Chengdu Forum on UN-GGIM Global Map for Sustainable Development: Development and Applications in Urban Hazard Mapping Chengdu, China, 15 – 17 October 2013

Session 4: Geospatial Challenges in Responding to Urban Disasters (cont)

Kyoung-Soo Eom Chief Cartographic Section Department of Field Support United Nations

Geospatial challenges in responding to Haiti Earthquake 2010 UN Cartographic Section (UNCS)

Abstract

After the earthquake on 12 January 2010 in Haiti, UNCS began to coordinate with MINUSTAH, OCHA, OOSA, DSS and UN agencies in order to establish practices for the sharing and dissemination of data in immediate response to and support of disaster relief operations. By 13 January, essential maps and geo-databases produced by UNCS and MINUSTAH GIS Unit were shared with UN offices/agencies including humanitarian community. UNCS established Haiti Crisis Operations Team to streamline efforts to meet urgent demands.

UNCS triggered the International Charter on Space and Major Disasters to obtain post event satellite imagery, and activated the rapid mapping service of G-MOSAIC services. A detailed block-level damage and trafficability assessment of Port-au-Prince and other areas that were hard hit by the earthquake was completed jointly by G-MOSAIC and UNCS. DLR provided additional damage assessment information, and JRC provided landslide risk analysis. World Bank, NOAA, US South Command, GIS Corps, Esri and many others provided data or services.

In response to the earthquake in Haiti, there has been an outpouring of goodwill in an effort to make high-resolution satellite and newly collected aerial images available free of charge for humanitarian operations. Web map services were set up for much of the new imagery, thus allowing for fast, low-bandwidth access to the data soon after they were made available.

Lessons learnt are highlighted that there is a room of major improvement in coordination among key actors and stakeholders. A pre-defined coordination mechanism will avoid confusion and waste of resources, and it will definitely enhance an effective use of geospatial information and tools in support of crisis response, crisis management and disaster relief operations.