

## Appendix B: Asian Tsunami Assistance

### Commitment

“We support urgent consideration by relevant fora of the international community to put in place an effective tsunami early warning system in the Indian Ocean, and the infrastructure necessary to make it effective.”

*Statement by G7 Finance Ministers on Assisting Countries  
Devastated by the Indian Ocean Tsunami*<sup>1014</sup>

### Background

On 26 December 2004, a massive earthquake measuring 9.0 of the Richter scale occurred on the floor of the Indian Ocean. The subduction earthquake generated tsunami tidal waves traveling at speeds of several hundreds of kilometres, which collided with the shore lines of several Asian and east African countries, namely Indonesia, Sri Lanka, Maldives, Thailand, India, Seychelles, Somalia, and Kenya. The tsunamis caused only US\$10-billion in damage<sup>1015</sup> but are estimated to have killed 225,000 people including 166, 320 in Indonesia alone.<sup>1016</sup> The tragedy triggered an outpouring of aid and support from governments and private citizens around the world, totally several billions of dollars. On 7 January 2005, the G7 Finance Ministers, as a part of the global response to the tragedy, released a special communiqué detailing the actions of G7 states to countries in the tsunami-zone. Most significantly, they called on the Paris Club to impose a debt moratorium on countries affected by the tsunami and called for creation of a tsunami early warning system.<sup>1017</sup> Since that time there have been several multilateral meetings to help coordinate and find the early warning system including: Second World Conference on Disaster Reduction hosted in Kobe, Japan on 18-22 January 2005; Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005; China- ASEAN Workshop on Tsunami Warning in Beijing, China on 25-26 January 2005; and the Third Earth Observation Summit in Brussels, Belgium on 16 February 2005. It is expected that a tsunami early warning system for the Indian Ocean will be operational by mid-2006 and will be operated by the UNESCO’s Intergovernmental Oceanographic Commission.<sup>1018</sup>

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<sup>1014</sup> *Statement by G7 Finance Ministers on Assisting Countries Devastated by the Indian Ocean Tsunami, 7 January 2005.* G8 Information Centre (Toronto) 7 January 2005. Date of Access: 12 January 2005 [www.g8.utoronto.ca/finance/fm050107.htm].

<sup>1015</sup> “2004 Natural Disasters Death Toll Doubles – Insurer,” *Planet Ark: Reuters Daily Environmental News* (New York) 28 February 2005. Date of Access: 28 February 2005 [www.planetark.com/dailynewsstory.cfm/newsid/29742/story.htm].

<sup>1016</sup> “Tsunami Death Tolls Rises to 225,000,” *Guardian Unlimited* (London) 19 January 2005. Date of Access: 1 February 2005 [www.guardian.co.uk/indonesia/Story/0,2763,1394002,00.html].

<sup>1017</sup> *Statement by G7 Finance Ministers on Assisting Countries Devastated by the Indian Ocean Tsunami, 7 January 2005.* G8 Information Centre (Toronto) 7 January 2005. Date of Access: 12 January 2005 [www.g8.utoronto.ca/finance/fm050107.htm].

<sup>1018</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/].

## Assessment

Score	Lack of Compliance -1	Work in Progress 0	Full Compliance +1
Canada		0	
France		0	
Germany			+1
Italy		0	
Japan			+1
Russia	(-1)*		
United Kingdom		0	
United States			+1
European Union			+1
<b>Overall: 0.50</b>			

\*Russia's score is not calculated in this overall average for this commitment since the commitment was made at the G7 Finance Ministers' Meeting to which Russia is not a member.

## Individual Country Compliance Breakdown

### 1. Canada: 0

Canada has exhibited evidence of its desire to comply with its commitment regarding the Asian Tsunami disaster, as agreed to at the G7 Finance Ministers Meeting on 7 January 2005.

Canada attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. Canada endorsed the Phuket Ministerial Declaration which committed participants "to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements and strengthening and upgrading of national systems, while moving towards a coordinated regional system." The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1019</sup>

Canada attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. The delegation was led by Paul E. Kennedy, deputy minister for Public Safety and Emergency Preparedness Canada.<sup>1020</sup> In a statement delivered to the conference by Ottawa's delegation, the government stated that "Canada supports calls for a global multi-hazard early warning system, and the Prime Minister has affirmed our commitment to working cooperatively with Asian nations, within a

<sup>1019</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf].

<sup>1020</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [www.unisdr.org/wcdr/].

multilateral framework, on a tsunami early warning system for the Indian Ocean region.”<sup>1021</sup> At the meeting participants committed to establishing an tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1022</sup>

During a state visit to India on 18 January 2005, Canadian Prime Minister Paul Martin and Indian Prime Minister Manmohan Singh agreed to the creation of an inter-governmental Science and Technology Initiative. The Initiative is intended to encourage strategic collaboration in selected areas of science and industrial technologies and each country established designated scientific advisers to report on its progress. In the first major project within the S&T Initiative, “India and Canada agreed to contribute expertise toward the creation of a tsunami early warning system for the countries of the Indian Ocean, in concert with multilateral efforts.”<sup>1023</sup> In a statement to media while in New Delhi, Martin stated that “Canada wants to participate in the development of such a system.”<sup>1024</sup>

In addition, Canada also pledged, through the Canadian International Development Agency, C\$1-million towards a global project to mainstream disaster reduction into the poverty reduction, governance and environment portfolios of the United Nations Development Programme in 2005 — an initiative that may result in funds being dedicated toward a tsunami early warning assistance. Ottawa also pledged another C\$1-million to the International Federation of the Red Cross and Red Crescent Societies for disaster preparedness and capacity building of national societies which too will likely involve the creation of an early warning system.<sup>1025</sup>

Overall, Canada has pledged C\$425-million over five years to disaster assistance and reconstruction efforts in the region, including \$265 million for humanitarian aid and \$160 million for rehabilitation and reconstruction over the next five years in Sri Lanka and Indonesia.<sup>1026</sup>

## 2. France: 0

France has registered evidence of its desire to comply with its commitment regarding the Asian Tsunami disaster, as agreed to at the G7 Finance Ministers Meeting on 7 January 2005, developing working models and new strategies for implementing an early warning system.

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<sup>1021</sup> *Canada’s Statement at Kobe Conference*, Foreign Affairs Canada (Ottawa) 20 January 2005. Date of Access: 26 January 2005 [webapps.dfait-maeci.gc.ca/minpub/Publication.asp?publication\_id=382075&Language=E&docnumber=12].

<sup>1022</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/].

<sup>1023</sup> *Joint Declaration by Canada and India*, Office of the Prime Minister (Ottawa) 18 January 2005. Date of Access: 20 January 2005 [pm.gc.ca/eng/news.asp?id=391].

<sup>1024</sup> “India, Canada to cooperate on tsunami warning system,” *South-Asia News* 18 January 2005. Date of Access: 20 January 2005 [south-asia.news.designerz.com/india-canada-to-cooperate-on-tsunami-warning-system.html].

<sup>1025</sup> *Canada’s Statement at Kobe Conference*, Foreign Affairs Canada (Ottawa) 20 January 2005. Date of Access: 26 January 2005 [webapps.dfait-maeci.gc.ca/minpub/Publication.asp?publication\_id=382075&Language=E&docnumber=12].

<sup>1026</sup> *Tsunami Disaster Response: Overview*, Canadian International Development Agency (Ottawa) 25 January 2005. Date of Access: 27 January 2005 [www.acdi-cida.gc.ca/tsunami-e].

France attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. France endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements and strengthening and upgrading of national systems, while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1027</sup>

France attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. The delegation was led by Christian Rouyer, a delegate of the Humanitarian Affairs Division of the Ministère des Affaires Etrangères.<sup>1028</sup> At the conference, France proposed a working-model (alongside rival models presented by Germany and Japan) for an Indian Ocean tsunami early warning system<sup>1029</sup> and offered the French island of Reunion as its base.<sup>1030</sup> The Conference neither confirmed nor rejected the French model and it is assumed UNESCO will take it under consideration. At the meeting, participants committed to establishing an tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1031</sup>

At the United Nations Meeting of Small Island Developing States (SIDS) on 11 January 2005 in Port Louis, Mauritius, France, along with the United States, once again pledged its support for the construction of a tsunami early warning system.<sup>1032</sup> However, Paris has also been involved in more unorthodox early warning schemes. On 10 January 2005, France, along with India, Indonesia, Sri Lanka and Thailand began developing a tsunami alert system that would employ SMS (short message services) messages sent to cellular phones to warn individuals of incoming tsunamis. While details of the plan are sparse, Hong Kong and the Netherlands already employ SMS in their emergency systems.<sup>1033</sup>

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<sup>1027</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1028</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [[www.unisdr.org/wcdr/](http://www.unisdr.org/wcdr/)].

<sup>1029</sup> Monsurul Huq, “Bangladesh Marks Her Presence,” *The Daily Star* (Dhaka) 25 January 2005. Date of Access: 1 February 2005 [[www.thedailystar.net/2005/01/25/d501251503112.htm](http://www.thedailystar.net/2005/01/25/d501251503112.htm)].

<sup>1030</sup> “Tsunami Warning Systems Examined,” *Sydney Morning Herald* (Sydney) 19 January 2005. Date of Access: 1 February 2005 [[www.smh.com.au/news/Breaking-News/Tsunami-warning-systems-examined/2005/01/19/1106074822434.html?oneclick=true](http://www.smh.com.au/news/Breaking-News/Tsunami-warning-systems-examined/2005/01/19/1106074822434.html?oneclick=true)].

<sup>1031</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1032</sup> “US and France pledge support to help establish early tsunami warning system,” Pacific Island News Association / UNESCO(Suva / Paris) 11 January 2005. Date of Access: 1 February 2005 [[www.unesco.org/csi/B10/PACNEWS/tsunami.doc](http://www.unesco.org/csi/B10/PACNEWS/tsunami.doc)].

<sup>1033</sup> Ben Charny, “SMS Enlisted for Tsunami Warning System?” *CNET Asia* (Hong Kong) 10 January 2005. Date of Access: 1 February 2005 [[asia.cnet.com/news/communications/0,39037080,39212474,00.htm](http://asia.cnet.com/news/communications/0,39037080,39212474,00.htm)].

### 3. Germany: +1

Germany has registered very strong evidence of its desire to fulfill its commitment regarding the Asian Tsunami disaster, as agreed to at the G7 Finance Ministers Meeting on 7 January 2005. Berlin has adopted a leadership role in this area, matching its already high levels of humanitarian aid and relief to the tsunami zone, with a detailed model and ample political will to create an early warning system.

On 5 January 2005, the German federal cabinet gave its support to the commissioning of the Georesearch Centre in Potsdam (GFZ) to formulate a plan for establishing a tsunami early warning system in the Indian Ocean.<sup>1034</sup> In doing so, Berlin is attempting to adopt a global leadership position on this issue while also establishing their plan as the preferable one, over counter-proposals by the US and Japan. On 13 January 2005, Chancellor Gerhard Schröder, Research Minister Edelgard Bulmahn, Foreign Minister Joschka Fischer, and Transport Minister Manfred Stolpe reviewed and approved of the model proposed by the GFZ in a presentation made in the Chancellery and urged its urgent implementation. Schröder stated that “An effective prevention system must be fast and of the latest technical state of the art...It can only be established together with the affected countries and the other partner states. This requires an international scientific-technical cooperation at the highest level.” To build on this, Foreign Minister Fischer has already offered to provide the technology to the governments of the countries affected by the tsunami disaster during his visits there January 7–10.<sup>1035</sup>

The GFZ model would develop 30 to 40 new stations in the Indian Ocean region to be integrated into a global network of 50 seismological research bodies, and would concentrate initially on Sri Lanka and Indonesia, two of the nations hardest hit by the devastating Dec. 26 tsunami which killed at least 156,000 people.<sup>1036</sup> The cost of the initial stage is estimated at 25 (US\$33-million) while the overall cost of the project is estimated to be 40-million euros (US\$53-million).<sup>1037</sup> To date, the German government has been highly ambiguous of whether its commitment to “provide” an early warning system means Berlin will cover the entire cost, or whether it simply means it will provide the model. It should be noted, however, that the GFZ was created partly through federal legislation and 90% of its budget is provided by the federal Ministry for Education and Research.<sup>1038</sup>

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<sup>1034</sup> *German Researchers Outline Tsunami Early-Warning System*, German Embassy to the United States (Washington D.C. / Berlin) 13 January 2005. Date of Access: 1 February 2005 [[www.germany-info.org/relaunch/politics/new/pol\\_asia\\_earthquake\\_tsunami\\_warning\\_01\\_2005.html](http://www.germany-info.org/relaunch/politics/new/pol_asia_earthquake_tsunami_warning_01_2005.html)]

<sup>1035</sup> *German Researchers Outline Tsunami Early-Warning System*, German Embassy to the United States (Washington D.C. / Berlin) 13 January 2005. Date of Access: 1 February 2005 [[www.germany-info.org/relaunch/politics/new/pol\\_asia\\_earthquake\\_tsunami\\_warning\\_01\\_2005.html](http://www.germany-info.org/relaunch/politics/new/pol_asia_earthquake_tsunami_warning_01_2005.html)]

<sup>1036</sup> *Concept of the Federal Republic of Germany for a Tsunami Early Warning System in the Disaster Region of the Indian Ocean*, Ministry of Education and Research (Berlin) 13 January 2005. Date of Access: 1 February 2005 [[www.germany-info.org/relaunch/politics/new/konzept-tsunami-fruehwarnung-bmbf-engl.pdf](http://www.germany-info.org/relaunch/politics/new/konzept-tsunami-fruehwarnung-bmbf-engl.pdf)].

<sup>1037</sup> “Germany Wants Lead on Tsunami Early Warning System,” *Reuters* (London) 8 January 2005. Date of Access: 1 February 2005 [[www.alertnet.org/thenews/newsdesk/L06570391.htm](http://www.alertnet.org/thenews/newsdesk/L06570391.htm)]

<sup>1038</sup> *Germany willing to provide tsunami early warning system*, Die Bundesregierung (Federal Government) Website (Berlin) 17 January 2005. Date of Access: 1 February 2005 [[www.bundesregierung.de/en/-,10001.774881/artikel/Germany-willing-to-provide-tsu.htm](http://www.bundesregierung.de/en/-,10001.774881/artikel/Germany-willing-to-provide-tsu.htm)].

In addition, Germany attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. Berlin's delegation was led by Mr. Hans-Joachim Daerr Ambassador, Director General for Global Issues, the United Nations, Human Rights and Humanitarian Aid from the Federal Foreign Office.<sup>1039</sup> At the conference Germany presented its model developed by the GFZ and it was taken under consideration by UNESCO who is coordinating the construction of the early warning system, alongside parallel models proposed by France and Japan. In addition, Germany announced a commitment to host a United Nations conference on early warning systems in Bonn in early 2006 but it was unknown if this was limited to early warning systems for tsunamis or for natural disasters in general.<sup>1040</sup> At the Kobe meeting participants committed to establishing an tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1041</sup>

Lastly, Germany also attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. Germany endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements and strengthening and upgrading of national systems, while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1042</sup>

To date, Berlin has pledged 500 million euros (US\$650-million) in humanitarian aid and assistance to the countries impacted by the tsunami disaster, in addition to the 150 million euros (US\$195-million pledged privately by German citizens). It is estimated that 60 Germans were killed in the tsunami, and another 300 injured.<sup>1043</sup>

#### 4. Italy: 0

Italy has demonstrated minimal evidence of its desire to contribute towards a tsunami early warning system in the Indian Ocean via-a-vis its G8 counterparts. Italy has primarily attended

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<sup>1039</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [[www.unisdr.org/wcdr/](http://www.unisdr.org/wcdr/)].

<sup>1040</sup> *Draft common statement of the Special Session on the Indian Ocean Disaster: Risk Reduction for a Safer Future*, Ministry of Foreign Affairs (Tokyo) 20 January 2005. Date of Access: 15 February 2005 [[www.unisdr.org/wcdr/official-doc/L-docs/draft-statement-special-session-english.pdf](http://www.unisdr.org/wcdr/official-doc/L-docs/draft-statement-special-session-english.pdf)].

<sup>1041</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1042</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1043</sup> *Germany Increases Disaster Aid to \$650 Million*, German Embassy to the United States (Washington D.C. / Berlin) 5 January 2005. Date of Access: 1 February 2005 [[www.germany-info.org/relaunch/politics/new/pol\\_asia\\_earthquake\\_tsunami\\_01\\_05\\_2005.html](http://www.germany-info.org/relaunch/politics/new/pol_asia_earthquake_tsunami_01_05_2005.html)].

conferences on tsunami early warning systems along with other G8 states but has not made significant pledges to aid in the design or funding of such a system for the Indian Ocean.

Italy attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. Rome's delegation was led by Mr. Eugenio Campo, Minister Plenipotentiary, Ministry of Foreign Affairs as well as other officials from the Ministries of Foreign Affairs and Defence and the Presidency of European Council of Ministers.<sup>1044</sup> Italy did not present a model for an early warning system unlike France, US, Germany and Japan, and did not make a pledge of funds. At the meeting participants committed to establishing an tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1045</sup>

Italy also attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. Italy was represented by officials from the Ministries of Foreign Affairs and Environment, including Undersecretary for Foreign Affairs Margherita Boniver. At the meeting, Italy endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements and strengthening and upgrading of national systems, while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1046</sup>

Earlier in the month, Undersecretary Boniver also met with Thai Foreign Minister Sathirathai on 10 January 2005. At that meeting the two agreed that Italian scientists will collaborate with Thai ones to create an early warning system against tsunamis.<sup>1047</sup> Nevertheless, at the preceding technical meetings to the Ministerial on 28-29 January, Italy announced plans for specialized projects to deliver technical assistance in environmental rehabilitation as opposed to the design and construction of the early warning system.<sup>1048</sup> They also did not announce any plans to contribute to the Voluntary Trust Fund — this despite the fact that Dr. Surakiart Sathirathai, Thai

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<sup>1044</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [[www.unisdr.org/wcdr/](http://www.unisdr.org/wcdr/)].

<sup>1045</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1046</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1047</sup> “Tsunami: Boniver, Italian Scientists Early Warning System,” *Agenzia Giornalistica Italia Online* (Rome) 10 January 2005. Date of Access: 1 February 2005 [[www.agi.it/english/news.pl?doc=200501101852-1182-RT1-CRO-0-NF82&page=0&id=agionline-eng.italyonline](http://www.agi.it/english/news.pl?doc=200501101852-1182-RT1-CRO-0-NF82&page=0&id=agionline-eng.italyonline)].

<sup>1048</sup> *Information Paper*. Ministry of Foreign Affairs (Rome) 27 January 2005. Date of Access: 1 February 2005 [[www.esteri.it/eng/6\\_38\\_90\\_01.asp?id=1603&mod=1](http://www.esteri.it/eng/6_38_90_01.asp?id=1603&mod=1)].

Minister of Foreign Affairs informed Mr. Gianfranco Fini, Deputy Prime Minister and Foreign Minister of Italy, of it during bilateral meetings in Bangkok on 22 January 2005.<sup>1049</sup>

On a diplomatic level, at the United Nations Meeting of Small Island Developing States (SIDS) on 11 January 2005 in Port Louis, Mauritius, the Italian delegation seconded a motion by Suriname to create a global, integrated tsunami warning system.<sup>1050</sup>

As of 11 January 2005, Italy has officially pledged 115-million euros in direct assistance to humanitarian and reconstruction assistance to countries in the tsunami zone — focusing on Thailand and Sri Lanka; private Italian citizens also contributed another 40-million euros.<sup>1051</sup> Overall, Italy aid program has been focused on environmental rehabilitation (beaches, coral reefs)<sup>1052</sup> and on coordinating a region-wide revival of the vital tourism industry of countries that ring the Indian Ocean.<sup>1053</sup> To date there had been little evidence that any substantial funds have been directed towards an early warning system.

## 5. Japan: +1

Japan has exhibited full compliance with its commitment regarding the Asian Tsunami disaster, as agreed to at the G7 Finance Ministers Meeting on 7 January 2005 — doing more than perhaps any other G8 country to ensure the funding, transfer of technology, and intergovernmental coordination necessary for an early warning system in the Indian Ocean. Japan is the site of nearly 20 percent of the world's earthquakes measuring magnitude 6 or over, which have also left a history of devastating tsunamis — experience it has put to good use in setting up a tsunami warning system that aims to issue a warning within three minutes.<sup>1054</sup>

On 18-22 January 2005, Japan hosted the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, which, at the request of Japanese Prime Minister Junichiro Koizumi, dedicated a special focus on developing a tsunami early warning system in the Indian Ocean.<sup>1055</sup> Mr Koizumi was also the only G8 head of government to attend

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<sup>1049</sup> *Press Release: Subject: Tsunami Waves in Southern Thailand : Relief measures and development.* Thai Embassy to the United States (Washington D.C. / Bangkok) 24 January 2005. Date of Access: 1 February 2005 [www.thaiembdc.org/pressctr/pr/Pr21-48.pdf].

<sup>1050</sup> “International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States - Summary and analysis,” *Earth Negotiations Bulletin*, International Institute for Sustainable Development (Winnipeg / Ottawa / Geneva) 17 January 2005. Date of Access: 1 February 2005 [lists.iisd.ca:81/read/messages?id=24083].

<sup>1051</sup> *Address by Undersecretary of State Roberto Antonione at the Donors Conference for the Areas Struck by the Tidal Wave (UN Geneva)*, Ministry of Foreign Affairs (Rome) 11 January 2005. Date of Access: 1 February 2005 [www.esteri.it/eng/6\_38\_90\_01.asp?id=1580&mod=3&min=0].

<sup>1052</sup> *Press Release: Subject : Tsunami Waves in Southern Thailand : Relief measures and development.* Thai Embassy to the United States (Washington D.C. / Bangkok) 24 January 2005. Date of Access: 1 February 2005 [www.thaiembdc.org/pressctr/pr/Pr21-48.pdf].

<sup>1053</sup> *Information Paper - Ministerial Conference To Promote The Revival Of Tourism In The Countries Struck By The Tidal Wave*, Ministry of Foreign Affairs (Rome) 11 February 2005. Date of Access: 11 February 2005 [www.esteri.it/eng/6\_38\_90\_01.asp?id=1633&mod=1&min=0].

<sup>1054</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/].

<sup>1055</sup> “Japan to provide tsunami early-warning system to Sri Lanka,” *TamilNet* (Colombo / Jaffna) 1 February 2005. Date of Access: 15 February 2005 [www.tamilnet.com/art.html?catid=13&artid=14128].



the conference. In a statement to participants, Mr. Shuzen Tanigawa, Senior Vice-Minister for Foreign Affairs of Japan, announced that Tokyo would “provide the highest level of knowledge and technological information that we have regarding the construction of a tsunami early warning mechanism through both bilateral cooperation and support for international organizations.” He also announced that of the US\$8-million requested by UNESCO to fund meetings, coordination, and design (but not construction) of such an early warning system, Japan would contribute US\$4-million.<sup>1056</sup> At the meeting participants committed to establishing a tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1057</sup>

On 25-26 January, Japan attended the China- ASEAN Workshop on Tsunami Warning in Beijing. The event was organized by China in order to increase cooperation in disaster prevention and relief work with ASEAN (Association of Southeast Asian Nations) members and international organizations. The workshop brought together 30 officials from ASEAN nations, China, Japan, US and Sri Lanka with participants exchanging views on improving the earthquake monitoring ability of South-East Asian countries.<sup>1058</sup>

Japan attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. Japan endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements...while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1059</sup> At the Conference, Mr. Shuzen Tanigawa, Senior Vice-Minister for Foreign Affairs, also pledged “to provide to the maximum extent possible knowledge and technology regarding the establishment of a tsunami early warning system.” He also promised to utilize tsunami warning information from existing Japanese observation networks to warn against tsunamis in the Indian Ocean until an early warning mechanism becomes fully operational in that region.<sup>1060</sup>

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<sup>1056</sup> “Address by Mr. Shuzen Tanigawa, Senior Vice-Minister for Foreign Affairs of Japan At the World Conference on Disaster Reduction,” Kobe, Japan, Ministry of Foreign Affairs (Tokyo) 20 January 2005. Date of Access: 1 February 2005 [[www.mofa.go.jp/policy/un/conf0501/address-4.html](http://www.mofa.go.jp/policy/un/conf0501/address-4.html)].

<sup>1057</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1058</sup> “China Backs ASEAN Disaster Warning Plan,” *Xinhua News Agency* (Beijing) January 26, 2005. Date of Access: 1 February 2005 [[ioc.unesco.org/indotsunami/beijing\\_jan05.htm](http://ioc.unesco.org/indotsunami/beijing_jan05.htm)].

<sup>1059</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1060</sup> *Address by Mr. Shuzen Tanigawa, Senior Vice-Minister for Foreign Affairs of Japan At the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements, Phuket, Thailand*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/address.html](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/address.html)].

At a 1 February 2005 visit to Sri Lanka, Senior Vice-Minister Foreign Minister for Japan, Shuzen Tanigawa, announced that Japan would provide immediate technical assistance to the South Asian country for the development of the early warning system as soon as possible. The announcement was made in response to a request from Sri Lankan President Chandrika Kumaratunga. Nevertheless, Tanigawa was careful to temper his promises noting that while “President Chandrika Kumaratunga has asked for Japanese assistance to set up a tsunami early-warning system...it depends on the government of Sri Lanka’s ability to absorb it.”<sup>1061</sup> This pledge was similar to the one made to the Indian government on 6 February 2005 to transfer technology and pool Japan’s ample experience with earthquake and tsunami prevention towards the development of an early warning system in the Indian Ocean. As a part of this technology transfer, Japan will host special training sessions on tsunami early warning system operated by the Japan International Cooperation Agency (JICA). That pledge was repeated by a series of high profile Japanese ministers who toured India in January including Shoichi Nakagawa, Minister for Economy, Trade and Industry, Finance Minister Sadakazu Tanigaki and Heizo Takenaka, Minister for Economic and Fiscal Policy and Privatisation of Postal Services.<sup>1062</sup>

Japan is also hosting the Dialogue for High Level Administrative Policy Makers on Establishing a Tsunami Warning Mechanism in the Indian Ocean in Tokyo on 22-24 February 2005. This meeting will serve as a precursor to the International Coordination Meeting for the development of Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework held in Paris and hosted by UNESCO on 3-8 March.<sup>1063</sup>

## **6. Russia: –1**

It should be noted at the outset that commitment in question was agreed to at the G7 Finance Ministers Meeting on 7 January 2005 to which Russia is not a member and does not regularly attend. Thus, the Russian Federation cannot be considered to be held accountable to the commitment regarding the establishment of a tsunami-early warning system since Russia was not present at the time it was agreed upon. Nevertheless, Russia’s performance is included here for the sake of consistency and comparison.

Russia has registered a marginal level of compliance with the commitment to establish a tsunami early warning system in the Indian Ocean, primarily attending multilateral conferences without making pledges of money or technical assistance. Russia has ample experience with tsunami early warning and response seeing as the Kamchatka Peninsula and the Kuriles Islands (which are also claimed by Japan) have suffered tsunami hits over the past century. Russia is also part of

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<sup>1061</sup> “Japan to provide tsunami early-warning system to Sri Lanka,” *TamilNet* (Colombo / Jaffna) 1 February 2005. Date of Access: 15 February 2005 [[www.tamilnet.com/art.html?catid=13&artid=14128](http://www.tamilnet.com/art.html?catid=13&artid=14128)].

<sup>1062</sup> “Japan offers help in setting up early warning system,” *IndiaInfo.com* (Bangalore) 6 January 2005. Date of Access: 16 February 2005 [[news.indiainfo.com/2005/01/06/0601japan.html](http://news.indiainfo.com/2005/01/06/0601japan.html)].

<sup>1063</sup> *Calendar of Tsunami related meeting and other events*, Intergovernmental Oceanographic Commission, UNESCO (Paris) 9 February 2005. Date of Access: 15 February 2005 [[ioc.unesco.org/indotsunami/calendar.htm#tokyo](http://ioc.unesco.org/indotsunami/calendar.htm#tokyo)].

the Pacific Tsunami Early Warning System operated by UNESCO's Intergovernmental Oceanographic Commission.<sup>1064</sup>

The Russian Federation attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. Moscow's delegation was led by Mr. Sergey Shoygu

Minister for Civil Defence, Emergencies and Disaster, as well as Directors from the Department of International Cooperation, the Environmental Geosciences Institute and the Hydrometeorological Centre.<sup>1065</sup> Russia did not present a model for an early warning system unlike France, US, Germany and Japan, and did not make a pledge of funds. At the meeting participants committed to establishing a tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1066</sup>

Russia attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. Japan endorsed the Phuket Ministerial Declaration which committed participants "to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements...while moving towards a coordinated regional system." The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1067</sup> Nevertheless, at the Ministerial, Russia made an unusual official address in which it merely detailed its own experiences in detecting and preparing for tsunamis off the coast of the Kamchatka Peninsula and the Kuriles Islands. Subsequently, the Russian delegation listed the steps necessary to make their system more efficient and provide help in setting up a similar system in the Indian Ocean but did not commit any funds or technical assistance to see this happen.<sup>1068</sup>

At a Meeting at the Ministry of Civil Defence, Emergencies and Disaster Relief of the Russian Federation presided over by Vladimir Putin himself, no mention was made of any Russian contribution, whether in funds, technical assistance or design, to a tsunami early warning system

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<sup>1064</sup> *Presentation of the Russian Delegation at the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements January 28-29, 2005, Phuket*, Embassy of the Russian Federation to the Kingdom on Thailand (Bangkok / Moscow) 28 January 2005. Date of Access: 1 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_06.html](http://www.thailand.mid.ru/Pressreliz/2005_06.html)].

<sup>1065</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [[www.unisdr.org/wcdr/](http://www.unisdr.org/wcdr/)].

<sup>1066</sup> "Tsunami Warning System Pledged," *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1067</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1068</sup> *Presentation of the Russian Delegation at the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements January 28-29, 2005, Phuket*, Embassy of the Russian Federation to the Kingdom on Thailand (Bangkok / Moscow) 28 January 2005. Date of Access: 1 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_06.html](http://www.thailand.mid.ru/Pressreliz/2005_06.html)].

in the Indian Ocean.<sup>1069</sup> A similar omission was made in the Russian Federation official press release *The Humanitarian Aid of the Russian Federation to the Countries of South and Southeast Asia Hit by the Natural Disaster on December 26, 2004*.<sup>1070</sup>

Russia has provided US\$22-million in official assistance to countries in the tsunami zone, of which \$12 million dollars will go to the World Food Program, \$3 million dollars to the UN Office for the Coordination of Humanitarian Affairs, \$3.5 million dollars to UNICEF, and \$3.5 million dollars to the World Health Organization. In addition, Russia has donated another US\$11-million worth of food (wheat) aid, purified drinking water, medicines, and aid transport. In total, the Russian Federation claims its tsunami aid totals 0.23% of Russia's expenditures on national defense, ranking it far ahead of other G8 countries in its own calculations.<sup>1071</sup> Moscow also prides itself on its self-proclaimed status as one of the first countries anywhere in the world, and particularly amongst the developed world, to provide aid and assistance to such countries following the disaster<sup>1072</sup> — although this claim cannot be easily substantiated.

## 7. United Kingdom: 0

The United Kingdom has registered a marginal level of compliance with the commitment to establish a tsunami early warning system in the Indian Ocean, primarily attending multilateral conferences without making pledges of money or technical assistance, and helping to map the earthquake zone on the ocean floor.

The United Kingdom attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. London dispatched a comparatively small delegation vis-à-vis other G8 member-states, although it was led by Mr. Gareth Thomas, Minister of International Development — underlining the importance of the event to the UK government.<sup>1073</sup> The UK did not present a model for an early warning system unlike France, US, Germany and Japan, and did not make a pledge of funds. At

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<sup>1069</sup> *Meeting at the Ministry of Civil Defence, Emergencies and Disaster Relief of the Russian Federation presided by President of the Russian Federation - Mr. Vladimir Putin, February 2, 2005, Moscow*, Embassy of the Russian Federation to the Kingdom of Thailand (Bangkok / Moscow) 8 February 2005. Date of Access: 15 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_07.html](http://www.thailand.mid.ru/Pressreliz/2005_07.html)].

<sup>1070</sup> *The Humanitarian Aid of the Russian Federation to the Countries of South and Southeast Asia Hit by the Natural Disaster on December 26, 2004*, Embassy of the Russian Federation to the Kingdom of Thailand (Bangkok / Moscow) 14 January 2005. Date of Access: 1 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_03.html](http://www.thailand.mid.ru/Pressreliz/2005_03.html)].

<sup>1071</sup> *The Humanitarian Aid of the Russian Federation to the Countries of South and Southeast Asia Hit by the Natural Disaster on December 26, 2004*, Embassy of the Russian Federation to the Kingdom of Thailand (Bangkok / Moscow) 14 January 2005. Date of Access: 1 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_03.html](http://www.thailand.mid.ru/Pressreliz/2005_03.html)].

<sup>1072</sup> *Meeting at the Ministry of Civil Defence, Emergencies and Disaster Relief of the Russian Federation presided by President of the Russian Federation - Mr. Vladimir Putin, February 2, 2005, Moscow*, Embassy of the Russian Federation to the Kingdom of Thailand (Bangkok / Moscow) 8 February 2005. Date of Access: 15 February 2005 [[www.thailand.mid.ru/Pressreliz/2005\\_07.html](http://www.thailand.mid.ru/Pressreliz/2005_07.html)].

<sup>1073</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [[www.unisdr.org/wcdr/](http://www.unisdr.org/wcdr/)].

the meeting participants committed to establishing an tsunami early warning system in the Indian ocean with 12–16 months under the leadership of UNESCO.<sup>1074</sup>

The United Kingdom also attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. The UK endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements...while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1075</sup>

On February 9, the United Kingdom Navy released infrared and sonar images of the earthquake epicenter on the floor of the Indian Ocean. The project was a partnership between the UK Navy and scientists from the British Geological Survey and Southampton Oceanography Centre that began in late-January. Geological scientists and their equipment were hosted on board the *HMS Scott* which traveled to the waters off the coast of Sumatra from Singapore to conduct the deep-water imaging project. It is hoped that increased understanding of how the underwater earthquake which caused the tsunami occurred will allow scientists to better predict when it will happen again and allow for the development of a more effective early-warning system.<sup>1076</sup>

## **8. United States of America: 0**

The United States has registered a notably high level of compliance with its G7 commitment to provide support and technical assistance to the development of a tsunami early warning for the Indian Ocean.

On 6 January 2005, Senator Joseph Lieberman introduced a new bill for reading in the US Congress which, if passed, would commit the United States to extending the tsunami-early warning system currently present in the Pacific Ocean into the Indian and Atlantic Oceans. Lieberman’s plan calls for the US to deploy 40-50 ocean-based sensors that would monitor seismic activity in the two oceans funded through an investment of US\$30-million by the United States. The bill faces a long process of committee hearings, debate in both the Senate and the House of Representatives, and requires presidential approval before it can become law.<sup>1077</sup>

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<sup>1074</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/].

<sup>1075</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf].

<sup>1076</sup> “Navy Releases Tsunami Images,” *BBC World News* (London) 9 February 2005. Date of Access: 15 February 2005 [news.bbc.co.uk/2/hi/science/nature/4247409.stm].

<sup>1077</sup> *U.S. Senator Proposes Tsunami Early Warning System*, State Department (Washington D.C.) 6 January 2005. Date of Access: 1 February 2005 [usinfo.state.gov/gi/Archive/2005/Jan/06-530798.html].

On 9 February 2005, President Bush petitioned the US Congress for a dramatic increase in the US' foreign and humanitarian assistance to countries battered by the Indian Ocean tsunami. Adding to the US\$350-million already committed by the US, Bush is requesting Washington's contribution rise to US\$950-million. Of these new funds, US\$35-million have been earmarked for the development and funding of a tsunami early warning system in the Indian Ocean<sup>1078</sup> — placing the US on par with Germany, the only other G8 member-state who has committed to funding a similar proportion of the proposed system's cost.<sup>1079</sup> The funding request has yet to be approved by Congress but there is strong support for the development of an early warning system amongst US legislators so this measure at the least, is likely to pass. This follows through on a commitment made by Bush at a January 10 meeting with Secretary of State Colin Powell and Administrator Andrew Natsios of the U.S. Agency for International Development. At that meeting, the President indicated that the United States is eager to participate in discussions about proposals for an Indian Ocean tsunami early warning system.<sup>1080</sup>

Currently the United States boasts one of the world's most sophisticated tsunami early-warning systems to protect Alaska, the western United States, and Hawaii from Pacific Ocean tsunamis. The system is operated by National Oceanic and Atmospheric Administration (NOAA) and is a principal component of the global tsunami early warning system for all countries in the Pacific operated by UNESCO's Intergovernmental Oceanographic Commission (IOC). On 14 January 2005, President Bush announced that the US would invest US\$37 million to expand U.S. tsunami detection and warning capabilities as part of the Global Earth Observation System of Systems (GEOSS), a 59-nation initiative led by the United States. It is expected that this upgrade will extend to the scope and range of the US and the IOC early-warning systems providing coverage of the areas that include South-East Asia. While this is not a replacement for a specifically dedicated system to monitor tsunamis in the Indian Ocean, it does provide increased security and early-warning against tsunami waves for some countries in the region<sup>1081</sup> — including India, Indonesia, and Malaysia who are members of GEOSS.<sup>1082</sup>

The United States attended the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005, where coordinating the international response to the tsunami disaster, including the construction of an early warning system, was a principal concern. Washington's delegation was led by State Department's Ambassador to Japan Howard Baker and included representatives from the president's National Science and Technology Council, the U.S. Agency for International Development, NOAA, the U.S. Geological Survey, the National Science Foundation, NASA, several U.S. embassies, the Department of Transportation and the

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<sup>1078</sup> *U.S. Pledges More Funding to Tsunami Relief, Warning System*, State Department (Washington D.C.) 10 February 2005. Date of Access: 15 February 2005 [usinfo.state.gov/gi/Archive/2005/Feb/10-420419.html].

<sup>1079</sup> "Germany Wants Lead on Tsunami Early Warning System," *Reuters* (London) 8 January 2005. Date of Access: 1 February 2005 [www.alertnet.org/thenews/newsdesk/L06570391.htm].

<sup>1080</sup> *Indian Ocean Warning System Rises on International Agenda*, State Department (Washington D.C.) 12 January 2005. Date of Access: 1 February 2005 [www.state.gov/p/io/rls/othr/40995.htm].

<sup>1081</sup> *Pacific Ocean Buoys Could Be Model for Tsunami-Monitoring System*, State Department (Washington D.C.) 9 February 2005. Date of Access: 15 February 2005 [usinfo.state.gov/usinfo/Archive/2005/Feb/09-101048.html].

<sup>1082</sup> *U.S. Announces Accelerated Plan for Tsunami Warning System*, State Department (Washington D.C.) 14 January 2005. Date of Access: 1 February 2005 [usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2005&m=January&x=20050114154312lcniirellep0.502865&t=xarchives/xarchitem.html]

Department of Health and Human Services.<sup>1083</sup> The United States did not make any explicit contribution of funds at this conference but the overall enthusiasm and interest of the US delegation in an early warning system was evident. The conference participants committed to establishing a tsunami early warning system in the Indian Ocean with 12–16 months under the leadership of UNESCO.<sup>1084</sup>

The US also attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. The US endorsed the Phuket Ministerial Declaration which committed participants “to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements...while moving towards a coordinated regional system.” The declaration sets mid-2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1085</sup>

Lastly, on 25-26 January, the US attended the China- ASEAN Workshop on Tsunami Warning in Beijing. The event was organized by China in order to increase cooperation in disaster prevention and relief work with ASEAN (Association of Southeast Asian Nations) members and international organizations. The workshop brought together 30 officials from ASEAN nations, China, Japan, US and Sri Lanka with participants exchanging views on improving the earthquake monitoring ability of South-East Asian countries.<sup>1086</sup>

To date the US has pledged US\$350-million in direct governmental assistance for humanitarian and reconstruction efforts for countries in the tsunami zone — primarily Indonesia and Sri Lanka. This number will rise to US\$950-million if President Bush’s request is approved by Congress. In addition, the US military has been deployed to assist in clean-up and reconstruction to countries across the tsunami zone, once again focusing on Sri Lanka and Indonesia. U.S. C-130 aircraft are flying aid missions around the clock, and aircraft from the Abraham Lincoln carrier group are transporting relief supplies off the coast of Indonesia.<sup>1087</sup> Private donations to relief efforts in the US, led by former US president George Bush Sr. and Bill Clinton, have claimed to have raised over \$1-billion in funds.<sup>1088</sup>

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<sup>1083</sup> *Indian Ocean Warning System Rises on International Agenda*, State Department (Washington D.C.) 12 January 2005. Date of Access: 1 February 2005 [[www.state.gov/p/io/rls/othr/40995.htm](http://www.state.gov/p/io/rls/othr/40995.htm)].

<sup>1084</sup> “Tsunami Warning System Pledged,” *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [[www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/](http://www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/)].

<sup>1085</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1086</sup> “China Backs ASEAN Disaster Warning Plan,” *Xinhua News Agency* (Beijing) January 26, 2005. Date of Access: 1 February 2005 [[ioc.unesco.org/indotsunami/beijing\\_jan05.htm](http://ioc.unesco.org/indotsunami/beijing_jan05.htm)].

<sup>1087</sup> *U.S. Tsunami Relief Efforts*, US Embassy to Austria (Vienna / Washington D.C.) 15 February 2005. Date of Access: 16 February 2005 [[www.usembassy.at/en/policy/tsunami.htm](http://www.usembassy.at/en/policy/tsunami.htm)].

<sup>1088</sup> *Former Presidents' Visit to Tsunami-Affected Countries a Success*, State Department (Washington D.C.) 25 February 2005. Date of Access: 25 February 2005 [[usinfo.state.gov/gi/Archive/2005/Feb/25-138092.html](http://usinfo.state.gov/gi/Archive/2005/Feb/25-138092.html)].

## 9. European Union: +1

The European Commission represented the EU at the second World Conference on Disaster Reduction hosted in Kobe, Japan from 18-22 January 2005. At the conference principal agenda times included coordinating the international response to the tsunami disaster and the construction of an early warning system with the EU being actively engaged in each matter. The EU had provided €360,000 to help fund the conference provided through the EU's Humanitarian Aid Office (ECHO).<sup>1089</sup> Brussels' delegation to Kobe was led by Mr. Thierry Bechet Counsellor from the Permanent Delegation of the European Commission in Geneva and included officials from the European Commission's Environment and External Relations portfolios.<sup>1090</sup> Speaking in regards to the conference, Louis Michel, EU Commissioner for Development and Humanitarian Aid said, "[h]aving a sophisticated alert system and populations that are prepared will enable us to save many lives in the future. The European Commission is fully committed to supporting a global alert system to prevent natural catastrophes such as tsunamis, earthquakes and cyclones."<sup>1091</sup> At the first Tsunami session of the Conference the Commission expressed its readiness to assist in international efforts to develop early warning systems and pledged €2 million through ECHO to the first phase of the UN International Strategy for Disaster Reduction (ISDR) proposal to establish a Tsunami early warning system for the Indian Ocean.<sup>1092</sup> The conference participants committed to establishing a tsunami early warning system in the Indian Ocean with 12–16 months under the leadership of UNESCO.<sup>1093</sup>

The European Commission and Luxembourg, acting in its role as President of the European Council, attended the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements in Phuket, Thailand on 28-29 January 2005. The meeting was hosted by the Thai government and intended to jump-start multilateral funding and design of the system and to announce the launch of the Voluntary Trust Fund to pool government donations towards it. The EC and Luxembourg endorsed the Phuket Ministerial Declaration which committed participants "to take immediate and practical steps to enhance early warning capabilities in the Indian Ocean and Southeast Asia and to cooperate towards the establishment of interim early warning arrangements...while moving towards a coordinated regional system." The declaration sets mid-

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<sup>1089</sup> *The European Commission supports the UN Disaster Reduction Conference in Kobe*, EUROPA: Office Website of the EU (Brussels) 17 January 2005. Date of Access: 1 February 2005 [europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/51&format=HTML&aged=0&language=EN&guiLanguage=en].

<sup>1090</sup> *List of Participants*, World Conference on Disaster Reduction (Kobe, Japan) 18-22 January 2005. Date of Access: 1 February 2005 [www.unisdr.org/wcdr/].

<sup>1091</sup> *The European Commission supports the UN Disaster Reduction Conference in Kobe*, EUROPA: Office Website of the EU (Brussels) 17 January 2005. Date of Access: 1 February 2005 [europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/51&format=HTML&aged=0&language=EN&guiLanguage=en].

<sup>1092</sup> *Indian Ocean Tsunami – The EU Response: Early warning systems, satellite monitoring and R&D*, EUROPA: Office Website of the EU (Brussels) February 2005. Date of Access: 15 February 2005 [europa.eu.int/comm/world/tsunami/early\_warning.htm].

<sup>1093</sup> "Tsunami Warning System Pledged," *CNN.com* (Atlanta) 20 January 2005. Date of Access: 1 February 2005 [www.cnn.com/2005/WORLD/asiapcf/01/20/asia.tsunami.warning.reut/].



2006 as the deadline for the establishment of a tsunami early warning system in the Indian Ocean.<sup>1094</sup>

Lastly, on 7 January, Luxembourg, in its role as the President of the Council of the European Union called for a rare ministerial meeting of the Council to discuss and coordinate the EU's response to the Asian tsunami disaster. On the agenda for the meeting, the Council was scheduled to "discuss the long-term reconstruction efforts in the affected region and the establishment of an early warning system."<sup>1095</sup> In a plenary session of debate at the European Parliament on 12 January 2005, the President of the European Commission reiterated the EU's support for a tsunami early warning system in the Pacific. José Manuel Barroso stated that the member states of the EU and EU Commission agreed in the General Affairs Council to offer direct support to the countries in their efforts to develop early warning systems so they will be better able to respond to future natural disasters. However, no further details on how this commitment would be actualized were provided.<sup>1096</sup>

Since the EC has a relatively small budget, large donations of foreign aid and assistance must come from the budgets of the member-states. Overall, the twenty-five member-states of the EU have pledged €1,500,000,000, or US\$2 billion, in direct foreign aid along with considerable donations from the private sector.<sup>1097</sup>

*Compiled by Anthony Prakash Navaneelan*  
15 February 2005

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<sup>1094</sup> *Phuket Ministerial Declaration on Regional Cooperation on Tsunami Early Warning Arrangements*, Ministry of Foreign Affairs (Tokyo) 29 January 2005. Date of Access: 15 February 2005 [[www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf](http://www.mofa.go.jp/policy/disaster/indonesia/meet0501/declaration.pdf)].

<sup>1095</sup> *Jean Asselborn in consultations with tsunami-hit countries of Southeast Asia*, Luxembourg Presidency of the Council of the European Union 2005 (Brussels / Luxembourg) 4 January 2005. Date of Access: 1 February 2005 [[www.eu2005.lu/en/actualites/communiqués/2005/01/04asselborn/index.html?highlight=tsunami](http://www.eu2005.lu/en/actualites/communiqués/2005/01/04asselborn/index.html?highlight=tsunami)].

<sup>1096</sup> *José Manuel Barroso, President of the European Commission, Intervention in Plenary session of European Parliament on aftermath of earthquake and Tsunami Session of the European Parliament*, EUROPA: Office Website of the EU (Brussels) 12 January 2005. Date of Access: 1 February 2005 [[europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/7&format=HTML&aged=0&language=EN&guiLanguage=en](http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/7&format=HTML&aged=0&language=EN&guiLanguage=en)].

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