GROUP ON
EARTH OBSERVATIONS

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# PRESS RELEASE

## Bucharest conference to strengthen environmental monitoring of planet Earth

### Global Earth Observation System of Systems (GEOSS) will save lives, improve resource management, and track humanity's impact on the environment

**Bucharest, 19 November 2008** – Some 300 officials from the Group on Earth Observations' member governments and organizations are meeting here on 19 and 20 November to plan the next three-year phase in the construction of a new global monitoring network that will support science-based decision-making about environmental risks and opportunities.

The Global Earth Observation System of Systems, or GEOSS, is linking together the world's diverse monitoring networks, instruments, data bases, models and other decision-support tools into one fully coordinated "system of systems".

By integrating data from ocean buoys, weather stations, satellites, seismic monitors and innumerable other technologies, GEOSS will empower decision-makers to address climate change, biodiversity loss, water shortages, disease epidemics, natural disasters and other critical global challenges.

"The satellites, ground sensors and other building blocks for measuring environmental parameters are now in place. They only need to be linked to one another to form a comprehensive 'system of systems', or GEOSS, that will monitor carbon dioxide emissions, forecast variations in food and water supplies, identify vulnerabilities to climate change and disease and provide other integrated and targeted information we need to address the world's most pressing problems," said GEO Secretariat Director José Achache.

In Bucharest, the GEO annual plenary (GEO-V) aims to finalize and adopt the 2009-2011 work plan for constructing GEOSS. GEO members are contributing to this voluntary global project by expanding and interlinking their respective observation systems. The proposed new work plan aims to take GEOSS from its start-up phase to the implementation phase that will actually put the components of GEOSS into place.

Key elements of the draft work plan include:

- Establishing the GEO Portal. The "GEOSS Common Infrastructure" consists of web-based portals; clearinghouses for searching data, information and services; and registries containing information about GEOSS. It will provide "one-stop shopping" portals to help the users of Earth observations to access and search for information more easily. The GEO community is currently evaluating the various elements that have been put into place with the aim of finalizing the arrangements in 2009.

- Promoting free access to data. GEOSS can only succeed if Earth observation data is widely and freely available to all interested users. GEO is building an international consensus that will make it possible to adopt the GEOSS Data Sharing Principles at a Ministerial Summit in 2010.

- Advancing the GEO Biodiversity Observation Network. The complexity of biological diversity, and the highly distributed nature of the systems and organizations that monitor it, make establishing the

"biodiversity arm" of GEOSS a particular challenge. The Bucharest meeting will be presented with an implementation plan for making a biodiversity observation network (GEO BON) a reality.

- Building a system for monitoring carbon. GEO is responding to growing international interest in tracking carbon flows by elaborating a plan for interlinking an array of existing and planned carbon monitoring instruments and tools. The plenary meeting will be asked to give this plan the go-ahead.

The Group on Earth Observations was established in 2005 after the World Summit on Sustainable Development (WSSD), the Group of Eight leading industrialized countries (G8) and three ministerial Earth Observation Summits all called for improving existing observation systems. Its membership now includes 75 governments and the European Commission; 51 "participating organizations" also contribute to its work.

GEO is building the Global Earth Observation System of Systems on the basis of a 10-Year Implementation Plan, which runs through the year 2015. GEOSS addresses nine priorities of critical importance to the future of the human race: it will help countries to protect themselves against natural and human-induced disasters, understand the environmental sources of health hazards, manage energy resources, respond to climate change and its impacts, safeguard freshwater resources, improve weather forecasts, manage ecosystems, promote sustainable agriculture, and conserve biodiversity.

**Note to journalists:** Journalists are invited to two back-to-back press conferences that will take place on Wednesday, 19 November, in the Palace of the Parliament. For more information, please see www.earthobservations.org or contact Anca Racheru of the Romanian Space Agency for accreditation information at +40 21 316 8722 or Michael Williams of the GEO Secretariat from 17-22 November at +41 79 572 9628 or mwilliams@geosec.org and from 24 November at +41 22 730 8293.