

TsunamiTeacher
Information Document

**Intergovernmental Oceanographic Commission
International Tsunami Information Centre
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Introduction

In the aftermath of the Indian Ocean tsunami of 26 December 2004, national authorities across the region have been charged with developing tsunami educational and resource materials for schools, as well as information and awareness packages for the media, decision-makers and the general public.

The Pacific-based International Tsunami Information Centre (ITIC), which is part of UNESCO's Intergovernmental Oceanographic Commission (IOC), has extensive experience in developing print and visual resources on the subject, and it has widely shared this documentation with national authorities in several countries in the Indian Ocean region.

While individual in-country efforts are underway to develop specific materials of local relevance, access to a consolidated source of new and existing, reliable and verified international tsunami warning and response information – as well as training modules aimed at stakeholder groups affected by or responsible for mitigating the multiple impacts of tsunamis – would hugely benefit on-going capacity-building at all levels across the region.

A consolidated *TsunamiTeacher* system of resources and training materials would enable governments and stakeholders to:

- Share the valuable body of research and good practice already undertaken around tsunamis, including by a variety of United Nations agencies.
- Adapt high quality generic materials appropriately to local contexts.
- Grow stakeholder and public awareness and understanding of tsunamis.
- Develop responses that have the potential to save lives and mitigate the impacts of tsunamis.

Tsunamis should be addressed in a “multi-hazard” framework – because they occur infrequently, and despite their potentially disastrous consequences, tsunamis are likely to drop off the public agenda. Effective responses to tsunamis are therefore likely only to be sustainable if they are plugged into national disaster frameworks: a *Toolkit* could also help to keep tsunamis in the public eye, and to integrate tsunami responses into broader national disaster strategies.

Content framework

An initial *TsunamiTeacher* concept and content framework was constructed at a hands-on technical workshop of experts and education specialists held by UNESCO-IOC at its offices in Paris on 5 and 6 September 2005.

The participants were: Professor Sirimali Fernando, Chair of the National Science Foundation, Sri Lanka; Dr Laura Kong, Director of the International Tsunami Information Centre, Hawaii; Karen MacGregor, specialist education writer and trainer, South Africa; and Peter Pissierssens, Bernardo Aliaga and Martin Hadlow of UNESCO-IOC at Headquarters in Paris.

The objectives of the meeting were to:

- Review current tsunami information, awareness and capacity-building efforts with a view to value-adding where appropriate.
- Study the efficacy of developing a global generic package (“kit”) of resources and materials for assisting national capacity-building.
- Prepare new materials and identify possible existing audio-visual and print resources for a generic “kit”.
- Suggest draft curricula and other components as required to enable tsunami awareness to be included in, for instance, school environments and media training institutions.
- Suggest appropriate technological platforms (for instance DVD, the internet and print) for any generic “kit”.

The meeting concluded that a consolidated global resource that pulled together reliable tsunami information, along with tsunami training modules, could greatly assist national authorities and a range of other stakeholder groups to raise awareness and understanding of tsunamis, and plan to respond to and mitigate their impacts.

It was agreed that UNESCO-IOC’s web-based, distance learning *Ocean Teacher* model could be a highly effective and publicly accessible platform for delivery, supported by DVD training packages targeting specific audiences. Five stakeholder groups were identified as target audiences that could benefit from the resource:

- The media
- Education systems
- Governments
- Community groups
- Private sector

Concept

Information is of limited use on its own, without context. The purpose of a *TsunamiTeacher* would not only be to pull together – and widely disseminate – a critical mass of quality information and material about tsunamis, but also to add value to the resource by directing different audiences to materials that are relevant and important to them.

The proposal is to develop a *TsunamiTeacher* based on the IOC’s *Ocean Teacher* concept, which has been developed over the past five years. The *TsunamiTeacher* would be a flexible, value-added binary resource comprising:

- An updatable “collection” of reliable tsunami-related information and materials, arranged in “folders” and including, for example, brochures and documents, graphics, multi-media materials, strategies and school curricula resources. The “collection” would be widely accessible on the internet and DVD.
- Continually produced training modules, available via the internet and on DVD, targeting different audiences with specific training and resources – linked to the “collection” – that build awareness and understanding of, and capacity to mitigate, tsunamis.

Modules for different audiences, for example the media or schools or governments, would contain storylines in chapters that link to relevant resources in the “collection”. None of the modules would use all of the resources, but different audiences could utilize the same materials.

So, for example, journalists and teachers might draw on basic information about tsunamis and photographs to illustrate their articles or lessons, while governments and companies might focus on documents outlining how to get collapsed infrastructure up-and-running. And all audiences would be interested in how people might seek safely after a tsunami warning.

Training modules could be adapted to make them locally relevant, for instance by taking local population concentrations and social structures and geographic features into account, or modules could be created from scratch anywhere in the world, by simply using the “collection” resources. The “collection” would be continually updated, pulling in new developments and documents as well as submitted information, which would be validated by experts.

Management structure

The *TsunamiTeacher* project would be based at the IOC-ITIC in Honolulu, Hawaii, which already holds much of its potential content. The language of the project would be English, and partnerships would be sought to translate the materials into French and Spanish.

The project would initially be managed by a co-ordinator/chief editor who would be responsible for the day-to-day preparation of content for the project, in association with the IOC-ITIC. The co-ordinator/chief editor would work with “subject” editors who would research resources and write content for the training modules targeting different audiences.

Initial research and selection of “collection” content, and the development of the first two training modules, would be undertaken by a team of IOC-ITIC staff and contractors. Thereafter the IOC-ITIC would be responsible for continually developing and maintaining the “collection”, producing training modules and verifying the quality and reliability of the tsunami information resources.

Specialists working on the ground in fields covered by the *Toolkit’s* resources, would be asked to review and validate the content. The *Toolkit’s* web-based application would be sited at the UNESCO-IOC’s project office in Ostend, Belgium, which would charged with hosting and administering the website.

Time frame

The launch of the *TsunamiTeacher* would be at the ICG-IOTWS II meeting in Hyderabad, India, from 14 to 16 December 2005. The launch would be timed to coincide with the symbolic first anniversary of the Indian Ocean Tsunami of 26 December 2005. The launch will describe the plan for the initial “collection” of tsunami resources and two training modules with descriptive printed brochures, packaged on DVD or CD-Rom. These are planned to be available in early 2006 and would be widely distributed to the media and national authorities ahead of the tsunami anniversary.

It is envisaged that the full development by the IOC-ITIC of the “collection” and a range of training modules targeting different audiences, as well as an interactive *TsunamiTeacher* website, would be completed by the end of 2006. Thereafter the content and website would be continuously maintained and updated by the IOC-ITIC, while the website would maintained by the IOC project in Ostend.

To construct an early content framework for the *TsunamiTeacher*, the possible purposes of and “collection” materials for kits aimed at the five audiences were conceived, as follows:

1- Journalists-media

Objectives-purposes

To provide technically correct, verified information to media personnel to assist them with the production of quality articles and programmes that would promote public awareness and understanding of, as well as preparedness for, tsunami events.

Materials

- Descriptive texts
- Press releases
- Case studies (examples)
- Meeting reports and their summaries
- Low resolution video and audio
- Links to focal points
- Graphics, animations and satellite images
- Photographic images
- Brochures maps posters
- List of acronyms
- Links to authors and production houses of multimedia videos and programmes
- Links to other relevant sections of the kit
- Links to relevant organizations in each country

2- Formal education

Objectives-purposes

To provide materials and generic tsunami curricula for formal (primary and secondary) education, as well as teacher guide books and texts.

Materials

- Pupil-student course booklets
- Teacher guides
- Video materials
- Posters, maps, t-shirt and sticker designs
- Scenarios for group activities and events
- Additional reading materials
- Links to the media section
- Links to websites, for research purposes

3- Government

Audiences

- National
- Provincial-district-local

Objectives-purposes

To provide:

- Generic legal and regulatory frameworks for legislators and decision-makers at all levels.
- General terms of reference for tsunami co-ordination committees and other institutions with tsunami responsibilities at all levels.
- General standard operating procedures for all institutions with tsunami responsibilities.
- Governance, management and resource (finance, staffing etc) considerations.
- Post-Tsunami disaster response and recovery (scientific post-tsunami surveys, relief services, structural damage assessment, lives loss etc).

Issues that the TsunamiTeacher would need to cover

Inundation maps, evacuation maps, land use policy, engineering practices, population density maps (taking into consideration transient populations such as tourists), infrastructure

collapse back-up plans (communication, transport, electricity etc).

Materials

- Documents and legal texts
- Co-ordination committee agendas, organizational structures, organigrams.
- Videos of tsunami drills
- Maps
- Software applications
- GIS samples
- Decision support systems, including simulation exercises
- Models and model outputs
- Disaster response
- Information on law and order and safety issues
- Lessons learned and case studies
- UN conventions and conferences on disaster management (global framework)

4- Community stakeholders

Audiences

NGOs, the tourism sector, civil society (such as labour, gender, religious, cultural groups) and local leaders.

Objectives-purposes

To motivate and assist community stakeholders to become an integral part of tsunami preparedness, response and recovery.

Materials

- Links to government and private sector stakeholders
- National communication and early warning plans
- Standard operating procedures
- Insuring for recovery following disaster
- Information on health issues and actions
- Information on law and order and safety issues
- Lessons learned and case studies

5- Private sector

Telecommunications, utilities, tourism, coastal industries and small businesses, shipping and transportation systems.

Objectives

- To involve the private sector in tsunami preparedness, operations and responses.
- To ensure back-up following the collapse of critical infrastructure and services, including electricity, water, food, shelter, first aid and medical.

Materials

- Links for community and government at the local level
- Signage
- Links to evacuation, inundation and hazard maps
- Insuring for recovery following disaster
- Building codes
- Continuity of operations plans (how company continues to operate)
- Lessons learned and case studies