Transition of IGOS Geohazards Theme
Geohazards Community of Practice

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with input from
Goneri Le Cozannet
and many others
Transition of IGOS Geohazards Theme
Geohazards Community of Practice

- IGOS-P Geohazards Theme
- Geohazards Community of Practice
- Frascati Declaration
- IGOS Geohazards transition to GEO Community of Practice
- Geohazards Initiatives and “Supersites”
- Outlook
Those willing to feedback on the documentation produced by the team (e.g. draft Theme Report) can address their comments to the IGOS Geohazards Bureau. The IGOS team does not commit to reply, however issues raised by users worldwide will be taken into account.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Download</th>
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<tbody>
<tr>
<td>May 2002</td>
<td>Theme Proposal submission. The text of the IGOS-GeoHazards Theme Proposal accepted by IGOS-P.</td>
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<tr>
<td>July 2002</td>
<td>First Progress Report.</td>
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<td>July 2002</td>
<td>IGOS brochure release (IGOS GeoHazards Prospectus).</td>
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<td>November 2002</td>
<td>Second Progress Report</td>
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<td>January 2003</td>
<td>Appointment of the IGOS GeoHazards Theme Steering Committee.</td>
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<td>April 2003</td>
<td>Fourth Progress Report.</td>
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<td>June 2003</td>
<td>IGOS Bulletin containing a paper about the GeoHazards Theme</td>
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<td>October 2003</td>
<td>Draft Observational Requirements</td>
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<td>December 2003</td>
<td>Final GeoHazards Theme Report</td>
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<td>November 2004</td>
<td>Creation of the IGOS GeoHazard Bureaus by ESA and BRCM</td>
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<td>August 2007</td>
<td>IGOS GeoHazards Theme Report</td>
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<td>August 2007</td>
<td>Geohazards Earth Observation Requirements</td>
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<tr>
<td>November 2007</td>
<td>IGOS GeoHazards: Geohazards Community of Practice</td>
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<td>November 2007</td>
<td>IGOS GeoHazards: Status and perspectives</td>
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<tr>
<td>November 2007</td>
<td>3rd International GeoHazards Workshop</td>
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Other documentation of interest:
- CEOS Disaster Management Group (DMSG) Final Report
- The Earthscope Undertaking
- Living with Risk: a global review of disaster reduction initiatives (UN/ISDR)
IGOS Geohazards Theme

- First Theme Report published April 2004, ESA

http://www.igosgeohazards.org/documents.asp
IGOS Geohazards Theme

- First Theme Report published April 2004, ESA
- Second Theme Report published August 2007

http://www.igosgeohazards.org/documents.asp
IGOS Geohazards Theme/GEO CoP/Geohazards Initiative

- First Theme Report published April 2004, ESA
- Second Theme Report published August 2007
- Newsletters

http://www.igosgeohazards.org/newsletters.asp
IGOS Geohazards Theme/GEO CoP/Geohazards Initiative

- First Theme Report published April 2004, ESA
- Second Theme Report published August 2007
- Newsletters
- Three International Geohazards Workshops;
  last one in November 2007 in Frascati, Italy:
- Frascati Declaration

http://www.igosgeohazards.org/workshops_meetings.asp
Frascati Declaration

We, as experts in the field of Geohazards, participating to the 3rd International Geohazards Workshop,

... recommend

...

- to stimulate an international and intergovernmental effort to monitor and study selected reference sites by establishing open access to relevant datasets according to GEO principles to foster the collaboration between all various partners and end-users

...

- to maintain and build a coordination body to ensure the further development of the Geohazards initiative and Community of Practice
GEO Geohazards Community of Practice

Since its inception, the IGOS geohazards theme has been a bridge between high level policy makers such as UNESCO and the geohazard community. This role has gained weight through the interaction with the Global Earth Observing System of Systems (GEOSS) currently established by GEO. The GEOSS project helps production and management of observations in a way that benefits environment and humanity. GEOSS is envisioned as a large national and international cooperative effort to bring together existing and new hardware and software, making it all compatible in order to supply data and information at no cost.

Improving access to Earth observations is one of the main objectives of GEO and complements the IGOS Partnership initiative with larger scopes. GEOSS will be developed in order to respond to the needs of the society for:

- Easier and more open data access;
- Informed decision making;
- A better Earth Observing System.

The Geohazards Communities of Practice (CoP)

IGOS Geohazards Theme:
- participates in GEO since 2005
- provides core for the Geohazards Community of Practice

Geohazards CoP:
- aims at bringing together any person or entity concerned with Geohazards;
- particular focus on users and beneficiaries, with exposed populations being the main beneficiaries of an improved hazard monitoring;
- federate a community that acts as a bridge between users and exposed populations, which produces efficient alerts, information and education tools to limit consequences of natural disasters (includes media, local authorities, schools and alert system managers);
- three main groups involved in the CoP have been identified.
IGOS Geohazards Transition to GEO Community of Practice

Data Providers
- Remote Sensing Agencies, In Situ Monitoring Networks
  - Raw data
  - Engineering Level Requirements

End Users Groups
- Public authorities: International, national, local level
  - Media, Education, Capacity Building, Alert
  - Operational state organisations
  - Civil security
  - Disaster Reduction Organisations
  - Earthquakes Reduction Organisations
  - Geological surveys

In-sector Providers
- Data Process and Interpretation Decision Support
- Research scientists and geological surveys
  - Derived information products
  - High Level Requirements

User needs
Current contribution of the IGOS Geohazards Theme/GEO Geohazards CoP/Geohazards Initiative to GEO:
- provided IGOS-P and the GEO UIC with Geohazards Earth Observation Requirements in August 2007
- Geohazards Executive Bureau has been leading two tasks:
  > DI-06-07: provides a pilot OGC-compliant catalogue and web service for hazard maps inventory (GeoHazData),
  > DI-06-03: organizes workshops and raises awareness on InSAR and advanced InSAR techniques in the Geohazards CoP.
- contributes to
  > DI-06-02 through user feedback from regional workshops;
  > DI-06-08 through the promotion of an integrated approach;
  > DI-06-09 through identification of geological high risk areas;
  > DI-06-12 through organization of user workshops in Latin America and South East Asia; and
  > AR-06-05 with GeoHazData.
The Concept Paper is the roadmap for the international Geohazards Initiative that:
- links research, long-term monitoring and operational programmes, bringing together the producers of global observations and the users that require them;
- responds to the scientific and operational geospatial information needs for the prediction and monitoring of geological hazards;
- builds on the work undertaken under IGOS Geohazards, the Geohazards, and the GEO Geohazards tasks;
- proposes an international cooperation framework to put in place recommendations of the Frascati declaration.
Geohazards Initiative and Supersites

Step one:
- aims at facilitating access to data over a certain number of regional areas ("supersites" or natural "geohazards laboratories").
- step one should be implemented for a few "Supersites" within 3 years.
- Eligible as a "Supersite" are regional area that meet at least one of the following criteria:
  > populations and elements are exposed to geological threats;
  > an event is expected to occur in the near future, or a slow process is already ongoing;
  > it should be an appropriate place to stimulate basic geohazard research (earthquakes hazards, landslides, volcanoes, hydro-geological processes) and sea level rise.
Outlook

- The “Supersites initiative” is presently the main contribution of the Geohazards CoP to the current GEO workplan.

- Focus is on the objectives and benefits of the Supersites, and less on the structure of the governing body and organizational aspects.

- Improvement of the CoP:
  > Involvement of funding agencies (OECD, European Community, National Ministries, USAID, World Bank, Islamic Bank or the Asian Development Bank…);
  > work towards participation of national, regional, and local representatives, and land use planers, who are critical in particular for connections to the exposed populations.
  > Integrate private companies that are end users; for example, insurances, re-insurances, infrastructures operators.