The Role of Geodetic Surveyors in Disaster Management

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SUMMARY

Geospatial Information is now ubiquitous in our lives and the geodetic surveyors play a fundamental role in this field. Beyond the role in cadastral or property surveying as well as building and infrastructure surveying, the geodetic surveyors are also involved in the management of geospatial information, in a broad sense of the term.

The need for accurate, up-to-date, accessible and shareable geospatial information in disaster management is widely acknowledged by professionals, academics, governments, NGOs and inter-governmental organisations. geospatial information is increasingly used across the various stages of disaster management from prevention, preparedness, response and recovery, however the level of adoption and implementation varies widely both within and between countries and according to the type of disaster. There are many reasons for this differential adoption relating to; policy, governance, finance, data, capacity and technological capability.

The report ‘2022 Disasters in Numbers’ released by the Centre for Research on the Epidemiology of Disasters, UCLouvain (BE), highlights the huge challenges and threats that we all face. The Emergency Event Database EM-DAT recorded 387 catastrophic events and disasters worldwide in 2022 resulting in the loss of 30,704 lives and affecting 185 million individuals with economic losses totalled around US$ 223.8 billion. As a result, developing the data, tools, processes, frameworks, and best practice to manage natural disasters more effectively is becoming an increasingly urgent global priority.

The IX CLGE Conference of the European Surveyor and General Assembly held in Paris (FR) from 9 to 11 November 2023 brought together surveyors, geospatial experts, and subject matter experts from across the public, private, and academic sectors to share experience and best practice and to

consider the increasingly important role that geodetic surveyors should play both now and in the future in the field of disaster management. This was a unique occasion to specifically focus on how geodetic surveyors across Europe, as members of the wider geospatial ecosystem, contribute to various aspects of disaster management as seen through the lens of a series of real-life case studies. The event concluded with the signing of the 'Paris Declaration' which acknowledges the range, scale and complexity of the disaster challenges that we all face. The Declaration makes a number of commitments about how we can work together to strengthen the contribution of surveyors, promote the role of our profession more widely, and cooperate with kindred bodies such as FIG, the Forum of Regional Bodies and inter-governmental organisations. This paper will explore what we have learned from our colleagues across Europe and what we can do at national and international level to begin to adopt globally the commitments made by European Surveyors in the Paris Declaration and to make a positive contribution to disaster management.