

Environment: Sustainable Development

Commitment

“Held First and Second Earth Observation Summits (EOS) and adopted a Framework document on a Global Earth Observation System of Systems (GEOSS). Planning to adopt a final 10-year strategic implementation plan on GEOSS at Third EOS in 2005 and working to identify the international mechanism to provide coordination and oversight for GEOSS.”

*Science and Technology for Sustainable Development:
“3r” Action Plan and Progress on Implementation*

Background

At the 2003 Evian summit, the G8 called for an integrated Earth observation system to observe and track climate change and other environmental trends on Earth. Such an integrated climate tracking system could provide valuable information to the benefit of all nations. Two summits (the First and Second Earth Observation Summits) have been held to date. The Third summit is planned for February 2005, and will be held in Brussels, Belgium. At this third summit the ten year implementation plan for a Global Earth Observation System of Systems will, in the words of one U.S administration official, be ‘blessed’.³³⁶

All countries listed in this report receive scores that indicate theirs is a work in progress. This is because the third EOS summit has yet to be held, and no mechanism to coordinate and oversee GEOSS has yet been identified.

Assessment

Score	Lack of Compliance -1	Work in Progress 0	Full Compliance +1
Canada		0	
France		0	
Germany		0	
Italy		0	
Japan		0	
Russia		0	
United Kingdom		0	
United States		0	
European Union		0	
Overall		0	

³³⁶ An Overview of U.S. Global Climate Change Policy In Advance of the Upcoming Conference of the Parties to the UN Framework Convention on Climate Change fpc.state.gov/fpc/39314.htm

Individual Country Compliance Breakdown

1. Canada

Canada receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that Canada is currently working towards maintaining their commitment to the February 2005 Summit.

One way in which Canada has shown commitment to the adoption of the 10-year strategic implementation plan on the Global Earth Observation System of Systems (GEOSS) is through the creation and maintenance of the Canadian Group on Earth Observations (CGEO).³³⁷ The CGEO structure is mirrored after the Group on Earth Observation’s (GEO)³³⁸. Canada also attended the GEO Special Session on Governance in 2004 which clearly demonstrates how Canada is “working to identify the international mechanism to provide coordination and oversight for the GEOSS”³³⁹. Canada also hosted the GEO-5 in November 2004 in Ottawa, Canada. After the meeting a Draft GEOSS 10-year Implementation Plan Reference Document (GEO 203–1) was completed and circulated which took into account conclusions from the GEO-5 meeting. Furthermore, “the Draft Final version of the Reference Document for acceptance by GEO-6 will be circulated on 20 January 2005.”³⁴⁰ The existence of such a detailed draft displays an effort towards the commitment of adopting “a final 10-year strategic implementation plan on GEOSS at the Third EOS in 2005.”³⁴¹

Canada also Co-Chairs two subgroups of the GEO, the User Requirements and Outreach Subgroup as well as the Data Utilization Subgroup.³⁴² In addition, Canada has clearly committed to attending the GEO-6 and EOS-3³⁴³, a requirement of the commitment.

As a participant in the GEO the CGEO states that they are developing a plan to strengthen its infrastructure in order to “upgrade its space, ocean, and ground observation capabilities.”³⁴⁴ Canada plans to play a “major role in developing observation systems for the Arctic.”³⁴⁵ Committing to working within existing Earth Observations systems shows Canada’s commitment to the GEO and therefore the GEOSS, demonstrating their investment in fulfilling the G8 commitment.

³³⁷ Canadian Group on Earth Observations, www.cgeo-gcot.gc.ca

³³⁸ Canadian Group on Earth Observations : Overview, www.cgeo.gc.ca/about/overview_e.htm

³³⁹ Sea Island Summit: Summit Documents. “Science and Technology for Sustainable Development: "3r" Action Plan and Progress on Implementation” www.g8usa.gov/d_0610041.htm

³⁴⁰ Group on Earth Observations: “Draft GEOSS Plan Reference Document 203–1” earthobservation.org/docs/DRAFT%20GEOSS%20Plan%20Reference%20Document%20203-1.pdf

³⁴¹ Sea Island Summit: Summit Documents. “Science and Technology for Sustainable Development: "3r" Action Plan and Progress on Implementation” www.g8usa.gov/d_0610041.htm

³⁴² Group on Earth Observations: Subgroups earthobservation.org/sub_groups.asp

³⁴³ Canadian Group on Earth Observations: Future Events www.cgeo.gc.ca/calendar/geo6_e.htm

³⁴⁴ Canadian Group on Earth Observations, “Canadian Brochure — Taking the Pulse of the Planet” www.cgeo.gc.ca/registration/CA_Brochure_e.asp#s3

³⁴⁵ Ibid.

2. France

France receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that France is currently working towards maintaining their commitment to the February 2005 Summit

A member of the GEO, France has been represented at two GEO meetings since the Sea Island summit: in September 2004, at a special GEO session on governance in Belgium, and in November, at the GEO-5 meeting in Ottawa. At the special session on governance, the GEO Implementation Plan Task Team released a report on governance in the 10-year implementation plan, calling for decisions to be made in terms of management and resources, and discussing new operating mechanisms, the relative roles of governments and participating organizations, the relationship of GEO structure to that of the United Nations, and the establishment of GEO successor mechanism.³⁴⁶ At the GEO-5 meeting in Ottawa, the GEO further negotiated the implementation plan on GEOSS, which is set to be delivered at the 3rd EOS (Earth Observation Summit) in Brussels in February, 2005.³⁴⁷ A draft of the GEOSS plan was distributed to the GEO community in October, 2004, and a final draft is scheduled to be ready in January for GEO-6 adoption.³⁴⁸

If the GEO remains on schedule, adopting a ten year implementation plan and manages to identify mechanisms of governance to provide coordination for GEOSS at the 3rd GEO summit in February, France will achieve a passing level of compliance with its Sea Island commitments.

3. Germany

Germany receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that Germany is currently working towards maintaining their commitment to the February 2005 Summit

The German government has committed to attend the third Earth Observation Summit, to be held February 16th, 2005.³⁴⁹ Furthermore, the German government currently endorses the present Framework of the Global Earth Observation System of Systems (GEOSS) 10 year plan, established at the 5th meeting of the GEO on November 29-30, 2004.³⁵⁰ German participation in the International Partnership for the Hydrogen Economy (IPHE), World Meteorological Organization (WMO), Integrated Global Observing Strategy (IGOS) and the Committee for Earth Observation Satellites (CEOS), Global Monitoring for Environment and Security

³⁴⁶ “Topics discussed at Special Session on Governance. Brussels, Belgium, 27-28 September, 2004” Found at: earthobservations.org/docs/special/B%20-%20Governance%20Session%20Review.doc

³⁴⁷ europa.eu.int/comm/space/news/article_1553_en.html

³⁴⁸ Ivan B. DeLoatch et al (GEO Implementation Plan Task Team). “Draft GEOSS 10-Year Implementation Plan and Report on Reference Document.” 29 November 2004. Found at earthobservations.org

³⁴⁹ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Bried_v2_LRP_rev2_20040505.ppt

³⁵⁰ www.mext.go.jp/english/kaihatu/earth/pdf/032_germany.pdf

(GMES),³⁵¹ as well as funding of the Global Runoff Data Centre (GRDC) and the Global Precipitation Climatology Centre (GPCC)³⁵² demonstrates the German commitment to the development of GEOSS. German missions such as the TerraSAR, RapidEYE and the SCIAMACHY mission are demonstrative of the German national commitment to GEOSS.³⁵³

4. Italy

Italy receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that Italy is currently working towards maintaining their commitment to the February 2005 Summit

The government of Italy has committed their attendance at the third Earth Observation Summit, to be held February 16th, 2005.³⁵⁴ The Italian government has also demonstrated a commitment to the GEOSS through participation in GEO Meetings,³⁵⁵ as well as the preparation for implementation of the COSMO-SkyMed, an observation system to be launched in June 2005.³⁵⁶

5. Japan

Japan receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that Japan is currently working towards maintaining their commitment to the February 2005 Summit

In compliance with their Sea Island Summit pledge, the government of Japan has committed to attend the third Earth Observation Summit (EOS) meeting on February 16th, 2005 in Brussels, Belgium³⁵⁷. Japan’s Akio Yuki is one of four co-chairs of the ad hoc Group on Earth Observations³⁵⁸ (established at the EOS1 to develop the 10-year strategic implementation plan³⁵⁹ to be adopted at EOS3). In addition, Japan has attended all GEO meetings leading up to the EOS3 that have occurred since the 2004 G8 summit, including the GEO-5 and GEO Special Session on Governance. Japan also hosted the second Earth Observation Summit in April 2004³⁶⁰. Japan’s commitment to this issue is strengthened by evidence of a variety of Earth Observation initiatives including, but not limited to, an Office of Satellite Technology, Research and Applications, Earth Observations Center, Earth Observation Research Center and Frontier Research System for Global Change. These all fall under the umbrella of the National Space

³⁵¹ Ibid.

³⁵² wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Bried_v2_LRP_rev2_20040505.ppt

³⁵³ www.mext.go.jp/english/kaihatu/earth/pdf/032_germany.pdf

³⁵⁴ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Bried_v2_LRP_rev2_20040505.ppt

³⁵⁵ Ibid.

³⁵⁶ www.skyrocket.de/space/index_frame.htm?www.skyrocket.de/space/doc_sdat/cosmo-skymed-1.htm

³⁵⁷ www.kantei.go.jp/foreign/koizumispeech/2004/06/22science_e.html

³⁵⁸ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Brief_v2_LRP_rev2_20040505.ppt#5

³⁵⁹ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Brief_v2_LRP_rev2_20040505.ppt#4

³⁶⁰ earthobservations.org/

Development Agency of Japan's Earth Observation Project³⁶¹, which is also in the process of developing an earth observation satellite, ADEOS-II³⁶². Japan also actively participates in several international research and development programs including the Committee on Earth Observation Satellites (CEOS)³⁶³, ARGO (part of the Integrated Global Observation Strategy)^{364,365} and the Global Observation Information Network (GOIN)³⁶⁶.

6. Russia

Russia receives a grade of '0' for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that Russia is currently working towards maintaining their commitment to the February 2005 Summit.

Russia will be in attendance at EOS-3 in February 2005.

7. United Kingdom

The United Kingdom receives a grade of '0' for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that the United Kingdom is currently working towards maintaining their commitment to the February 2005 Summit.

The United Kingdom attended the GEO Special Session on Governance in 2004 which clearly demonstrates how the UK is "working to identify the international mechanism to provide coordination and oversight for the GEOSS"³⁶⁷. They were also present at the GEO-5 in November 2004 in Ottawa, Canada. After the meeting a Draft GEOSS 10-year Implementation Plan Reference Document (GEO 203-1) was completed and circulated which took into account conclusions from the GEO-5 meeting. Furthermore, "the Draft Final version of the Reference Document for acceptance by GEO-6 will be circulated on 20 January 2005."³⁶⁸ The existence of such a detailed draft displays an effort towards the commitment of adopting "a final 10-year strategic implementation plan on GEOSS at the Third EOS in 2005."³⁶⁹

³⁶¹ www.nasda.go.jp/projects/eos/index_e.html

³⁶² www.mofa.go.jp/policy/environment/wssd/2002/event2-1.html

³⁶³ www.ceos.org/pages/agencies.html

³⁶⁴ www.mofa.go.jp/policy/environment/wssd/2002/event2-1.html

³⁶⁵ www.argo.ucsd.edu/

³⁶⁶ www.goin.nasda.go.jp/

³⁶⁷ Sea Island Summit: Summit Documents. "Science and Technology for Sustainable Development: "3r" Action Plan and Progress on Implementation" www.g8usa.gov/d_0610041.htm

³⁶⁸ Group on Earth Observations: "Draft GEOSS Plan Reference Document 203-1" earthobservation.org/docs/DRAFT%20GEOSS%20Plan%20Reference%20Document%20203-1.pdf

³⁶⁹ Sea Island Summit: Summit Documents. "Science and Technology for Sustainable Development: "3r" Action Plan and Progress on Implementation" www.g8usa.gov/d_0610041.htm

The United Kingdom also Co-Chairs the User Requirements and Outreach Subgroup of the GEO.³⁷⁰ Additionally, the United Kingdom is currently the chair of the Committee on Earth Observation Satellites (CEOS) which the Director General of the British National Space Centre says will allow “the UK to play a leading international role in establishing the organization as an integral part of the recently set-up Group on Earth Observation (GEO) framework and its new ten-year implementation plan.”³⁷¹ The UK has also played a significant role in the launching and operation of Envisat, “the largest and most complex Earth observation satellite ever developed in Europe.”³⁷² Envisat will definitely be a contributor to Earth Observation (EO). As well, the BNSC is involved in various EO-related international organizations such as the Global Monitoring for Environment and Security (GMES) initiative, seen as a “groundbreaking contribution to the GEOSS.”³⁷³

Investing in existing EO systems shows Britain’s commitment to the GEO and therefore the GEOSS, demonstrating their stake in fulfilling the G8 commitment.

8. United States

The United States receives a grade of ‘0’ for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that the United States is currently working towards maintaining their commitment to the February 2005 Summit

The United States of America has committed to attend the third Earth Observation Summit (EOS) meeting on February 16th, 2005 in Brussels, Belgium³⁷⁴, in compliance with their Sea Island Summit Pledge. American commitment to GEOSS comes with the reinforcement of the appointment of American Vice Admiral Conrad Lautenbacher as one of four co-chairs of the ad hoc Group on Earth Observations³⁷⁵ (established at the EOS1 to develop the 10-year strategic implementation plan³⁷⁶ to be adopted at EOS3). Washington, D.C. also played host to the first Earth Observation Summit in July 2003 and the first meeting of the GEO in 2003³⁷⁷. In addition, the United States attended all GEO meetings leading up to the EOS3 including the GEO-5 and GEO Special Session on Governance since the Sea Island Summit. Commitment to earth observation systems by the United States can be further established through their involvement with, and support for, organizations and agencies like the Office of Climate Observation³⁷⁸, the Environmental Protection Agency³⁷⁹, the National Atmospheric and Oceanic Administration³⁸⁰

³⁷⁰ Group on Earth Observations: Subgroups earthobservation.org/sub_groups.asp

³⁷¹ British National Space Centre, “UK Leads International Earth Observation Group” November 17th, 2004 at bnscc.gov.uk/default.aspx?nid=4848

³⁷² British National Space Centre, Envisat Showcase at bnscc.gov.uk/default.aspx?nid=4506

³⁷³ EUROPA — Space — Earth & Space Week — The GEO story europa.eu.int/comm/space/esw/group/overview/article_1673_en.htm

³⁷⁴ usinfo.state.gov/gi/Archive/2004/Jun/14-782228.html

³⁷⁵ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Brief_v2_LRP_rev2_20040505.ppt#5

³⁷⁶ wgcv.ceos.org/docs/plenary/wgcv22/GEO_Generic_Brief_v2_LRP_rev2_20040505.ppt#4

³⁷⁷ earthobservations.org/summit/index.html

³⁷⁸ www.ogp.noaa.gov/mpe/co/index.htm

³⁷⁹ www.epa.gov/geoss/

and most importantly, the development of the Interagency Working Group on Earth Observations (IWGEO). IWGEO was formed to develop a 10-year plan for implementing the United States' components of the integrated Earth Observation System³⁸¹.

9. European Union

The European Union receives a grade of '0' for a work in progress regarding its environment commitment. Full compliance cannot yet be determined, as the Third Earth Observation Summit (EOS-3) when it has been scheduled to adopt a final 10-year strategic implementation plan has not yet taken place. However, it is clear that the European Union is currently working towards maintaining their commitment to the February 2005 Summit

The European Union is proceeding toward an acceptable level of compliance with Sea Island's Global Earth Observation System of Systems commitments. As a member of the GEO, the EU took part in a special session on governance held September 27-28 in Brussels, Belgium, as well as in the GEO-5 meeting held in Ottawa, Canada, November 29-30. The special session on governance was called by Achilleas Mitsos, the Director General for research at the European Commission and one of the 4 GEO chairs, who stated at the session that the GEO was "on schedule to deliver the 10-year Plan at the Third EO Summit in Brussels next February"³⁸². At this session, the GEO Implementation Plan Task Team released a report on governance in the 10-year implementation plan, calling for decisions to be made in terms of management and resources³⁸³. The group discussed several other issues relating to mechanisms for coordination and oversight of the GEOSS, including new operating mechanisms, the relative roles of governments and participating organizations, the relationship of GEO structure to that of the United Nations, and the establishment of a GEO successor mechanism.³⁸⁴

At the GEO-5 meeting in Ottawa, the GEO met to further negotiate the implementation plan on GEOSS, to be delivered at the Third EOS in February, 2005 in Brussels, Belgium. A draft of the GEOSS plan was distributed to the GEO community in October, 2004, with a final draft to be ready in January for GEO-6 adoption.³⁸⁵ As well as hosting the GEO-6 meeting and the third GEO summit in February, 2005, the EU has planned an Earth and Space week of public awareness activities surrounding the summit³⁸⁶

If the goals of the GEO laid out at the GEO-5 in Ottawa are attained at the third GEO summit in Brussels in February, then the EU will achieve an acceptable level of compliance with its Sea Island commitments.

³⁸⁰ www.noaa.gov/search.html

³⁸¹ iwgeo.ssc.nasa.gov/

³⁸² europa.eu.int/comm/space/news/article_1553_en.html

³⁸³ "Topics discussed at Special Session on Governance. Brussels, Belgium, 27-28 September, 2004" Found at: earthobservations.org/docs/special/B%20-%20Governance%20Session%20Review.doc

³⁸⁴ Ibid.

³⁸⁵ Ivan B. DeLoatch et al (GEO Implementation Plan Task Team). "Draft GEOSS 10-Year Implementation Plan and Report on Reference Document." 29 November 2004. Found at earthobservations.org

³⁸⁶ europa.eu.int/comm/space/esw/summit/article_1514_en.htm

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