**International Early Warning Programme Advisory Group Meeting** First session Bonn, 26 – 27 March 2007 **Item 3(a) Annual Report of the PPEW** 

# **Annual Report of the PPEW 2006**

#### Summary

This narrative report provides an overview of the activities and achievements of the secretariat of the United Nations International Strategy for Disaster Reduction (ISDR) in respect to its activities of the Platform for the Promotion of Early Warning (PPEW) from 1 March 2006 to 28 February 2007.

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# I. Background

The three main objectives of the PPEW's activities in 2006 to promote and improve early warning systems worldwide were as follows.

- 1) Strengthen the stakeholders' governance mechanisms and develop programme activities for the IEWP.
- 2) Complete and follow-up on PPEW's major undertakings including the outcomes of EWC III, the Early Warning Projects Portfolio, the strengthening of tsunami early warning systems in the Indian Ocean, and the Global Survey of Early Warning Systems.
- 3) Maintain PPEW's promotion and information resource activities in support of the implementation of early warning elements of the Hyogo Framework for Action and promoting early warning in international and regional policy and development processes.

# **II.** Project activities and outputs

# Task 1 – Strengthen the stakeholder-based governance mechanisms and programme content of the International Early Warning Programme (IEWP).

Substantial progress has been achieved on Task 1. The Early Warning Stakeholders' Meeting in March 2006 was well attended and the discussion led to prioritising outstanding issues and expectations for the Programme. The IEWP programme definition document was revised. Members of the Interim IEWP Advisory Group were identified. A preparatory meeting for the IEWP Advisory Group took place in December 2006. Progress on Task 1 during the reporting period is presented below according to each targeted output as follows:

### Output 1.1: IEWP concept developed

(i) The original programme definition document was revised with feedback from early warning stakeholders. The role of PPEW was differentiated from the IEWP, serving as the secretariat to the Programme. The interim IEWP Advisory Group members were identified on a volunteer basis. However, the governance mechanism of the IEWP is open for any interested early warning stakeholder to join. The IEWP concept has evolved during the period and will further articulated in 2007.

#### Output 1.2: Early Warning Stakeholders Meeting

- (i) On 29 March 2006, Early Warning stakeholders were invited to a consultation meeting coordinated by PPEW and chaired by UNEP to discuss governance mechanisms and necessary arrangements to be established in order to strengthen the IEWP as a vehicle for partnerships and coordination. The meeting also aimed at building on the momentum of the Third International Early Warning Conference (EWC III) by identifying priority areas facing the early warning community and building consensus on follow-up actions.
- (ii) A number of UN agencies (UNEP, UNDP, UNU-EHS, WMO, FAO, UNESCO-IOC, UNFCCC, WFP, UNCCD, UNOOSA), donors (World Bank, EC), governments (Norway, Japan, Germany, Australia, Pakistan, Cambodia), early warning related organisations (ADRC, DKKV, IFRC, Global Fire Monitoring Center, CDERA, GROOTS, ICPAC, SOPAC), universities (RMIT-Australia, Tohoku University-Japan) and the UN/ISDR secretariat participated in the meeting.

#### Output 1.3: Framework programme for IEWP

(i) The framework programme for IEWP was drafted. The document was then introduced during the Interim IEWP Advisory Group Preparatory meeting in December. During the

EWC III, it was highlighted that the subject of early warning is receiving increased attention following the recent major disasters and the publication of the Global Survey of Early Warning Systems (2006). The importance of advancing IEWP with clearly defined benchmarks and milestones to achieve a global scope, and a set of strategic areas is a priority for the PPEW which serves as the secretariat for the IEWP.

#### Output 1.4: Interim IEWP Advisory Group Preparatory Meeting

- (i) The meeting of the International Early Warning Programme (IEWP) Interim Advisory Group was held in Bonn on 1-2 December 2006, chaired by Mr. Patricio Bernal, ASG (UNESCO-IOC), in the absence of the current Chair Norberto Fernandez (UNEP). The meeting was a follow-up and continuation of the discussion at the IEWP stakeholder meeting held in Bonn on 29 March 2006, when is it was agreed to develop a concrete action plan based on recommendations from the global survey, with achievable outputs, clear roles and responsibilities, and prioritisation of key issues. The report of the Interim Advisory Group is contained in Annex 3 of this document.
- (ii) The UNU-EHS, GFMC, DKKV, WMO, ADRC, IFRC, UNESCO IOC, UNOOSA, and UN/ISDR secretariat participated at the meeting.
- (iii) The meeting provided an opportunity to discuss both the scope and content to the IEWP work plan and strategic positioning of the IEWP and PPEW within the strengthened ISDR system. The Advisory Group is to be formally established in 2007.
- (iv) Interim IEWP Advisory Group Members reviewed the IEWP programme definition document, the draft terms of reference for the IEWP Advisory Group, and achieved a consensus on the general direction, priorities for action, and future steps.

#### Output 1.5: Second IEWP Stakeholder meeting

- (i) It was decided that the second IEWP stakeholder meeting would not be held until the IEWP Advisory Group mechanism is established. It is expected that the next stakeholder meeting would take place during the Global Platform for Disaster Risk Reduction to be held in Geneva in June 2007.
- (ii) In early February, invitation letters were sent to the IEWP Advisory Group Members for the First Meeting of IEWP Advisory Group in Bonn to be held on 26-27 March 2007.
- (iii) As requested during the Interim IEWP Advisory Group Preparatory Meeting in December 2006, the PPEW secretariat will provide a number of deliverables to the Advisory Group for its next meeting in March 2007. These documents include the proposed PPEW Work Programme for 2007 providing details and estimated costs, a detailed programme document for the IEWP incorporating relevant elements from the status and summary reports of the PPEW, a background paper describing an out-reach, communication and dissemination strategy for the publication "Developing Early Warning: A Checklist", a progress report on activities under the EWC III Early Warning Projects Portfolio, and an overview and structure for the Secretary-General update report on the Global Early Warning System.

#### Output 1.6: Recruitment Process for the new PPEW Coordinator

(i) After the former coordinator of the PPEW, Reid Basher, was transferred to the ISDR Geneva on 30 April 2006, Yuichi Ono acted as Officer-in-Charge of PPEW during 1 May and 30 November 2006. The recruitment process for the new PPEW Coordinator with the involvement of the IEWP stakeholders was completed in November 2006. The IEWP stakeholders were well-informed of the process and a number of competent candidates applied to the post globally advertised in July-August 2006. Their CVs were carefully screened and several successful candidates were interviewed in Bonn in October 2006. Dr. Douglas Pattie was selected by the committee composed of UN/ISDR senior staff members and he accepted the offer in November 2006. He was officially recruited as of 1 December 2006.

#### Task 2 – Complete and follow up on the platform's current major projects.

Activities under this task relate to the successful completion of ongoing major early warning projects and follow-up strategies promoted with partners and donors. Substantial progress has been achieved on Task 2. The PPEW significantly contributed to the EWC III. Some of the early warning projects presented during the EWC III are being funded by donors. PPEW prepared publications for conference, including the Early Warning Projects Portfolio (EWPP), the Compendium of Early Warning Projects, the documents "Developing Early Warning Systems: A Checklists" and the "Global Survey of Early Warning Systems".

Progress on Task 2 during the reporting period is presented below according to each output as follows:

#### Output 2.1: Outcomes of the EWC III

- (i) The Third International Conference on Early Warning was hosted by the Government of Germany under the auspices of the United Nations in Bonn, 27-29 March 2006. UN/ISDR and PPEW underpinned the substantive early warning aspects of the work of the organising committee, including contributing to the development of concepts for the meeting, hosting some organising committee meetings and most notably organising a process to call for and evaluate proposals for concrete early warning projects. PPEW compiled and organised the conference programme for the "Priorities and Project Forum".
- (ii) PPEW supported the preparations for the EWC III by providing advice, contacts, background material, logistical support, building a database of submitted projects, ensuring their peer review, preparing a catalogue of project summaries and assisting in their promotion to donors.
- (iii) The Early Warning Project Portfolio (EWPP) includes more than 100 project proposals. The proposals were reviewed by early warning experts and some were selected for presenting at the EWC III. The PPEW developed a web-accessible database to handle the early warning projects submitted for the EWC III. This database facilitated an online review process by experts and the access for donors and public. PPEW is tasked to facilitate fund-raising to implement the early warning projects.
- (iv) The compendium was disseminated to the early warning stakeholders during the EWC III. The Munich Re Foundation pledged support for a project from Tonga entitled "Early Warning Communications System for Kingdom of Tonga".
- (v) In order to assist governments and communities implement effective people-centred early warning systems the "Checklist for Developing Early Warning Systems" was revised with comments from the Third International Conference on Early Warning. The Checklist was translated into the official UN languages and a number of Indian Ocean regional languages. The document was disseminated throughout the ISDR system, partners and national platforms as a key tool to help facilitate the development of people-centred early warning systems.

#### Output 2.2: Global Survey of Early Warning Systems

(i) The survey process was led by PPEW, with guidance from a stakeholder working group organised by the 11th Inter-Agency Task Force (IATF) in 2005. An international expert working group meeting was held in Bonn to review and provide input to the draft report. The pre-print version was completed and submitted to the Office of the UN Secretary General and distributed at the EWC III. The Survey contains specific recommendations in five areas that address gaps in early warning, capacity building and measures to establish the IEWP. These specific recommendations are being incorporated into the proposed 2007 PPEW Work Programme.

# Output 2.3: Tsunami Early Warning Strengthening Project

- (i) PPEW established a Project Overview Plan<sup>1</sup> and developed a web-accessible project database and information system (TEWIS). During the reporting period PPEW provided input to and participated in the international tsunami coordination meeting in Paris, at the regional tsunami coordination meeting in Mauritius, and at several high level dialogue meetings. Information was supplied on request to the Office of the Special Envoy on the Tsunami (President Clinton) in collaboration with WMO and UNESCO-IOC.
- (ii) PPEW prepared a lessons-learned document, "Lessons for a Safer Future: Drawing on the experience of the Indian Ocean tsunami disaster." This document draws on the experiences of many organisations and individuals during and following the tsunami. The report offers eleven lessons and contributes to the ongoing process of learning how nations, communities and individuals can become better prepared for and reduce the risk of potential natural hazards.
- (iii) PPEW served as an information source on early warning issues. In the aftermath of the tsunami there was a demand for interviews, advice and information on early warning systems, including requests for interviews from the international media such the BBC, CNN, Deutsche Welle, the International Herald Tribune among others. New tsunami web pages with tsunami project news, key documents, meeting information and background information were established at the PPEW webpage.
- (iv) PPEW prepared the publication "Evaluation and Strengthening of Early Warning in Countries Affected by the 26 December 2004 Tsunami" that includes all initiatives and outcomes products related to this project.

Promotional Activity	Donor approach	Result
Inform proper submitter about	Regional approach; multi-	Three project
UNESCAP Trust Fund May 2006	hazard projects in Indian	submitters applied
	Ocean region	to UNESCAP for
		funding
Project selection for EC-AIDCO	India, Indonesia, Sri Lanka,	One project was
(PPEW proposed 7 projects) October	Indian Ocean Region,	selected for review
2006	Maldives	process
		- no funds
Project selection for Government of	Burkina Faso, Cape Verde, El	Funds for ISDR in
Luxembourg. PPEW proposed 13	Salvador, Laos, Mali,	Trust Fund
projects. October 2006	Namibia, Nicaragua, Niger,	
	Senegal, Vietnam	

Output 2.4: Promoting the Early Warning Project Portfolio for funding and implementation

<sup>&</sup>lt;sup>1</sup> http://www.unisdr.org/ppew/tsunami/pdf/project-overview-plan.pdf

Project selection for Italy. PPEW	The Caribbean	Under consideration
proposed 8 projects November 2006		
PPEW made specific recommendations	Improve project design and	Projects under revision.
for project revision, to improve the	presentation of selected	
presentation and clarity of the proposal,	projects.	
for approx. 40 early warning projects		
and resent reviews to project submitters.		
December 2006-February 2007		

# **Funded Projects**

Project Title	Organisation	Duration	Funds*	Donor
Early Warning Communications	Tonga National	Donor and	50,000€	Munich Re
System for Kingdom of Tonga	Disaster	Agency to		Foundation
	Management	inform PPEW		
	Office (NDMO)			
Capacity Building in	InWEnt -	November 06 –	610,000€	German
Mozambique: Using the	Capacity	October 08		Federal
Education Sector for Disaster	Building			Foreign
Awareness Outreach	International			Office
Building Tornado Warning	Asian Disaster	To be	USD	Project to
System for Bangladesh - Coping	Reduction	determined	40,000	be revised.
with Neglected Disaster	Center			

\* The funds are disbursed directly by the donor to the organisation

### Output 2.5: Finalize the report of the Global Survey of Early Warning Systems

(i) PPEW continued the consultation during and after the EWC III. The final version of the Survey was completed in September 2006 and dissemination is an on-going activity. The report identified gaps in global early warning capacities and made recommendations for future actions by governments and organisations.

#### Output 2.6: Follow up on EWC III outcomes

- (i) PPEW supported the production of conference outcomes including the checklist of good practices, session summaries and a conference statement.
- (ii) The final version of the updated Early Warning Checklist was published by PPEW to provide key elements for developing early warning systems. PPEW coordinated the translation of the publication into 19 different languages used in the Indian Ocean Region and coordinated its dissemination.
- (iii)German Committee for Disaster Reduction (DKKV) and PPEW jointly produced the conclusions of the EWC III. The publication was distributed by DKKV and PPEW.

#### Output 2.7: The ISDR Tsunami Consortium

- (i) A roundtable on Indian Ocean Tsunami Warning and Response Systems was convened by UNESCO-IOC and the ISDR secretariat on March 27th, 2006 in the margins of the Third International Early Warning Conference in Bonn and in the presence of President Clinton, the UN's Special Envoy for Tsunami Recovery.
- (ii) On the occasion of the roundtable, ISDR system partners formed a consortium to assist initially up to 10 governments with technical assistance to develop plans for an accelerated implementation of national tsunami early warning systems.

(iii) The consortium partners include UNESCO-IOC, WMO, UNOCHA, IFRC, UNDP, UNEP, and the World Bank. The consortium is being coordinated by PPEW and the ISDR secretariat. The Governments of Comoros, Madagascar, Maldives, Mauritius, Mozambique, Pakistan, Seychelles, Somalia, Sri Lanka, Tanzania, and Thailand have officially requested the support offered by the consortium. Currently, it is envisioned the consortium partners will support the implementation of the national plans until December 2008.

#### Output 2.8: Support the completion of the Early Warning Strengthening Project

- (i) The multi-partner, multi-donor initiative "Evaluation and Strengthening of Early Warning Systems in countries affected by the 26 December 2004 Tsunami," which was launched in early 2005 was successfully completed in 2006. The initiative was funded through the UN Flash Appeal for Indian Ocean Earthquake-Tsunami 2005 with US\$ 10.5 million in contributions from the European Commission for Humanitarian Aid and the Governments of Finland, Germany, Japan, Netherlands, Norway and Sweden. It was coordinated by the PPEW secretariat and implemented by several international, regional, and national partners.
- (ii) A major highlight was the establishment of partnerships and coordination mechanisms across a wide range of partners and donors and provided an example of an integrated vehicle for supporting the implementation of the Hyogo Framework for Action 2005-2015. This partnership approach brought an added value to the diversity of activities and a more coherent and coordinated approach to the issue, thus extending the reach and effectiveness of inputs and resources. While the project was developed in the context of the UN Flash Appeal process, it fits into the framework of the International Early Warning Programme and the objectives of the PPEW's work programme.
- (iii) Activities were mainly focused on establishing the project administration and underpinnings, particularly partner work programmes and memoranda of understanding, supporting UNESCO-IOC to develop governance mechanisms and technical inputs for a regional tsunami warning system, and providing project coordination and integration. About half of the funds received have been streamed to other key agencies. Partnerships and coordination have been strengthened across many UN agencies, regional and national organisations, research institutes, and local communities.

#### Task 3 – Maintain the platform's promotional and information resources activities.

The PPEW was able to maintain and improve the information resources, including the volume and quality of web site contents, the quarterly PPEW newsletter, and other publications and documentation. PPEW promoted its concepts and activities through specific UN policy making processes, particularly those concerning tropical cyclones, water-related disasters, and tsunamis. Progress on Task 3 during the reporting period is highlighted below according to each targeted output as follows:

Output 3.1: Website enhanced, newsletters and publications produced and disseminated.

- (i) PPEW's website was constantly improved in volume and quality.
- (ii) Special tsunami pages were updated to provide content on the tsunami project coordinated by PPEW and to provide up-to-date news on events, documents and background information on tsunamis.
- (iii) The PPEW Newsletters was produced quarterly and each issue was disseminated by email to about 2000 readers.

Output 3.2: People-centred early warning systems promotion and their practical implementation in ISDR system venues and in other UN policy processes

- (i) PPEW supported the meetings of the UNESCAP/WMO Typhoon Committee activities of the hydrology, meteorology and DPP components of the Typhoon Committee. The secretariat also participated in the conference "International Frameworks for Disaster Risk Management for Better Impacts and Visibility" in Macao, China in September 2006.
- (ii) PPEW supported the ISDR exhibit shared with WMO at the Fourth World Water Forum in Mexico City in March 2006. During the forum PPEW participated in the Asia-Pacific Water Ministerial Meeting and organized two sessions, 1) tools for capacity building in risk management, and 2) collaborative approach among international agencies for effective flood management – International Flood Initiative.
- (iii) PPEW collaborated with WMO, UNU-EHS, and ICHARM to produce a chapter, 'Risk Management,' in the World Water Development Report II, which was launched during the World Water Forum.
- (iv) PPEW participated and stressed the importance of the people-centred early warning system by giving the example of the July 2006 Java tsunami at the 3rd International Symposium on Integrated Water Resources Management in Bochum, Germany in September 2006.
- (v) PPEW participated and supported the International Flood Initiative Advisory Committee and Management Committee in Geneva on 26 January 2007. PPEW helped draft the concept paper in 2004 and ISDR became a member of the committee. PPEW chaired the Hashimoto High Level Panel Meeting co-organized by the Japan Water Forum and ISDR in Geneva on 27 January 2007. This is a three-year process to set up a common goal for water-related disasters stakeholders.
- (vi) PPEW continued to participate in the UNESCAP/WMO Typhoon Committee, particularly in the development of the Disaster Prevention and Preparedness Working Group. A project is being supported by South Korea and China on creating a database for early warning among the Member countries. PPEW will give advice on the further development of this project.

#### Output 3.3: Updated Early Warning Projects Portfolio database

(i) The database was constantly updated and revised by taking into consideration of accessibility and usability. One hundred and five (105) project proposals were submitted for appraisal by the EWC III Review. In the follow-up to the EWC III conference, the PPEW is providing to all countries and agencies who have submitted proposals the overall assessment and specific recommendations on each proposal submitted. Based on an analysis of the comments from the 66 expert project reviewers most of the proposals need to be amended or revised, and suffered from a number of common weaknesses. In general, many of the proposals did not address the four elements of early warning systems as requested in the call for proposals. The "social science" dimensions of the project were not discussed or described in detail. The budgets were too large and did not provide sufficient detail. The strategy for the project did not emphasize implementation in the communities and linking it to authorities and their existing practices.

The number of proposals by hazard type and by region in each category of decision (1 to 5 ranking) is as summarised in the following tables.

Category of		Type of Hazard								Total			
Conclusion	MH	ТО	EN	FL	TS	DR	EQ	VO	WF	LO	FS	SD	
1	1	-	-	1	-	-	-	-	-	-	-	-	2
2	11	-	-	1	3	-	3	-	-	-	-	-	18
3	20	-	-	6	1	1	3	1	1	-	-	-	33
4	17	1	-	9	4	2	1	2	2	1	-	1	40
5	7	-	1	2	-	-	1	-	-	-	1	-	12
Total	56	1	1	19	8	3	8	3	3	1	1	1	105

Summary of Conclusions of EWC III by Type of Hazard

Categories of Conclusion: 1-Strongly disagree, 2-Largely disagree, 3-Partially agree, 4-Largely agree, 5-Strongly agree. The types of hazards include the following: Multi-hazard (MH), Tornado (TO), El Nino (EN), Floods (FL), Tsunami (TS), Drought (DR), Earthquake (EQ), Volcano (VO), Wildland Fire (WF), Locust (LO), Food Security (FS) and Sand and Dust Storm (SD).

Region		Type of Hazard								Total			
	MH	ТО	EN	FL	TS	DR	EQ	VO	WF	LO	FS	SD	
Latin America	11	-	-	6	-	-	-	1	1	-	1	-	20
Asia Pacific	25	1	1	7	7	2	4	1	-	-	-	1	49
Africa	18	-	-	5	1	-	1	-	-	1	-	-	26
Europe	2	-	-	1	-	-	2	-	-	-	-	-	5
Global	-	-	-	-	-	1	1	1	2	-	-	-	5
Total	56	1	1	19	8	3	8	3	3	1	1	1	105

# Summary of Proposals Submitted to EWC III by Region

# III. Project activities organised and supported by PPEW during 2006

Project Related Activities Orga	nized and Co-o	rganized by PPEW
Activity or Event	Venue	Relevant Work Programme Task
World Water Forum IV - a session on	Mexico City,	Task 3 promote HFA in
"People-centred Early Warning System in the	Mexico	international forums
Water-related Disasters" (16-22 March		
2006). PPEW exhibition with WMO		
Tsunami risk assessment coordination	Bonn,	Task 2 strengthen tsunami EWS
meeting (27 March 2006). PPEW proposed	Germany	
strategy for building resilience to tsunamis in	_	
the Indian Ocean. AIDO-CO project funded.		
The Third International Conference on Early	Bonn,	Task 1,2,3 IEWP governance
Warning (27-29 March 2006)	Germany	mechanism; strengthen tsunami
Roundtable on Indian Ocean Tsunami		EWS; promote HFA in
Warning and Response Systems		international forums

• Side event on the ongoing project to strengthen tsunami early warning systems in the Indian Ocean.		
Germany with the DKKV, UNU-EHS and UN/ISDR.		
The Early Warning Stakeholders meeting (29	Bonn,	Task 1 IEWP governance
March 2006) chaired by UNEP.	Germany	mechanism
A coordination meeting on the major findings	Bonn,	Task 2 strengthen tsunami EWS
of tsunami research and discussion on the	Germany	
objectives, scope and concrete plans (12 April		
2006). Jointly with CRED and UNU-EHS.		
Mitigation, Preparedness and Development	Bangkok,	Task 1 IEWP governance
Workshop related to the Indian Ocean	Thailand	mechanism; Task 2 strengthen
Consortium activities (12-16 June 2006).		tsunami EWS
PPEW proposal to form the ICG-IOTWS		
Working Group 6.		
Workshop on the Human Impact of Tsunami	Bangkok,	Task 1 IEWP governance
and Disaster Risk Reduction (16-17 June	Thailand	mechanism, Task 2 strengthen
2006) co-organised with UNU-EHS and		tsunami EWS
CRED.		
A rapid survey in southern Java to investigate	Java,	Task 1 IEWP governance
risk factors for the 17 July 2006 Tsunami (24-	Indonesia	mechanism
30 July) coordinated with ADRC and		
Indonesian National Disaster Management		
Office.		
	D I'	
Workshop on Disaster Risk Reduction (30	Bali,	Task 3 promote HFA in
July 2006) PPEW with representatives from	Indonesia	international forums
the National Disaster Management Offices in		
the Indian Ocean countries.	D	
Interim Advisory Group meeting for the	Bonn,	Task 1,2,3 IEWP governance
International Early Warning Programme	Germany	mechanisms, recommendations
(IEWP) (1-2 December 2006) Chaired by		of global survey; promote HFA
UNESCO.	Corrents	in international forums
International Conference on Ocean Security in	Corpus Christi USA	Task 1,2,3 IEWP governance
the Wider Caribbean (9-12 February 2007).	Christi, USA	mechanisms, recommendations
Co-chair and responsible for project proposal		of global survey; promote HFA
with UNESCO-IOCARIBE.		in international forums

Project Related Events with Participation by PPEW						
Event (Date)	Venue	Relevant Work Programme Task				
DKKV Member meeting (6 March 2006)	Bonn, Germany	Task 1 IEWP governance mechanism				
WMO Hurricane Committee Annual Meeting (1-4 April 2006)	San Juan, Puerto Rico	Task 3 promote HFA in international forums				
WMO Symposium on Multi-Hazard Early Warning System (22-24 May 2006)	Geneva, Switzerland	Task 1 IEWP governance mechanism				
UNESCAP/WMO Typhoon Committee Working Group on Disaster Prevention and Preparedness Meeting on Early Warning	Seoul, Republic of Korea	Task 3 promote HFA in international forums				
Systems and Future Activities (25-26 May						

2006)		
Natural Disaster Prevention, Flood and	Prague,	Task 2 recommendations of
Drought workshop (20-23 June 2006)	Czech	Global Survey
	Republic	
Asia Regional Forum on ICT for Effective	Galle, Sri	Task 3 promote HFA in
Disaster Management (26-28 June 2006)	Lanka	international forums
The Third Session of the ICG-IOTWS (31	Bali,	Task 1 IEWP governance
July – 2 August 2006) Formation of PPEW-	Indonesia	mechanism
led Working Group 6.		
ESCAP/WMO Workshop on Integrating	Macao,	Task 1 IEWP governance
Activities of the Hydrology, Meteorology and	China	mechanism
DPP Components of the Typhoon Committee into the Related International Frameworks for		
Disaster Risk Management for Better Impacts		
and Visibility: Hydrological Component (4-8		
September 2006)		
DKKV Membership meeting (29 September	Bonn,	Task 1 IEWP governance
2006)	Germany	mechanism
The 3rd International Symposium on	Bochum,	Task 3 promote HFA in
Integrated Water Resources Management (25-	Germany	international forums
28 September 2006)		
The 7th Forum and Disaster Reduction Day	Eschborn,	Task 3 promote HFA in
(19-20 October 2006) DKKV and GTZ	Germany	international forums
The International Bonn – Human Security	Bonn,	Task 1 IEWP governance
presentation series (26 October 2006)	Germany	mechanism
Global Consortium for Tsunami Recovery	New York,	Task 1 IEWP governance
Meeting (15-17 November 2006) President	USA	mechanism
	N '1	
The annual meeting of UNESCAP/WMO Typhoon Committee (7-9 December 2006)	Manila, Philippines	Task 2 recommendations of Global Survey
Field visit to community based flood warning	Leyte Island,	Task 2 recommendations of
system sites in Philippines (10-12 December,	Quezon City,	Global Survey
2006)	Philippines	Global Sulvey
A coordination and planning meeting with	Kobe, Japan	Task 1,2,3 IEWP governance
ADRC for the International Workshop on		mechanisms, recommendations
Tornado Disasters in Bangladesh (22		of global survey; promote HFA
December 2006)		in international forums
The DAAD Special Seminar organized by	Bonn,	Task 1 IEWP governance
UNU-EHS (11 January 2007)	Germany	mechanism
The EU High Level Cooperation Course (16	Bonn,	Task 1 IEWP governance
January 2007)	Germany	mechanism
27 <sup>th</sup> Session UNOOSA Inter-Agency Task	Vienna,	Task 1,2,3 IEWP governance
Force 17-19 January 2007	Austria	mechanisms, recommendations
		of global survey; promote HFA
The International Flood Initiative Advisory	Concyre	in international forums
The International Flood Initiative Advisory Committee and Management Committee (26	Geneva, Switzerland	Task 2 recommendations of Global Survey
January 2007)	Switzeriallu	Giobai Suivey
Hashimoto High Level Panel Meeting co-	Geneva,	Task 1 IEWP governance
organized by Japan Water Forum and ISDR	Switzerland	mechanism
(27 January 2007)		
The Workshop on Cross-boundary Early	Bonn,	Task 2 recommendations of
Warning in Europe (5 February 2007)	Germany	Global Survey
The Third Session of the Intergovernmental	Bonn,	Task 2 strengthen tsunami EWS
Coordination Group North-Eastern Atlantic,	Germany	

the Mediterranean and Connected Seas Tsunami Warning and Mitigation System (7-9 February 2007)		
The Fourth Session of the Intergovernmental	Mombasa,	Task 2 strengthen tsunami EWS
Coordination Group for the Indian Ocean	Kenya	
Tsunami Warning and Mitigation System		
(ICG/IOTWS-IV) (28 February –2 March		
2007)		
2 March 2007)		

# IV. Major additional activities

#### Follow up activities on Tsunami Early Warning Strengthening Project

In December 2006, a new UN/ISDR project "Building Resilience to Tsunamis in the Indian Ocean" (budget of EUR 6M) was approved and the contract was signed by the European Community. This three year initiative focuses on India, Indonesia, Maldives, and Sri Lanka. It constitutes a continuation of the UN Flash Appeal initiative for building the resilience of communities and nations to disasters by strengthening national and local institutions, mechanisms and capacities for disaster risk reduction. The project will be implemented through partnerships with ISDR system partners and will be monitored from the ISDR office for Asia and the Pacific with support from the ISDR headquarters in Geneva. PPEW will provide technical support and guidance with respect to assessing and supporting the strengthening of end-to-end national early warning systems within a regional coherent approach.

# Workshop on Mitigation, Preparedness and Development for Tsunami Early Warning Systems

The UN/ISDR secretariat, UNESCAP and UNESCO-IOC organised a regional workshop, which was held 14-16 June 2006 in Bangkok, Thailand. The workshop brought together over 130 experts from more than 20 countries bordering the Indian Ocean, regional partners and representatives from UN agencies and disaster management offices in the Indian Ocean region. The aim of the meeting was to introduce a development perspective into the mitigation and preparedness process on the tsunami early warning systems. Technical experts from the fields of tsunami early warning systems, disaster risk reduction and the development sector shared experiences on integrating tsunami early warning systems into disaster risk reduction and development processes.

The workshop outcomes helped to define the draft terms of reference for a proposed new Working Group of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG-IOTWS) on Mitigation, Preparedness and Response (Working Group 6).

# UN/ISDR-PPEW Workshop on Disaster Risk Reduction: Context for Indian Ocean Tsunami Early Warning Systems

Representatives from IOC Indian Ocean Member States, UN agencies and NGOs participated in the ISDR-PPEW workshop held in Bali, Indonesia 30 July 2006. The overall objective of the meeting was to finalise the consultative process that was initiated at the second session of the ICG-IOTWS in Hyderabad, 14-16 December 2005, where the importance of integrating disaster risk reduction and development expertise into the work of ICG was stressed.

The purpose of the workshop was to increase the involvement among disaster risk reduction and development experts on the future implementation of tsunami early warning systems in the Indian Ocean region; to strengthen regional networking among the invited disaster management and development experts and to finalise the preparation for the establishment of the proposed Working

Group 6 on Mitigation, Preparedness and Response, at the ICG-IOTWS-3. The Working Group 6 was officially launched at the meeting.

#### Java Tsunami Field Survey Mission

One week after the 17 July 2006 Java Tsunami in Indonesia which killed more than 600 people, PPEW organised a quick field survey mission to the most seriously affected areas in the southern Java with the Asian Disaster Reduction Center, assisted by the National Coordinating Agency for Disaster Relief and Refugees of Indonesia (Bakornas PBP). For this local tsunami, no warning was issued by the national tsunami warning center. The objective of this survey was to identify tsunami risk factors that led to a disaster as well as to provide useful information for constructing a better preparedness program in the future.

#### Caribbean Regional Observing System.

During the February 2007 "International Conference on Ocean Security in the Wider Caribbean" (Corpus Christi, USA) PPEW co-chaired a session on "Ocean Monitoring and Ocean Early Warning Systems to minimize impact of Natural Hazards in the Wider Caribbean Region: Building Blocks to secure completion of the Caribbean Observation System". The significance of this conference for PPEW is far-reaching. This conference has moved a multi-partner project proposal drafted by PPEW and UNESCO-IOCARIBE forward as a deliverable to the UNESCO/ICG for the Caribbean and through the US Government for funding for the collaborative action of the civilian, defence and private sector communities.

A significant commitment to the proposal budget (USD 140M) has been indicated by NOAA. The proposal entitled "A Caribbean Regional Observing System: Strengthening Early Warning Systems and Disaster Risk Reduction in the Caribbean and Adjacent Regions" has significant ownership by PPEW and is being promoted by the Intergovernmental Oceanographic Commission - Sub-Commission for the Caribbean and Adjacent Region - Global Ocean Observing System (IOCARIBE-GOOS) and the UN/ISDR.

The proposal is a follow up to the outcomes of the First Session of the IOC Intergovernmental Coordination Group for Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions held in Bridgetown, Barbados, 10-12 January 2006. It addresses the needs of governments of the region in the field of disaster risk reduction and aims at identifying ways and means to facilitate the implementation of the Hyogo Framework for Action. By implementing a regional observing system project, the partners and collaborating governments should be able to quickly assess the hazards' monitoring capacities of the regions, reinforce existing networks among practitioners and authorities, conduct regional meetings for relevant practitioners for both training and coordination aims, develop information materials based on sound science for policy makers, practitioners and community leaders, provide necessary coordination and support for the countries, and develop educational support and materials. The overall purpose of the observing system is to achieve comprehensive, coordinated and sustained observations of the Caribbean region, in order to improve monitoring of the state of the region, increase understanding of Earth processes, and enhance prediction of the behaviour of the Caribbean ecosystem.

The IOCARIBE-GOOS/ISDR-coordinated multi-partner project has been designed to support the efforts to form a regional observing system and strengthen early warning capacities of countries in the Caribbean. The project is positioned as a major initiative to be reported to the IEWP and coordinated through the PPEW, the ISDR Regional Office in The Americas and IOCARIBE.

#### V. Evaluation of 2006 progress

The successful completion of the UN Flash Appeal tsunami early warning project for the Indian Ocean coordinated by PPEW demonstrated the strengthened PPEW capabilities and credibility. While making efforts on follow-up activities, PPEW was asked to provide support in the other regions, including the Caribbean Sea, Atlantic Ocean, and Mediterranean and adjacent Seas. The biggest lesson-learned from the December 2004 tsunami was to establish early warning systems before disasters strike. Accordingly, the UN Secretary General in 2005 called for establishing a multi-hazard global early warning system in order not to repeat the tragedy. This preparedness orientation significantly prevents and minimizes the impacts of disasters. PPEW immediately initiated a few activities including the Early Warning Checklist, which was designed as a manual for establishing and implementing early warning systems for different hazards at the country level. Secondly, the Global Survey of Early Warning led by PPEW and supported by ISDR system agencies identified gaps and shortcomings and provided several recommendations. The Early Warning Project Portfolio (EWPP) demonstrated concrete needs to establish early warning system at the country and regional level. Analysis of the 2006 work plan is presented in Annex 1 and 2, notably for the further development of the IEWP mechanism to be supported by key early warning stakeholders. A challenge during 2006 was to help find donors to implement early warning projects compiled in the Compendium. PPEW is currently preparing a new 2007 strategy to foster this process.

The situation of the multi-hazard Global Early Warning System needs to be monitored constantly. Accordingly, PPEW, as well as IEWP, need to vigorously appeal for further investment on establishing and strengthening early warning systems based on sound science and cost- benefit analysis of early warning system. Outreaching priorities should target the most vulnerable communities and countries suffering the highest number of victims caused by recent disasters. The PPEW needs to continue to conduct risk factor analysis after large disasters. Early warning issues are a priority of the Hyogo Framework for Action. The PPEW as well as IEWP is expected to provide significant inputs to the Global Platform for Disaster Risk Reduction process starting June 2007.