

EARTH OBSERVATION SYMPOSIUM (B1)  
International Cooperation in Earth Observation Missions (1)

Author: Mr. André Husson  
Centre National d'Etudes Spatiales (CNES), France

Mr. Stephen Briggs  
European Space Agency (ESA), Italy

Mr. Surendra Parashar  
Canadian Space Agency, Canada

Ms. Catherine Proy  
Centre National d'Etudes Spatiales (CNES), France

Dr. Ahmed Mahmood  
Canadian Space Agency, Canada

Mr. Philippe Bally  
European Space Agency (ESA), Italy

INTERNATIONAL CHARTER 'SPACE AND MAJOR DISASTERS' TEN YEARS OF OPERATIONAL  
SERVICES

**Abstract**

International Charter 'Space and Major Disasters' is a unique initiative employing space technologies to help save lives and assess the damage due to natural disasters that leave a trail of destruction around the world, including in Europe. The aim of the Charter is to provide support to aid workers and relief teams involved with disaster response. Earth Observation satellites can provide rapid access to archive imagery and crisis imagery specifically tasked over a disaster impacted area. Reference and fresh data can be used to derive crisis mapping and damage assessment products that emergency response teams can use for decision making in command centres and in the field. CNES, ESA and CSA have founded the International Charter 'Space and Major Disasters' in 2000 to respond to major disasters. The Charter is an international agreement between ten space agencies of France, Europe, the United Kingdom, the United States, Canada, Argentina, China, India and Japan, making their resources available to emergency operations during the immediate crisis response phase. The members collaborate on a no exchange of funds and best effort basis. Each member agency mobilizes its Earth Observation missions and commits operational resources to support the activities of the Charter. The Charter is an international collaboration concerning major natural or man made disasters and with two simple objectives: firstly, to task satellites in emergency situation; the Charter is not involved with other phases of risk management such as prevention, rehabilitation or post-crisis reconstruction; secondly, to supply user organisations, primarily national civil protection agencies, with rapid access at no cost to satellites data. Since its creation in November 2000, the Charter has been activated all over the world more than 250 times in more than 90 countries. There is an increase of Charter events, with more than 40 to 50 activations each year. This increase has a variety of origins, the first of which is the progress attained concerning awareness of what Charter can bring to users. Today it is premature to directly link the number of mass disasters to climate change though major hydrometeorological hazards appear to be more and more frequent. The paper will provide an overview of particular Charter activations with a particular focus on the actions performed in the aftermaths of the 2010 January Haiti earthquake looking at the data gathered, the crisis mapping products elaborated and user feedback concerning service the utility of the space based service.