties of Civil Protection (IGSU) and attracting some NGO's to be partners of IGSU and ECBR in multiplicating the risk reduction effect in neighborhoods

#### 5. **Deliverables**

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

- Reports of seminars and workshops to be distributed to the EUR-OPA Secretariat and partners of four countries.
- Publication of training and pedagogical materials for citizens (leaflets) and course support text for seminar participants, targeted at neighborhoods with traditional, old and vulnerable low-rise buildings

<u>Partner 1:</u> ECRP Sofia, Bulgaria – reports, recommendations, brochures, leaflets including expertise and educational materials for earthquake preparedness in Bulgaria,

<u>Partner 2</u>: ECMNR – Chisinau, R. of Moldova - reports, recommendations, brochures, leaflets including expertise and educational materials for earthquake preparedness in R of Moldova

#### 2019

#### **Coordinator Centre:**

- Reports of seminars and workshops to be distributed to the EUR-OPA Secretariat and partners of four countries.
- Publication of training and pedagogical materials for citizens (leaflets) and course support text for seminar participants, with target on neighborhoods with old and vulnerable high-rise buildings.

<u>Partner 1:</u> ECRP Sofia, Bulgaria – reports, recommendations, brochures, leaflets including expertise and educational materials for earthquake preparedness in Bulgaria

<u>Partner 2</u>: ECMNR – Chisinau, R. of Moldova - reports, recommendations, brochures, leaflets including expertise and educational materials for earthquake preparedness in R of Moldova.

## **Russian Federation – ECNTRM Activity 1**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°: 1.1

NAME OF THE CENTRE	ECNTRM			
COUNTRY	Russian Federation	Russian Federation		
REPRESENTED BY	Sergey Kachanov	Sergey Kachanov		
TITLE OF THE PROJECT	Recommendations for the establishment and management of the socionetworks volunteers community			
DURATION	2018 X□ 2019 X□			
PARTNERS				
Coordinator Centre: ECNTRM				

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

Analysis and lessons learned from the previous experience of fighting with emergency situation consequences show that the assessment of the territories vulnerability and disaster overcoming mechanisms should be conducted with the active participation of the population at risk of emergency or being a witness to the signs of threat of these situations. If the local population is involved in the risk assessment process, it also gives the opportunity to increase its awareness of potential risks and promptly initiate the process of emergency situation prevention.

Thus, currently, there is a need for a large number of people to have a tool which can be used to increase the effectiveness of combating threats of emergencies, collectively solving the following tasks:

- recording messages about the threats of natural and man-made emergencies risk;
- discussions of the emergency monitoring threat results;

- analysis of heterogeneous spatial data in order to detect threats associated with the risk of natural and man-made emergencies;
- accumulation of the statistics about the registered messages about the threats and outcoming response to these messages;
- increase of social activity of people and improvement of individual and group skills in detection and prevention of natural and man-made emergencies threat occurrence.

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

To understand the 'crowdsourcing' world practice, how does the volunteers' community work in social networks, principals of their activity and organisation.

To analyze the possibility of implementation of experience in emergency prevention, defining proper conditions for volunteers' assistance.

#### 2019

To prepare the recommendations for the establishment and management of the social networks volunteers community

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

To study the 'crowdsourcing' world practice involving other EUR-OPA interested centers.

Analyze the principals of implementation of experience in emergency management.

#### 2019

#### Coordinator Centre:

Prepare recommendations for the establishment and management of the social networks volunteers community

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

The analytical report on the 'crowdsourcing' world practice with the possible use of the information received from the other EUR-OPA interested centers.

Principals of implementation of experience in emergency management.

#### 2019

Recommendations for the establishment and management of the social networks volunteers' community. Guidelines and training toolkit for the volunteers.

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### **Coordinator Centre:**

Report on the 'crowdsourcing' world practice.

Approaches to the recommendations for the establishment and management of the social networks volunteers' community. Requirements for the training toolkit for the volunteers.

#### 2019

#### **Coordinator Centre:**

Recommendations for the establishment and management of the social networks volunteers' community. Guidelines and training toolkit for the volunteers.

# **Russian Federation – ECNTRM Activity 2**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°: 1.1

NAME OF THE CENTRE	ECNTRM		
COUNTRY	Russian Federation		
REPRESENTED BY	Sergey Kachanov		
TITLE OF THE PROJECT	Methods of revealing the signs of emergency threat, creation of models of specific threats to be used by the volunteers in the social networks		
DURATION	2018 X□ 2019 X□		
PARTNERS			
Coordinator Centre:			

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

The general aim of the project is to create technology for obtaining expert justified signs of man-made and natural emergency situations, to build models of specific threats to be used in the future to justify the structure of the message about the threat for processing of spatial data, and the overall algorithm of processing volunteers messages about the threats associated with the risk of emergencies.

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

- Defining the primary list of the threat signs.
- Defining the list of regulatory documents governing control and supervisory authorities in their activities on prevention of emergencies.
- Obtaining expert opinions on the proposed features of emergency threat.
- Obtaining characteristic values of the threat necessary to assess the credibility of threats of emergencies and ranking of threats.
- Assessment of the volunteer's opportunities to identify the signs of threats of emergency situations

of a certain type by analyzing the proposed spatial data.

#### 2019

To develop recommendations for obtaining expert justified signs of man-made and natural emergency situations, creating models of specific threats to be used in the future to justify the structure of the message about the threat for processing of spatial data, and the overall algorithm of processing volunteers messages about the threats associated with the risk of emergencies.

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

- Study the signs of threat.
- Study the regulatory documents that govern control and supervisory authorities, in their activities on emergencies prevention.
- Apply for the expert opinions on the proposed features of the subject of threat of emergency.
- Study characteristic values of the threat necessary to assess the credibility of threats of emergencies and ranking of threats.
- Study the volunteer's opportunities to identify the signs of threats of emergency situations of a certain type by analyzing the proposed spatial data.

#### 2019

#### Coordinator Centre:

Develop recommendations for obtaining expert justified signs of man-made and natural emergency situations, creating models of specific threats to be used in the future to justify the structure of the message about the threat for processing of spatial data, and the overall algorithm of processing volunteers messages about the threats associated with the risk of emergencies.

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

Definition of the signs of threat on the basis of the expert opinions on the proposed features of the subject of threat of emergency.

Obtaining characteristic values of the threat necessary to assess the credibility of threats of emergencies and ranking of threats.

Report on the volunteer's opportunities to identify the signs of threats of emergency situations of a certain type by analyzing the proposed spatial data.

#### 2019

Recommendations for obtaining expert justified signs of man-made and natural emergency situations. Models of specific threats to be used in the future to justify the structure of the message about the threat for processing of spatial data, and the overall algorithm of processing volunteers messages about the threats associated with the risk of emergencies.

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

The analytic report on the signs of threat, the regulatory documents that govern the control and supervisory authorities in their activities on prevention of emergencies, characteristic values of the threat necessary to assess the credibility of threats of emergencies and ranking of threats, the volunteers opportunities to identify the signs of threats of emergency situations of a certain type by analyzing the proposed spatial data.

#### 2019

#### Coordinator Centre:

Recommendations for obtaining expert justified signs of man-made and natural emergency situations, creating models of specific threats to be used in the future to justify the structure of the message about the threat for processing of spatial data, and the overall algorithm of processing volunteers' messages about the threats associated with the risk of emergencies.

## **Russian Federation – ECNTRM Activity 3**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### **PROJECT N°: 1.1**

NAME OF THE CENTRE	ECNTRM	ECNTRM		
COUNTRY	Russian Federation	Russian Federation		
REPRESENTED BY	Sergey Kachanov			
TITLE OF THE PROJECT	Methods of verification of messages about the threat of emergencies in the social networks.			
DURATION	2018 X□ 2019 X□			
PARTNERS				
Coordinator Centre:				

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

The technique for verification of messages about the threat of emergencies is needed to radically improve the efficiency and reliability of the analysis of existing and newly received information from a variety of sources (especially spatial data) aimed at identifying and preventing threats of emergency situations of man-made and natural character.

Identification of the threat by the volunteer's community must undergo the verification process to reduce the impact of "social noise" on the work of the state structures responsible for the emergency threat prevention. The development of the method of messages verification about the threat of emergencies is aimed at solving this problem.

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

- Development of the approaches to message filtering.
- Development of the "posts weight gain" methods in order to receive messages with high probability of risk of emergency situations.

#### 2019

- Development of the technique for verification of messages about the threat of emergencies.

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

- Development of the e-mail form for the Internet portal.
- Development of the procedure of format and logical control of messages.
- Development of the post (message) confirmation mechanism.

#### Partner 1, Partner 2, Partner 3.

#### 2019

#### Coordinator Centre:

Methods of verification of messages about the threat of emergencies in the social networks.

#### Partner 1:, Partner 2:, Partner 3:

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

- E-mail form for the Internet portal.
- Description of the message definition format and logical control.
- Post (message) confirmation mechanism.

#### 2019

Methods of verification of messages about the threat of emergencies in the social networks.

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

#### Coordinator Centre:

Report on the e-mail form for the Internet portal, the message definition format and logical control and the post confirmation mechanism.

Partner 1, Partner 2, Partner 3.

#### 2019

#### Coordinator Centre:

Methods of verification of messages about the threat of emergencies in the social networks.

Partner 1, Partner 2, Partner 3.

## **Turkey – AFEM Activity 1**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

PROJECT N°: 2.1

NAME OF THE CENTRE	Natural Disasters Traini	ing Center (AFEM)		
COUNTRY	Turkey			
REPRESENTED BY	Dr. Yeliz Teker			
TITLE OF THE PROJECT	International Workshop on Strengthening the Role of Local Authorito Build Disaster Resilient Communities			rities
DURATION	2018 2019 🗆			
PARTNERS	BUDGET IN € BUDGET IN € TOTAL BUDGET 2018 - 2019			
Coordinator Centre:		-		

#### 1. Background

[Describe the general aim of the project and what has been achieved so far on related matters - Maximum 10 lines]

The local authorities have a vital role in dealing with DRR because the impact of all disasters is local. So it is important to define and strengthen the role of the local authority to build disaster resilient communities. It is also emphasized that local governments need to get ready, reduce the risks and become resilient to disasters through the Making Cities Resilient Campaign of UNISDR. There are five cities (Antalya, Kocaeli, Yalova, Gaziantep and İstanbul) within the campaign in Turkey. So, it is aimed at gathering the representatives of municipalities and provincial directorates of Ministries to share best practices, to discuss key issues such as urban risk, city planning, education and awareness for building resilient communities by organizing a workshop. It is also planned to invite a representative from UNISDR and also from other countries to share their best practices.

#### 2. Specific objectives

[Describe the specific objectives of the project for each year - Maximum 8 lines]

#### 2018

- Effective interaction between local authorities.

- Sharing best practices.
- Improve the innovative projects to define and implement local actions related to disaster resilience.

#### 3. Activities

[Describe detailed activities to be carried out in relation to the budget – Maximum 24 lines]

#### 2018

Coordinator Centre: AFEM

- Identify the workshop's location It is planned to organize the workshop in Antalya.
- Identify participants It is planned to invite the representatives of local authorities (municipalities and provincial directorates of Ministries) from 5 cities (Antalya, Kocaeli, Yalova, Gaziantep and İstanbul), a representative from UNISDR to present the campaign details, representatives from other countries to present their best practices.
- Preparation of workshop visual materials: design of banner, announcements, brochures, invitations, etc.
- Preparation of technical details: simultaneous translation, determination of the technical infrastructure existing and usable in the space, preparation of the list of technical materials additionally provided from outside.
- Preparation of technical equipment: roll-up, flag, name tag, folder, pen, note book, USB, participation certificate etc.
- Arranging travel expenses of participants: Travel to-from Antalya, transfer for Antalya to-from the hotel etc.

#### 4. Expected Results

[Describe the expected results of the project for each year - Maximum 8 lines]

#### 2018

The workshop report and the booklet of best practices will be shared with local authorities for extending the implementation of the campaign nationwide building disaster resilient communities.

- Evaluate the current situation and sharing best practices.
- Extend the implementation of the campaign nationwide building disaster resilient communities.
- Strengthen the coordination between local authorities.
- Encourage the Municipalities to develop work related to DRR

#### 5. Deliverables

[Describe concrete outputs (workshop report, maps, guidelines, recommendations, brochures, leaflets, development of websites, etc.) – Maximum 24 lines]

#### 2018

Coordinator Centre:

- Workshop report
- Booklet of best practices

## **Turkey – AFEM Activity 2**

#### SPECIALISED CENTRES - PROJECT PROPOSAL 2018-2019

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### PROJECT N°: 2.1

NAME OF THE CENT	ΓRE	European Centre of Technological Safety (TESEC)		
COUNTRY		Ukraine		
REPRESENTED BY		Viktor Poiarkov		
TITLE OF THE PROJ	ECT	Identification of good governance practices in the management of nuclear disasters and cross-border technology.		
DURATION		2018 x 2019		
PARTNERS	BUDGET IN EURO		BUDGET IN EURO	TOTAL BUDGET 2018 - 2019
Partner Centre 4 AFEM Turkey		713,52	0	713,52

#### 6. Background

In 2011, after Fukushima nuclear accident, the meeting of the EUR-OPA Permanent Correspondents requested the network of scientific centers to develop a booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" in order to better inform and protect people against nuclear or radiation disasters. The Booklet has been developed, translated in 12 languages, successfully presented in more than 20 countries and became an information tool for better protection of people. This is a good basis for harmonising the response of nuclear hazards in case of an accident involving different countries, which is extremely important for cross-border cooperation. Unfortunately, in case of nuclear accident people do not feel directly the radiation and has to trust information, which could be different in neighbouring countries and need to be harmonised, as well as early warning and other implemented countermeasures.

#### 7. Specific objectives

We continue collecting and distributing best international experience for the protection of

people against nuclear disasters, also using good governance practices in the management of nuclear disasters and cross-border technology. National and international regulation (like IAEA conventions) defined some key points in cross-border cooperation in case of nuclear accident but precise studies of Chernobyl and Fukushima disasters on international exercises in neighbour countries, demonstrated that some important issues for better protection of people still need improvement. Like the harmonisation of early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radiomonitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

The aim is to develop a questionnaire on all these issues - for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states and neighbouring countries for collecting different practices and problems, and be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

As Chernobyl and Fukushima demonstrated that citizens of countries far away from Chernobyl or Fukushima also worry about health effects of disasters, such system of governance and information is of interest to many counties.

#### 2018

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters. Reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire and analyse it.

Develop proposals for good governance practices.

Prepare document for adopting by EUR-OPA and distribution to member States.

#### 8. Activities

#### 2018

#### Coordinator Centre:

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire of different countries and analyse it.

Develop proposals for good governance practices. Prepare document for adoption by EUR-OPA and distribution to member states.

#### Partner 1:

#### **ECRP** Bulgaria

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 2:

#### **ECBR** Romania

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 3:

#### **ECRM** Armenia

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 4:

#### **AFEM Turkey**

Translate into Turkish the "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" Booklet to present it to national authority.

#### 9. Expected Results

Better protection of people against nuclear disasters using good governance practices in the management of nuclear disasters and cross-border technology.

A questionnaire will be developed for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states for collecting data on different practice and problems, and will be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 2018

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 10. Deliverables

Development of a questionnaire, distribution of the questionnaire to the member states, report on replies obtained, drafting of Recommendations to be addressed to EUR-OPA member states.

#### 2018

#### Coordinator Centre:

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed.

#### Partner 1:

#### **ECRP** Bulgaria

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 2:

#### **ECBR** Romania

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 3:

#### **ECRM** Armenia

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 4:

#### **AFEM Turkey**

Booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" translated to Turkish and presented to National authority.

### **Ukraine - TESEC**

#### PRIORITY FOR ACTION OF THE MEDIUM TERM PLAN:

Using scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

Developing cooperation among all decision-makers to better define authorities' adequate role in DRR.

Promoting risk culture among population (children, adults and groups with special vulnerability).

Fostering population's active participation (as individuals and as community) to DRR.

#### **PROJECT N°: 2.1**

NAME OF THE CENTRE	European Centre of Technological Safety (TESEC)	
COUNTRY	Ukraine	
REPRESENTED BY	Viktor Poiarkov	
TITLE OF THE PROJECT	Identification of good governance practices in the management of nuclear disasters and cross-border technology.	
DURATION	2018 <b>X</b>	2019
PARTNERS		
Coordinator Centre: TESEC Ukraine		
Partner Centre 1: ECRP Bulgaria		
Partner Centre 2: ECBR Romania		
Partner Centre 3: ECRM Armenia		
Partner Centre 4: AFEM Turkey		

#### 11. Background

In 2011, after Fukushima nuclear accident, the meeting of the EUR-OPA Permanent Correspondents requested the network of scientific centers to develop a booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" in order to better inform and protect people against nuclear or radiation disasters. The Booklet has been developed, translated in 12 languages, successfully presented in more than 20 countries and became an information tool for better protection of people. This is a good basis for harmonising the response of nuclear hazards in case of an accident involving different countries, which is extremely important for cross-border cooperation. Unfortunately, in case of nuclear accident people do not directly feel the radiation and have to trust information, which

could be different in neighbouring countries and needs to be harmonised, as well as early warning and other implemented countermeasures.

#### 12. Specific objectives

We continue collecting and distributing best international experience for the protection of people against nuclear disasters, also using good governance practices in the management of nuclear disasters and cross-border technology. National and international regulation (like IAEA conventions) defined some key points in cross-border cooperation in case of nuclear accident but precise studies of Chernobyl and Fukushima disasters on international exercises in neighbour countries demonstrated that some important issues for better protection of people still need improvement. Like the harmonisation of early warning systems, effective channels for communication, taking into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

The aim is to develop a questionnaire on all these issues - for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states and neighbouring countries for collecting different practices and problems, and be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

As Chernobyl and Fukushima demonstrated that citizens of countries far away from Chernobyl or Fukushima also worry about health effects of disasters, such system of governance and information is of interest to many counties.

#### 2018

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters. Reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire and analyse it.

Develop proposals for good governance practices.

Prepare a document for adoption by EUR-OPA and distribution to member States.

#### 13. Activities

#### 2018

#### **Coordinator Centre:**

Develop a questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Distribute the questionnaire to member states.

Collect information from the replies to the questionnaire of different countries and analyse it.

Develop proposals for good governance practices. Prepare document for adoption by EUR-OPA and distribution to member states.

#### Partner 1:

#### ECRP Bulgaria

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 2:

#### **ECBR** Romania

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the questionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 3:

#### **ECRM Armenia**

Contribute to developing the questionnaire about the governance of trans-border collaboration in case of nuclear disasters.

Help national authority to reply to the guestionnaire.

Contribute to developing proposals for good governance practices.

#### Partner 4:

#### **AFEM Turkey**

Translate into Turkish the "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" Booklet to present it to national authority.

#### 14. Expected Results

Better protection of people against nuclear disasters using good governance practices in the management of nuclear disasters and cross-border technology.

A questionnaire will be developed for defining good governance practices for better protection of people against nuclear disasters, taking into account cross-border cooperation. It will be distributed to member states for collecting data on different practice and problems, and will be analysed by experts. On this basis, recommendations for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 2018

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed and adopted by EUR-OPA.

#### 15. Deliverables

Development of a questionnaire, distribution of the questionnaire to the member states, report on replies obtained, drafting of Recommendations to be addressed to EUR-OPA member states.

#### 2018

#### Coordinator Centre:

A questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of radiological situation, intervention levels for different countermeasures and others will be developed.

A recommendation for better protection of people in case of nuclear disasters will be developed.

#### Partner 1:

#### **ECRP Bulgaria**

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issues to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 2:

#### **ECBR** Romania

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 3:

#### **ECRM Armenia**

Contribution to the questionnaire about the governance of cross-border collaboration in case of nuclear disasters, reflect on such issue to better harmonise early warning systems, effective channels for communication, take into account different levels of emergency management (state, local), communication with mass media and public, radio-monitoring procedures and forecasting of the radiological situation, intervention levels for different countermeasures and others.

Contribution to a recommendation for better protection of people in case of nuclear disasters.

#### Partner 4:

#### **AFEM Turkey**

Booklet "Basic Knowledge of Nuclear Hazards: Lessons from CHERNOBYL and FUKUSHIMA" translated to Turkish and presented to National authority.

# Country Contribution to Proposed Project Priorities 2018 -2019

Priorities	Countries
Apply scientific and technological knowledge to better assess evolving risks and adapt resilience strategies accordingly	1) Algeria - CRSTRA 2) Georgia - GHHD 3) Greece - ECFF 4) Italy - UNIMORE 5) Luxembourg - ECGS 6) Malta - ICoD 7) Morocco - CEPRIS 8) Portugal - CERU 9) Russian Federation - ECNTRM
Strengthen cooperation among all decision-makers to achieve a better definition of the appropriate role of the authorities in disaster risk reduction	1) Germany - GFMC 2) Turkey - AFEM 3) Ukraine - TESEC
Promote a "culture of risk" in the population (children, adults and particularly vulnerable groups)	1) Algeria - CRSTRA 2) Bulgaria - ECRP 3) Greece - ECFF 4) Italy - CUEBC 5) Morocco - CEPRIS 6) Portugal - CERU 7) Romania - ECBR 8) Turkey - AFEM
Promote the active participation of the population (individually and collectively) in RRC	1) Greece - ECFF 2) Italy - CUEBC 3) Morocco - CEPRIS 4) Portugal - CERU 5) Romania - ECBR 6) Armenia - ECRM