



Title	<i>“Space-based information for Crowdsourcing Mapping”</i>
Implementing Section/Programme	United Nations Office for Outer Space Affairs
Participating Government(s)	All Member States are beneficiaries
Partner(s)	Private and public sector stakeholders interested in the topic
Timeframe	July 2011 – June 2012
Estimated budget	USD 220,000. -
Proposed funding source	Voluntary contributions by Member States as well by Partners.

Narrative summary

In recent years, advancements in technologies have made it possible for virtual communities such as OpenStreetMap, Ushahidi, Sahana, CrisisMappers, Virtual Disaster Viewer, Google MapMaker, INSTEDD and others to provide increasing support to disaster preparedness and emergency response efforts. Important cornerstones of this virtual effort are the possibility to access and take advantage of satellite imagery as well as the use of other space-based technologies such as telecommunications satellites and global navigation satellite systems. Taking note of the need to connect these pioneering communities with the space industry as well as the disaster management community, the UN-SPIDER Programme is carrying out this one-year project (**“Space-based information for Crowdsourcing Mapping”**) aiming at identifying specific actions that could ensure a closer cooperation among the three communities.

The UN-SPIDER Programme was established by the General Assembly of the United Nations in 2006 with the mandate to ensure that all countries and international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle. This includes the need to ensure that space-based information supports the Crowdsourcing mapping efforts for the benefit of the disaster management community. Building on this mandate, UN-SPIDER aims to bridge these groups that generate maps and other relevant geo-spatial information, the space community, and the disaster management community.

The UN-SPIDER Programme is ideally positioned to conduct this project given its mandate, its role within the United Nations to promote the use of space-based information; its established networks bringing together national institutions responsible for disaster management and emergency response, as well as other end users, and space solution experts; and its technical foundation, particularly in the area of information technologies.

The proposed project aims to improve synergies among these communities via:

- Compilation of views and recommendations from experts from the disaster management community regarding how geo-based information has to be generated and/or tailored to ensure that it can be used effectively;
- Definition of potential applications and products which could be elaborated by the crowd-sourcing communities to support preparedness and emergency response;
- Building upon existing solutions to facilitate the sharing of information to the emergency management community;
- The possibility of building upon the UN-SPIDER knowledge portal to serve as a communication channel to link these communities and to facilitate the transmission of information to the emergency management community, and;
- Additionally, we will also be discussing strategies on how to adequately address intellectual property and copyright concerns.

Activities and Outcome

This project will have as a main outcome improving synergies among the disaster management, the space and the crowd-sourcing communities aiming at contributing to the reduction of disaster risks and improved capacities in disaster preparedness. The following tasks are foreseen:

- a) the establishment of communications and cooperation among these three communities through workshops, web-based forums, and other communication mechanisms. The aim is to facilitate the exploration of novel uses of space-based data through IT technologies to process it, and the presentation of information generated in a format and structure that blends itself to more rapid and efficient use by the disaster management community;
- b) the conduction of pilot efforts to create information (maps in both a traditional or creative/inclusive way, e.g. crismappers) to support selected countries, where UN-SPIDER has already conducted Technical Advisory Missions and is strengthening institutional capacities on the use of space-based information targeting all phases of the disaster management cycle.
- c) the use of UN-SPIDER's Knowledge Portal to be used by these three communities on a continuous basis to serve as tool to for the crowd-sourcing community to present its products, for the disaster management community to provide feedback, and for the space community to identify emerging trends in the use of space-based information.

The first activity of this project will be an Expert Meeting, to be held in Vienna from 5-6 July 2011, to discuss strategies that will contribute to supporting civil protection and emergency management agencies to make use of products generated by such groups in areas of preparedness and emergency response and provide a better understanding to these groups on the specific needs of the disaster management community.

A follow-up expert meeting is foreseen to be held in Geneva on the 16th November 2011 proposed back-to-back with the 3rd International Conference of Crisis Mappers which will also be held in Geneva on 14-15 November 2011.

Finally a comprehensive International Workshop bringing together a wider community will be held in 2012 bringing together the discussions carried out previously and finalising the work of the one-year project. This workshop will enable UN-SPIDER to gather a more

holistic feedback on how outputs from the crowd-sourcing communities could be shaped to ensure that such outputs can be used rapidly and efficiently by the disaster management community.

Consultants and staff will be mobilised to help identify and systematize lessons learned from events such as the Haiti and Japan earthquakes and other crisis where space-based data has been used to generate information; to conduct surveys with representatives from the disaster management community to identify best practices in terms of the format in which information is used and identified needs by this community in terms of emerging technologies. In addition, efforts will be conducted to build upon the UN-SPIDER Knowledge Portal taking into consideration the recommendations from these communities so that it can be used as a platform for continuous communication among the three communities.

Proposed budget

Description	Total
Staff and consultants	110,000
Travel support for experts from developing countries and from the crowd-sourcing community to the Expert Meetings and the Workshop	50,000
Logistics	40,000
Miscellaneous	20,000
Project Total	220,000