

Natural Disaster: Mitigation and Management through GIS – the Italian Experience

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SUMMARY

Over the last decade, Italy has suffered numerous natural calamities that brought extreme damages on its natural landscape, real estate and heritages sites. The magnitude of these calamities, unfortunately also signified casualties.

After the 2012 earthquake in the region of Emilia Romagna, the Italian Civil Protection designed a new way to prevent and mitigate the effects of natural disasters, in order to be able to quickly respond on emergencies, address the primary needs and limit and recover from the damages. The new Condizioni Limiti di Emergenza, or the CLEs are created to be utilized as the principal instrument on designing new emergency preparedness plans and coordinate necessary actions when faced with critical circumstances.

This paper focuses on the foregoing procedure of data collection and the development of new dynamic, standardized and easily updatable emergency plans and thematic maps. Furthermore, some case studies would also be presented in which will show a comprehensive view of the different situations wherein CLEs are used, whether it would be a small Italian borgo, or a bigger city with an imminent emergency situation.