

Il progetto FIRESPIILL

FIRESPIILL | PP11 | ARPA FVG

Presentazione interna | Palmanova | 11 January 2021

FIRESPILL: progetto strategico INTERREG IT-HR

Strategic theme: 4 - **Oil spills and other marine hazards, fire and earthquake**

Specific objective: 2.2 - **Increase the safety of the Programme area from natural and man-made disaster**

Project acronym	FIRESPILL
Project title	Fostering Improved Reaction of crossborder Emergency Services and Prevention Increasing safety Level
Start date	01/04/2020
End date	31/12/2022



SAFETY AND RESILIENCE

S.O. 2.12



FIRESPILL: obiettivo generale e principale

FIRESPILL project overall objective is to increase the capacity of Emergency Service Organizations and citizenship to cross-border operate in tackling natural and manmade disasters in the Adriatic Basin, decreasing the exposure of the populations to the impact of hazards and increasing the safety of the Croatian and Italian Adriatic basin by improving emergency prevention and management measures and instruments. The joint efforts invested by 13 project partners, with cross-cutting competencies and multidisciplinary experiences, will result in development of common monitoring strategies and a disaster prevention and management system that will increase the resilience of involved territories to natural disasters like **wildfires** and **earthquakes** as well as accidents like **oil spills**. Further benefits and multiplicative effects will be gained from its integration in the regional development plans.

L'insieme delle minacce è ampio, riguarda ambiti diversi che comportano metodologie e strumenti utili alla riduzione del rischio non comuni o mutuabili.

Sintesi dei risultati progettuali attesi

FIRESPILL main results are:

- 1) **Upgraded Emergency Services Regulatory system** and institutional cooperation among the involved actors **through the analysis and mapping of hazard exposure** and current emergency services regulatory systems, **establishment of better coordinated collective emergency planning and preparedness**, and **improving the level of uniformity** aiming for balanced territorial approach in risk tackling (WP3).
- 2) **Enhanced awareness** and behaviour **of the citizens** through participatory actions increasing the level of involvement of the population in risk prevention, monitoring and crisis management, transforming them from vulnerable elements to active sensors (WP2 and WP5).
- 3) **Improved risk prevention and management in the involved coastal regions** through the upgrade of Emergency Management System (EMS), **aimed at observing and predicting geophysical factors** influencing people and properties, coordinating the emergency interventions and activating channels of communication with interventions teams and affected citizens (WP3 and WP5). This result and its multiplicative effects will be reinforced by pilot actions tailored to each risk (WP4).

Project specific objective 1

Enhance governance and operational capabilities of cross border Emergency Service Organizations FIRESPILL project aims at upgrading cross border emergencies management system able to advance the capacity of recovery while minimising damages, through strengthening administrative and operational competence and strive towards sustainable development. Enhancing the level of uniformity and similarity will improve the overall efficiency of the existing Emergency Services Regulatory Systems, in line with the EU principle of co-operation and subsidiarity (EU Civil Protection Mechanism). It'll be pursued by comparing the current civil protection legislations and practices in the two countries to identify their homogenization level and the arguments on which to intervene to improve the overall system efficiency. The main natural and man-made disasters FIRESPILL project aims to tackle, are fire, earthquake, oil spill and other marine hazards. In order to effectively tackle these emergencies, it is essential to analyse and streamline hazard exposure of project area as well as the legislation and practices at hand for each respective risk on both sides of the Adriatic, and only then adopt joint approaches and common monitoring strategies and management systems. In terms of its operational capabilities, FIRESPILL aims at the upgrade of safety equipment, emergency land and sea vehicles, mobile command and control units, communications systems and establishment of Advanced Training Centre.

Project specific objective 2

Mobilize the participatory process of citizenship to obtain their contribution to crisis management

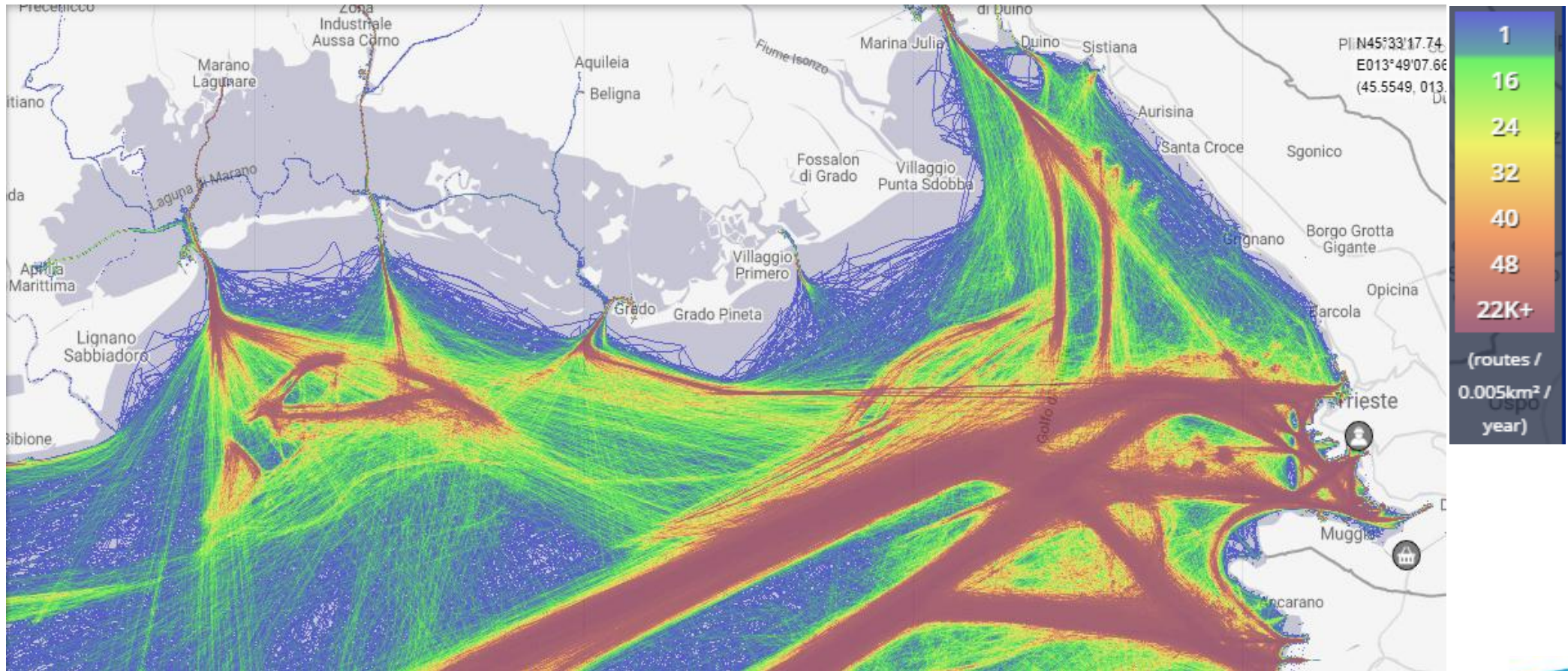
FIRESPILL aims at increasing the level of involvement of the population on risk prevention, monitoring and crisis management. It will be pursued by activating the participatory process of citizenship addressed to: (i) add to its role of "vulnerable element" the "active sensor" one during hazardous occurrences to obtain its contribution to Civil Protection activities of natural and manmade risk forecasting, prevention, monitoring and management within its own living territory; (ii) get a proper behaviour and a thorough knowledge of risk issues to reduce the natural and manmade phenomena that lead to emergencies. Joint development and implementation of awareness raising actions in the society (i.e. schools, citizen) is essential to enhance their knowledge on risk prevention and crisis management. Public awareness is regarded as one of the disaster management innovative tools and best practices used to achieve disaster risk reduction. It helps a community to become resilient through awareness of the issues affecting its environment and ownership of efforts. Enhanced knowledge will result in improved behaviour and better preparedness of the population and rescue teams and their active participation in the common monitoring strategies and disaster management system. These actions will achieve an increase in hazard knowledge, audience's risk perception, and communication of this knowledge to others and fostering of a safety culture.

Project specific objective 3

Improve efficiency in monitoring and intervention through upgrade of Emergency Management Systems

FIRESPILL project aims at the improvement of an innovative Emergency Management Systems (EMS) that will enable better coordinated collective emergency planning and preparedness for natural and man-made disasters in the Programme area. The aim is to integrate the present applications, heterogeneous data from institutional (research centers, sensor networks, etc.) and social media sources and make similar risk scenarios available to emergency services' chain of command. This will be achieved by a thorough analysis and streamline of presently available solutions, improvement of existing early warning and decision-making support systems, resulting in coordinated contingency plans at cross border regional scale. Pilot actions will be implemented to promote the employment of innovative Emergency Management Systems tools and developed solutions for each respective hazard. Shared platforms will network the involved stakeholders and support exchange of good practices in order to enhance the knowledge transfer and capitalization of achieved results in the field of prompt response to disasters.

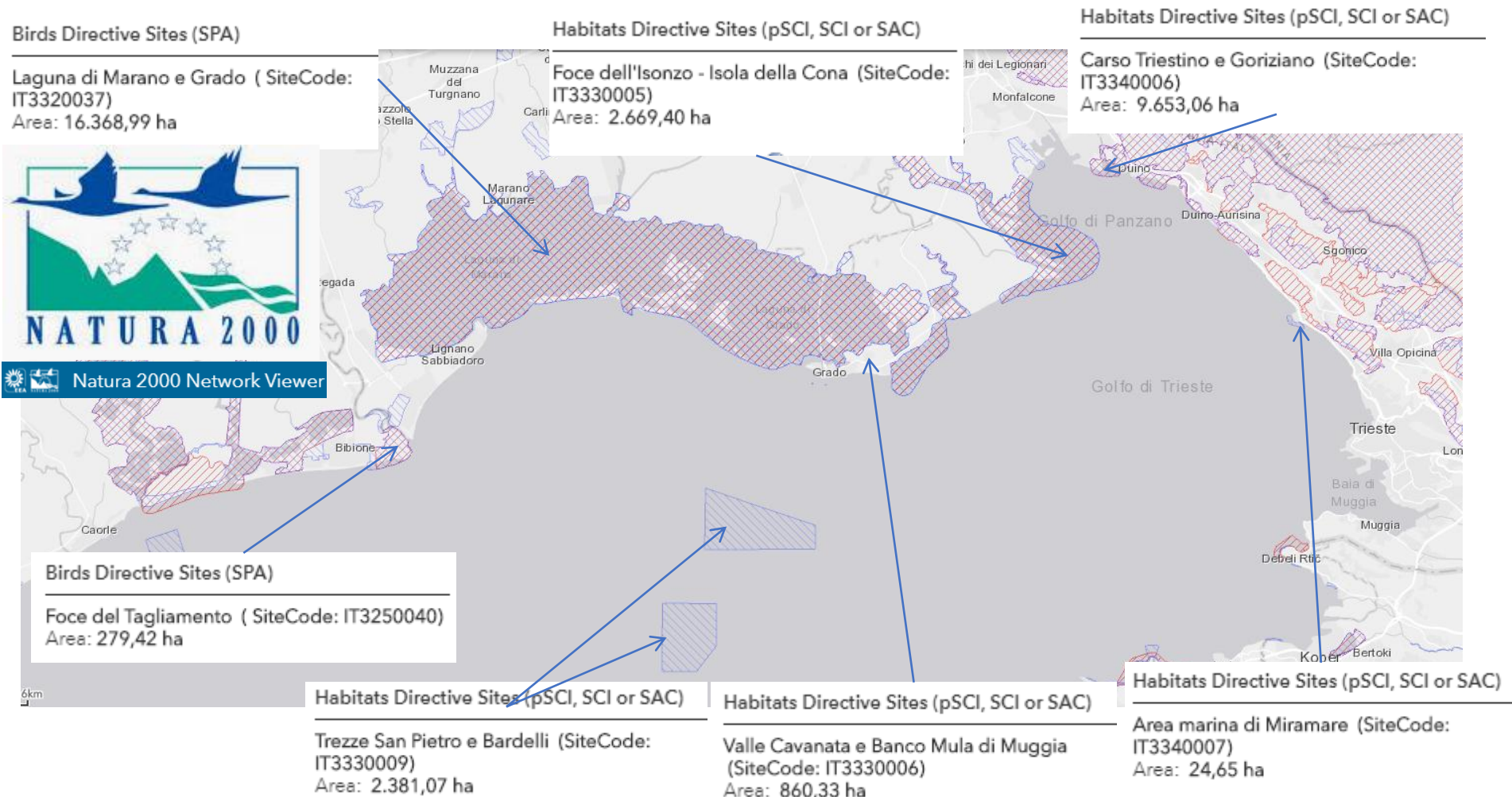
La Pilot di PP11 – ARPA FVG: la minaccia



Esempio di pressione ambientale

Dettaglio del traffico navale nel mare di competenza della Regione Friuli Venezia Giulia

La Pilot di PP11 – ARPA FVG: gli esposti e vulnerabili

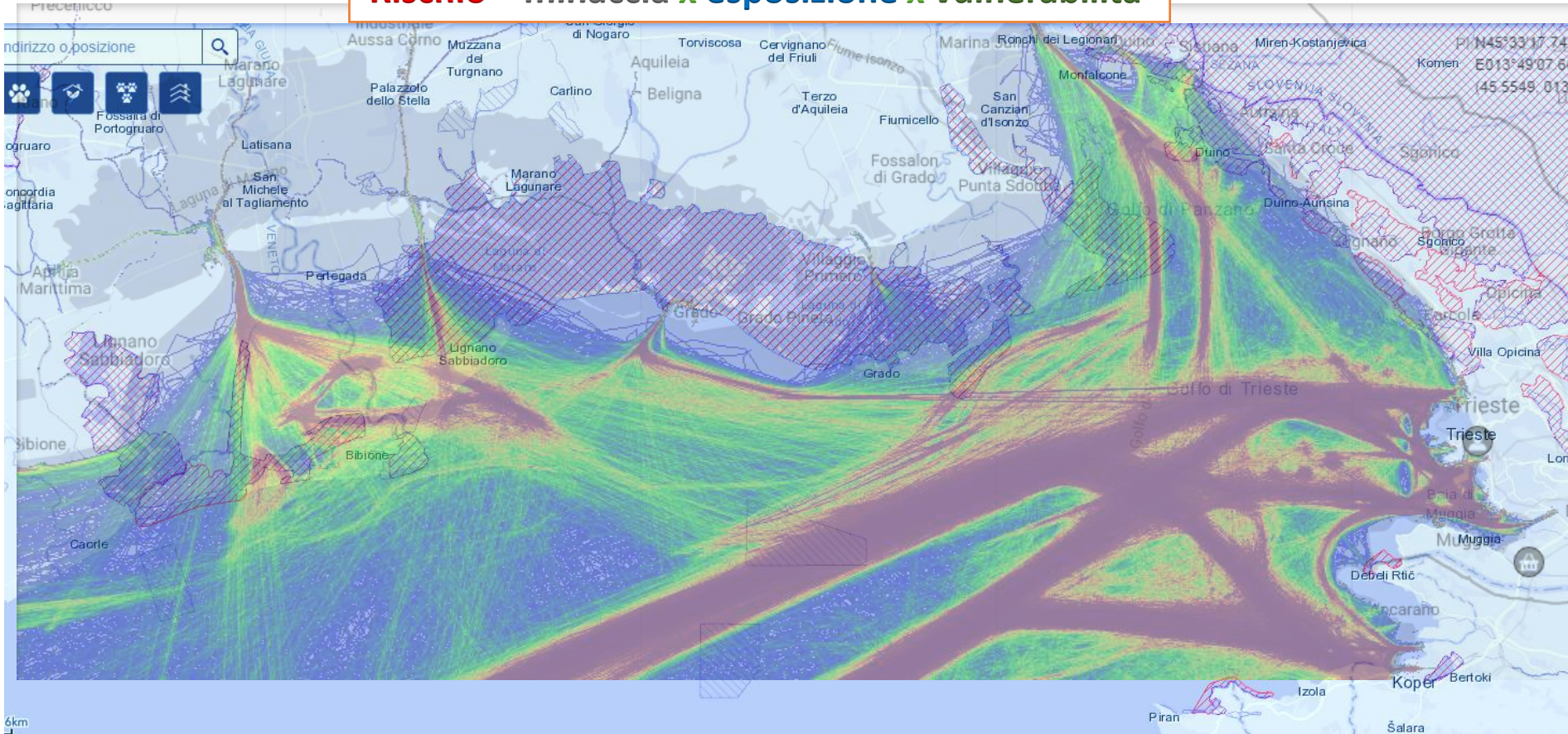


Esempio di sistema vulnerabile ed esposto alle pressioni

I siti ambientali di rilevanza comunitaria (NATURA 2000) sulle coste ed il mare del Friuli Venezia Giulia

La Pilot di PP11 – ARPA FVG: il rischio oil spill

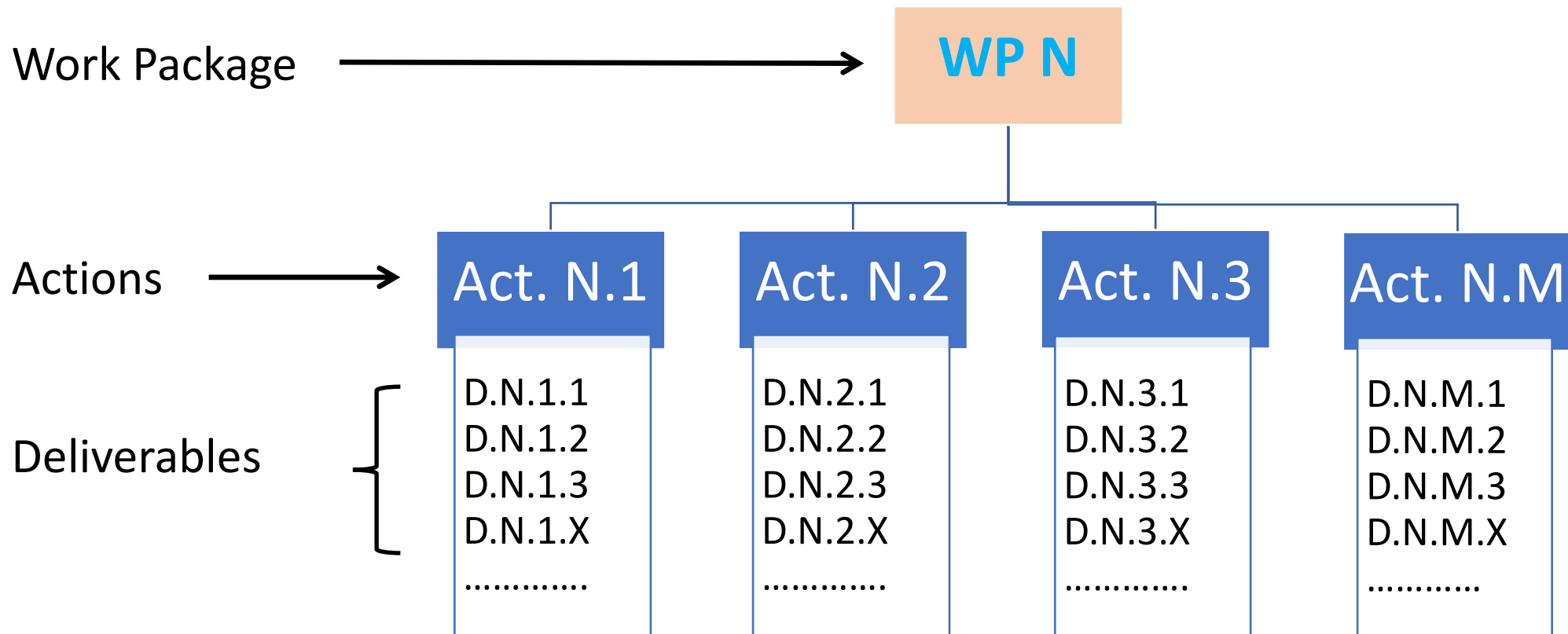
Rischio = minaccia x esposizione x vulnerabilità



Periodi progettuali

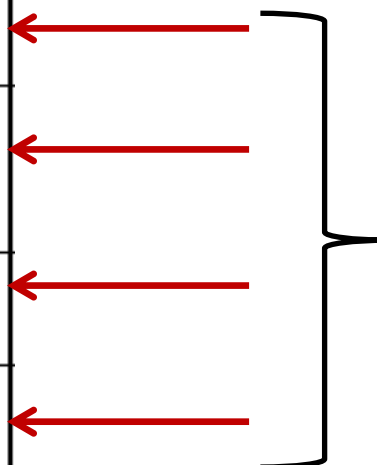
Reporting period	Timeframe	Deadline for drafting and presentation of the Progress Reports/Final Report
1	Apr-June 2020	30/09/2020
2	July-Dec 2020	31/03/2021
3	Jan-June 2021	30/09/2021
4	July-Dec 2021	31/03/2022
5	Jan-June 2022	30/09/2022
6	July-Dec 2022	31/03/2023

Work Packages – le actions e le deliverables



WP1 Project Management

WP1	<i>Project management</i>	Timeframe
1.1	<i>Activity 1.1 Start - up activities</i>	M.01.- M.04.
1.2	<i>Activity 1.2 day to day project management coordination and internal communication</i>	M.01.- M.33.
1.3	<i>Activity 1.3 Steering and monitoring of the project's implementation</i>	M.01.- M.33.
1.4	<i>Activity 1.4 Financial management</i>	M.01.- M.33.

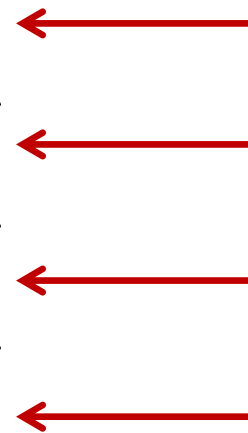


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WP2: Communication activities

WP2	Communication activities	Timeframe
2.1	Activity 2.1 Start - up activities	M.01.- M.06.
2.2	Activity 2.2 Public events	M.03.- M.33.
2.3	Activity 2.3 Digital activities	M.03.- M.33.
2.4	Activity 2.4 Media relations and publications	M.03.- M.33.

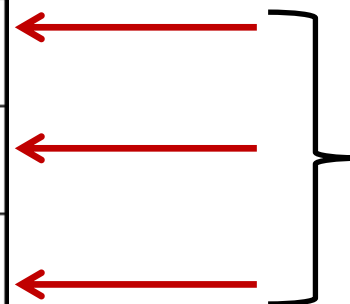


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WP3 Modeling and Enhancing the Innovative Cross border Emergency Services

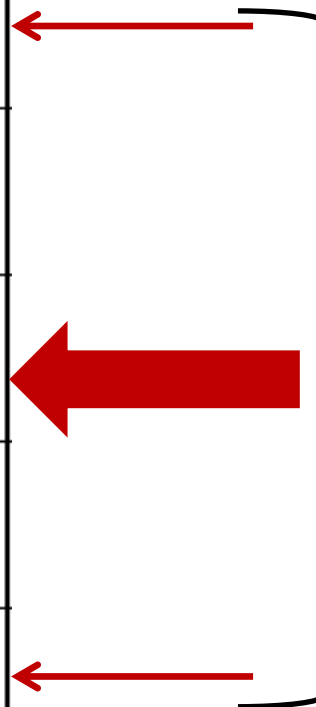
WP3	<i>WP3 Modeling and Enhancing the Innovative Cross border Emergency Services</i>	Timeframe
3.1	<i>Activity 3.1 Survey of current emergency services regulatory systems</i>	M.04.- M.09.
3.2	<i>Activity 3.2 Common points and possible convergences identification</i>	M.10.- M.15.
3.3	<i>Activity 3.3 Emergency services regulatory systems green paper development</i>	M.16.- M.24.
3.4	<i>Activity 3.4 Transfer adoption of green paper</i>	M.25.- M.33.



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WP4 Pilot projects' deployment

WP4	WP4 Pilot projects' deployment	Timeframe
4.1	Activity 4.1 Pilot projects planning	M.03.- M.06.
4.2	Activity 4.2 Fire and earthquake pilot deployment	M.07.- M.26.
4.3	Activity 4.3 Oil spills and other marine hazards pilot's deployment	M.07.- M.26.
4.4	Activity 4.4 Establishment of advanced training centers for civil protection	M.07.- M.26.
4.5	Activity 4.5 Joint evaluation of the pilots defining transferability options & follow-up interventions	M.25.- M.33.



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WP5 Activation of citizens' participatory process

WP5	<i>WP5 Activation of citizens' participatory process</i>	Timeframe
5.1	<i>Activity 5.1 Design of "building safe community" awareness campaign</i>	M.08.- M.10.
5.2	<i>Activity 5.2 Creating an information sharing environment to improve hazard prevention and control</i>	M.11.- M.24.
5.3	<i>Activity 5.3 Raising community awareness via capacity building in hazard prevention and response system</i>	M.13.- M.32.
5.4	<i>Activity 5.4 Social media content campaign activation</i>	M.12.- M.27.
5.5	<i>Activity 5.5 Evaluation of "building safe community" awareness campaign</i>	M.28.- M.33.



WP4 dettagli

Building on the findings of WP3, this WP aims at enhancement of Emergency Service Organization operational capabilities to increase their level of preparedness in terms of reaction to natural and manmade hazards through pilot projects' deployment. **Pilot projects will have specific actions that will be dedicated to each main risk and they will be selected by each partner within its territories:**

Forest fire. The specific objective is to enhance Fire fighting capacity to deal with prevention and improved reaction to forest fire outbreaks by upgrading their preparedness, readiness and operational capacities, as well as strengthening cross border coordination. Main focus will be on the improvement of existing systems of fire monitoring and intervention by upgrading and implementing new (innovative) solutions and investing in fire equipment.

Oil spill. The specific objective will be to enhance capacity of Coast Guard, specialized Civil Protection units to deal with oil spilling and other marine hazards by upgrading their level of preparedness in after outbreak intervention, as well as strengthening cross border coordination. Specific actions foresee: Coast Guard /Civil Protection Units specialized drills and **simulations** with use of floating barriers for oil containment or absorption and the use of skimmer equipment capable of removing the oily components from sea water.

Earthquake. The specific objectives will be to finalize an enhanced monitoring procedure based on the low cost and non-invasive instrumental seismic vulnerability measurement applicable to a large number on a widespread territory to “Eurocode 8 class III and IV” Public Buildings to catalogue their seismic safety status in order to promote an effective seismic risk prevention policy in Adriatic basin seismic high-risk areas. Also, identification and monitoring of 3 case studies in the earthquake area is planned under this pilot axis.

WP4 Expected outputs and coordination

The main WP outputs are:

- Pilot Project Framework Plan (PPFP) developed
- N° 1 Pilot deployment of fire and earthquake.
- **N° 1 Pilot deployment of oil spills and other marine hazards.**

- **Task Force 2 (TF2)** (Oil spills and other marine hazards pilots deployment)- **coordinated by PP9;** participated by: PP1, PP4, PP7, PP11

PP1 ABRUZZO REGION ITALY

PP4 ADRIATIC TRAINING AND RESEARCH CENTRE FOR ACCIDENTAL MARINE POLLUTION
PREPAREDNESS AND RESPONSE – ATRAC

PP7 REGION OF ISTRIA CROATIA €

PP9 PUGLIA REGION - CIVIL PROTECTION DEPARTMENT

PP11 ENVIRONMENTAL PROTECTION AGENCY OF FRIULI VENEZIA GIULIA

Action 4.3 OIL SPILLS AND OTHER MARINE HAZARDS PILOTS DEPLOYMENT

Start date: **01/02/2021** End date: **30/06/2022**

Activities refer to the **development of methodology for risk assessment for oil spills** in the Adriatic Sea **providing data collection on maritime traffic, possible sources of pollution, exposure, environmental sensitivity, impacts on human life, environment and economy** etc. **Simulation of oil spill scenarios using oil spill trajectory models for tracking the movement of the oil slick, and oil spill dispersion model for predicting possible impacts to the environment are foreseen.** **Capitalization of existing simulation models for oils spills and its upgrade** with new functionalities will be available to all partners through web interface and interoperable services and development of oil spill operational prototype and hazard mapping capacities relevant for all partners. Equipment to act in case of oil spills and other marine hazards will be improved, as well as specialized exercises and simulations for coast guards and civil protection units thus increasing their level of preparedness.

Action 4.3 deliverable


D.4.3.1 - N° 1 Pilot deployment of "Oil spills and other marine hazards" Pilot deployment of "Oil spills and other marine hazards" will consist of:

- N° 1 Methodology/guidelines for risk assessment for oil spills in the Adriatic Sea developed (PP4)
- N° 1 Oil spill operational prototype and hazard mapping capacities developed (PP9)
- N° 2 Enhanced simulation models for oils spills and other marine hazards (PP9, **PP11**)
- N° 5 Specialized exercises implemented (with usage of personal protective equipment and specialized equipment floating booms, boats, drones,..) (**1 exercise per PP**)


All TF2 PPs will contribute to the achievement of pilot deployment deliverables. - TF2 (Oil spills and other marine hazards pilots deployment)- **coordinated by PP9**; participated by: PP1, PP4, PP7, **PP11**

Contact

PP11 - ARPA FVG
Enrico Ballaben

 Via Cairoli, 14 I-33057 Palmanova (UD) ITALY

 enrico.ballaben@arpa.fvg.it

 +39 0432 191 8286

 www.italy-croatia.eu/firespill