



Reinforcing civil protection capabilities into
multi-hazard risk assessment under climate change



Funded by
European Union
Humanitarian Aid
and Civil Protection

A participatory and integrated approach for civil protection planning: the case study of Cinque Terre

20/10/2021

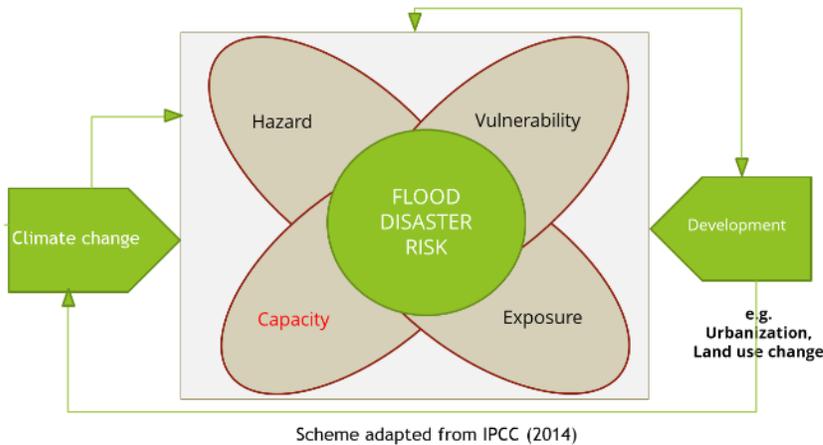




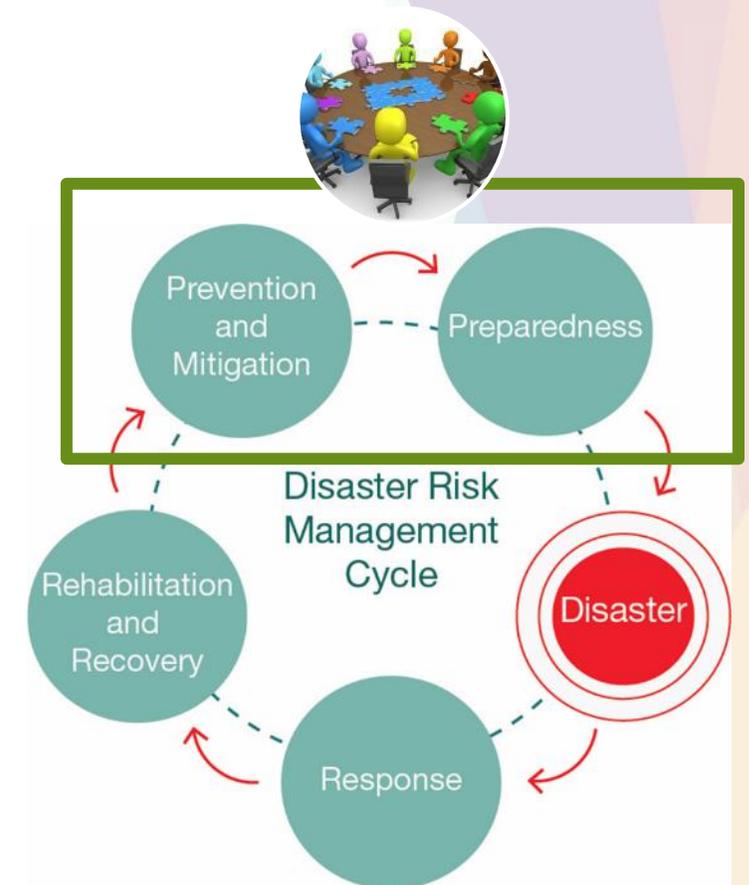
OUTLINE

- ▶ A BRIEF INTRODUCTION : CIVIL PROTECTION CHALLENGES IN THE CONTEXT OF CLIMATE CHANGE
- ▶ THE PROPOSED METHODOLOGY
- ▶ THE CASE STUDY: SOME IMPORTANT INSIGHTS
- ▶ CONCLUSIONS

A brief introduction: civil protection challenges in the context of climate change



- According to EEA, **pluvial floods and flash floods are likely to become more frequent** throughout Europe.

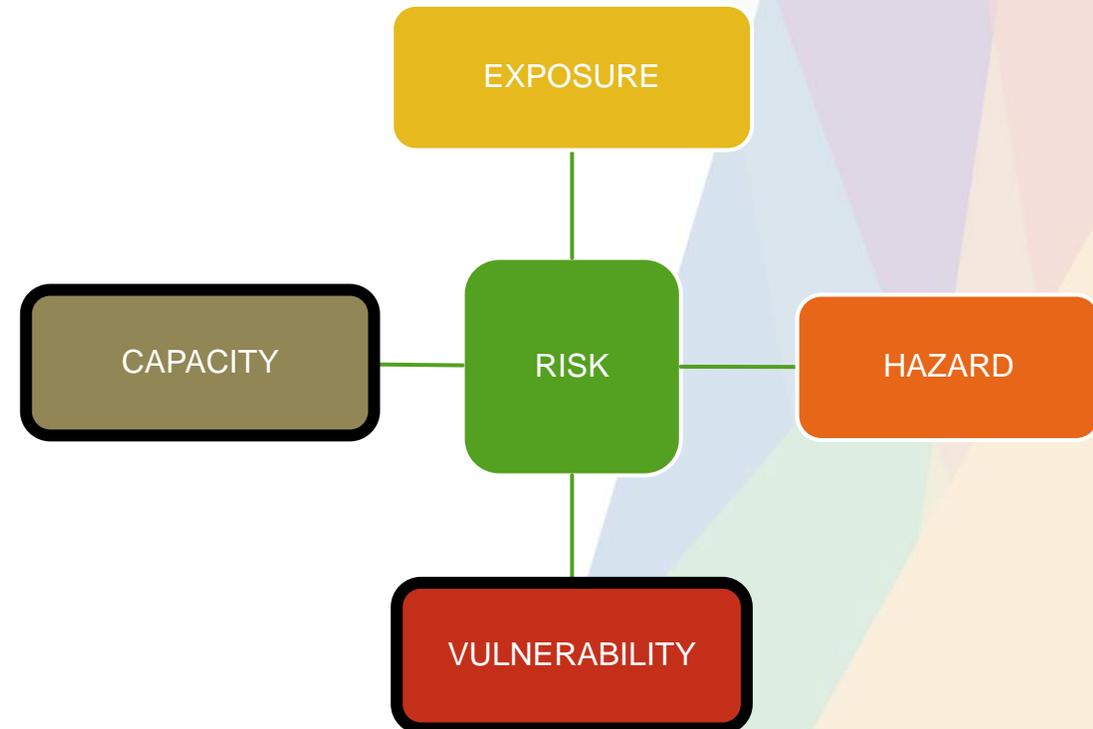


The methodology: a participatory and integrated approach

ISSUE

How to reinforce civil protection capabilities and emergency management to face extended, more severe, unprecedented, or extreme natural hazard events in a changing context

- ▶ **Participatory approach**
- ▶ aims to involve the different territorial actors of the Civil Protection System in **co-design and co-decision of civil protection actions**;
 - ▶ strengthens the local (Regional and Municipal) **civil protection capacity** and “reliability and trust ability” of the institutional bodies of CP
 - ▶ improves **risk knowledge and awareness** and the capacity building
 - ▶ favors actions more **shared and adapted**.

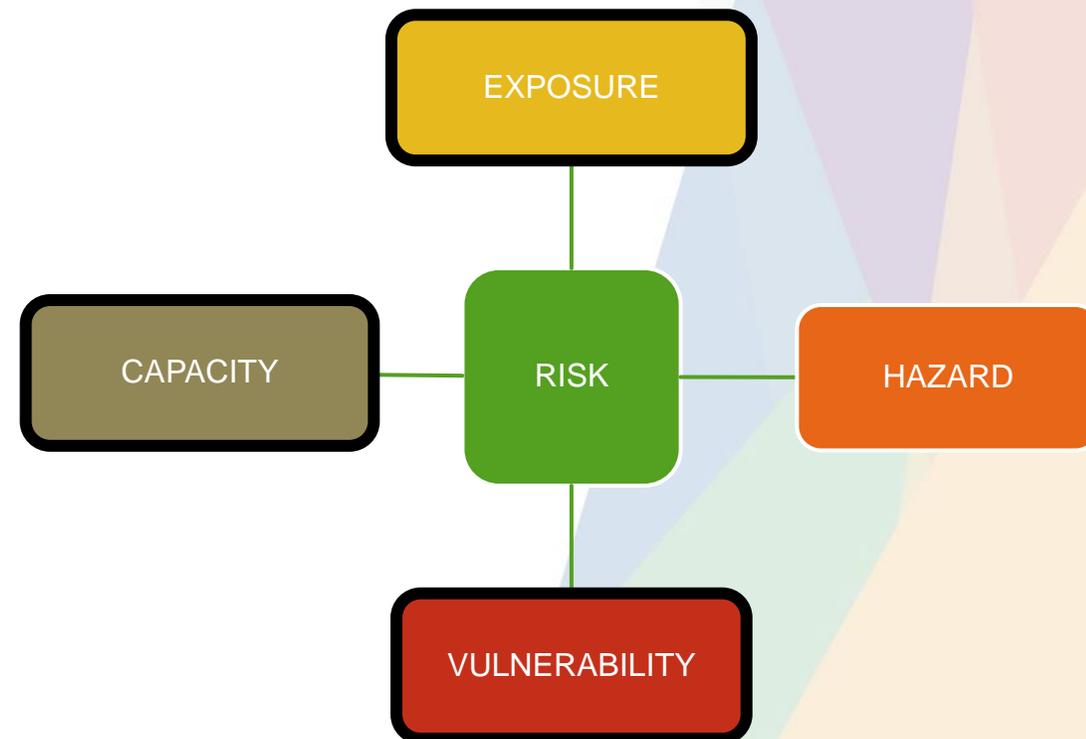


The methodology: a participatory and integrated approach

ISSUE

How to reinforce civil protection capabilities and emergency management to face extended, more severe, unprecedented, or extreme natural hazard events in a changing context

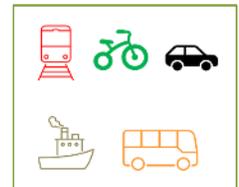
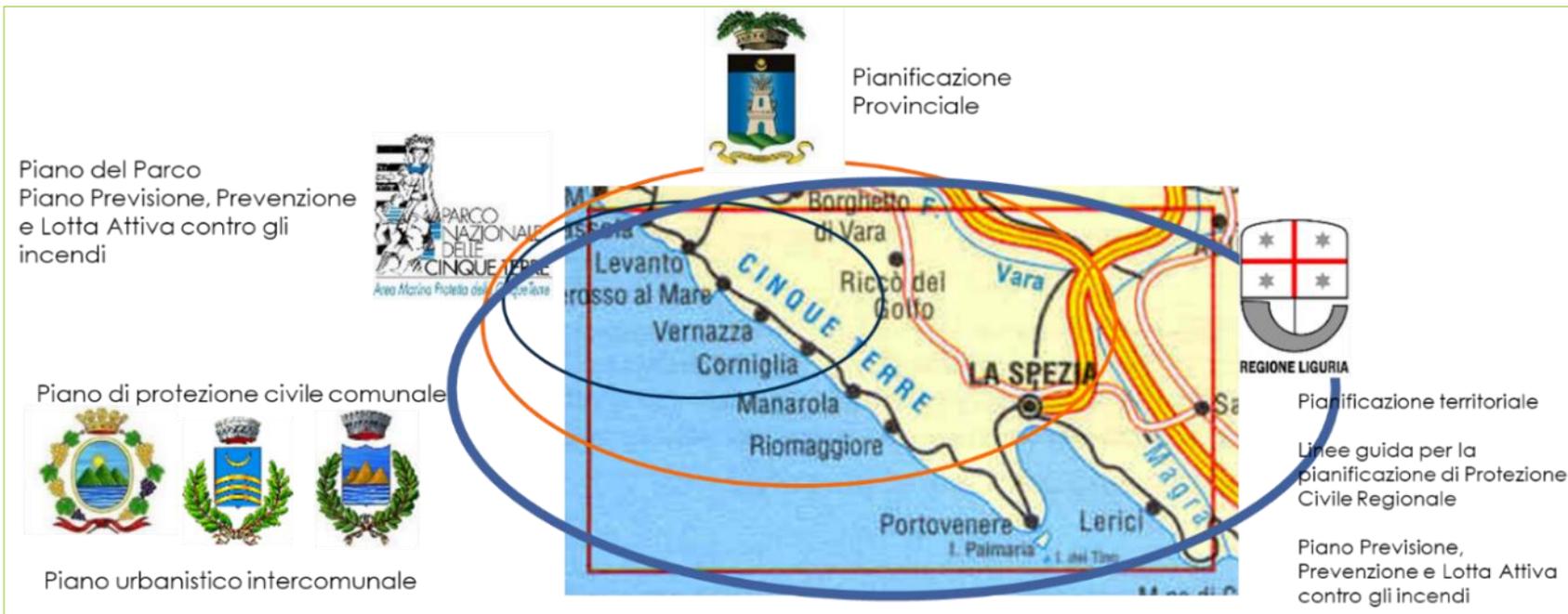
- ▶ **Integrated approach**
- ▶ aims to facilitate the enhancement and exchange of information between different sectors and favor interinstitutional cooperation.
 - ▶ decreases the “territorial vulnerability and exposure”, producing more aware territorial planning able to take into account the actual and future disaster risk.
 - ▶ favors greater collaboration and cooperation between different entities that are in charge of disaster risk management, also clarifying the different responsibilities



The case study of 5 terre



Hydrogeological and socioeconomic remarks



TOURISM SECTOR

SMALL RIVER BASINS

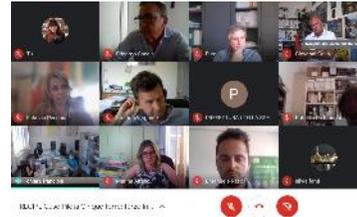
Intensità pioggia	Molto forte
Quantità pioggia	Elevata Significativa
Durata	≤ 1 ora
Classe di bacino che va in crisi	Bacini piccoli, reti fognarie A < 15 Km ²

Response time:
20 min - 1h

Road map for participated and integrated approach

Context analysis including CC impacts

SWOT Analysis and Definition of participation objectives for CP planning (flood risk and tourism sector)



Process implementation

Civil Protection Plan improved, more suited to local context (Capacity) and to DRM/CCA framework

DRM Actors mapping



Formalization of the inter institutional working group

Some insights | Working group composition and scope



MUNICIPALITIES

Local institutional bodies
in charge of local civil protection



PREFECTURE

Territorial institutional body
in charge of coordination of
municipalities and civil protection



REGIONE LIGURIA

Region

Regional institutional body
in charge of regional civil
protection



National Park

National institutional body
in charge of territorial planning



Regional agency for the
protection of the Ligurian
environment.

Regional institutional body
in charge of regional civil
protection (forecasting and
monitoring the events)

Some insights | Tourism sector



Flood risk

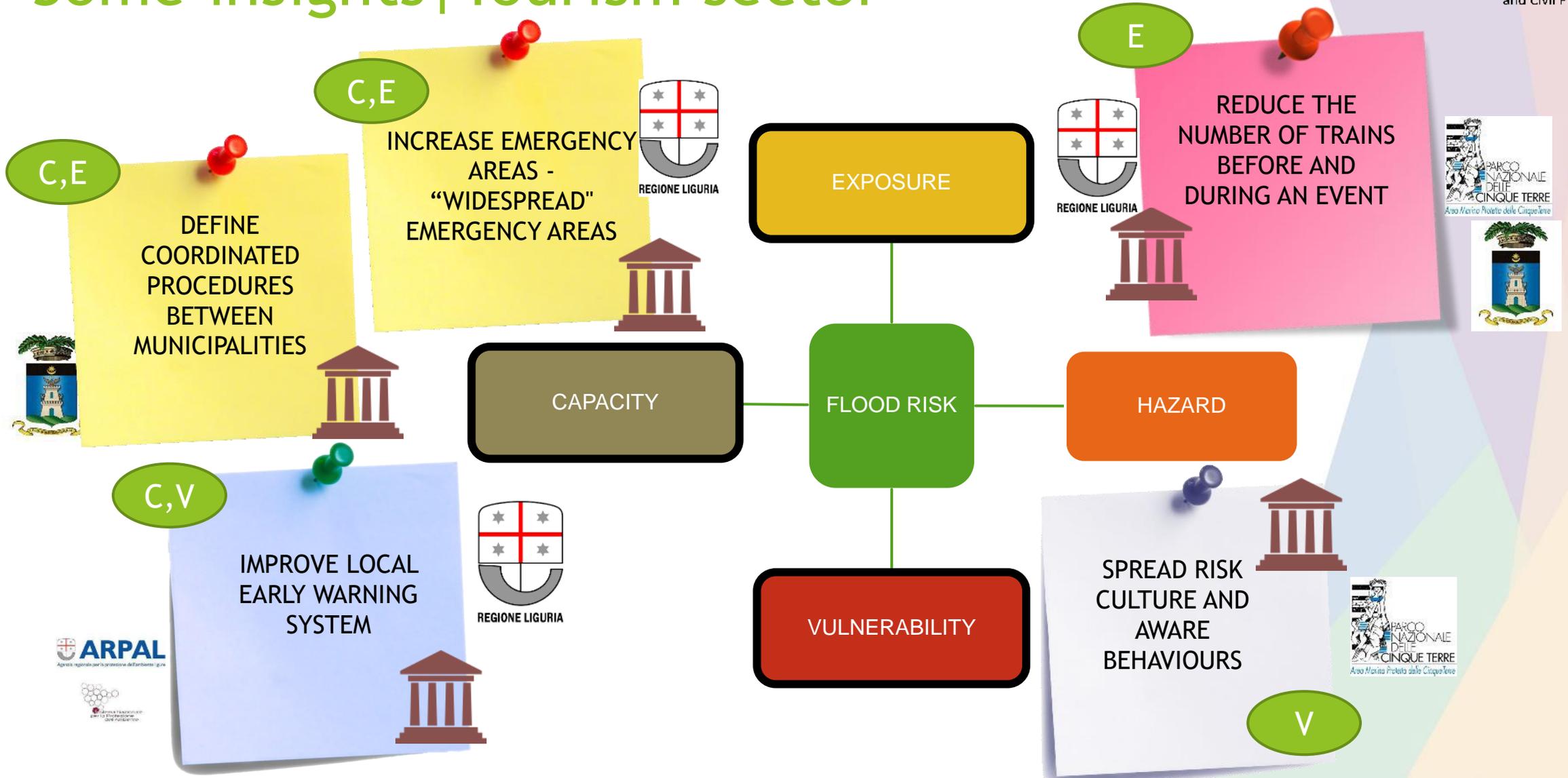
Climate Change impacts

Tourism sector

Increased territorial vulnerability

*CAN ADDRESSING TOURISM SECTOR RISK MANAGEMENT BE AN
OPPORTUNITY FOR IMPROVING TERRITORIAL RESILIENCE?*

Some insights | Tourism sector



Conclusion I

The participated and integrated approach responds to

► Requirements of civil protection

- To strengthen the collaboration between institutions at different levels and offices of the same agency
- To rise risk awareness and involvement of the population in the CP planning process
- To foster long-term planning and integrated planning

► Requirements of risk managers

- To reinforce the collaboration and cooperation between institutions and to innovate the approach of risk management from “protect all” to “live with”
- To reinforce risk awareness and risk perception and to involve the population

- **How to reinforce civil protection capabilities and emergency management to face extended, more severe, unprecedented, or extreme natural hazard events in a changing context**



RECIPE

Reinforcing civil protection capabilities into multi-hazard risk assessment under climate change



Funded by
European Union
Humanitarian Aid
and Civil Protection

Conclusion II

**PARTICIPATED AND INTEGRATED
Civil Protection Plan**

the Cp plan could be seen as a tool of Preparedness but also of Prevention and mitigation, focusing on the efforts of reducing the risk vulnerability and exposure. In this way a civil protection plan could enrich and could have a WIDER and OVERALL view and impact on risk reduction.



Civil Protection Plan

► **How to reinforce civil protection capabilities and emergency management to face extended, more severe, unprecedented, or extreme natural hazard events in a changing context**



Funded by
European Union
Humanitarian Aid
and Civil Protection

RECIPE

REINFORCING CIVIL PROTECTION
CAPABILITIES INTO MULTI-HAZARD
RISK ASSESSMENT UNDER
CLIMATE CHANGE

Thank you!

