

## **Symposium PTWS Future comments**

**Dr. Ken Gledhill, Chair, ICG/PTWS**

Some of the issues identified during the symposium, such as the need for standards are global issues. PTWS can play our part, as we have always done in the globally, by raising these topics at TOWS and IOC.

I was taken by the issue of time versus accuracy for tsunami warning presented by Vasily Titov and summarised by Laura Kong. They identified a “Heisenberg’s uncertainty principle for tsunami”. This demonstrated also the move PTWS has made from concentrating on tele-tsunami to beginning to address the issue of very local tsunami. This is challenging but very important.

When considering the question: should we concentrate on a few high priority issues, or “cover the field”?

My answer to this is:

“We are only as effective as our weakest link”

We are a complete system with life-safety as our driving aim. We cannot ignore any component of the system.

Considering the strategic pillars of PTWS, we can identify key priorities.

Pillar 1: We need to understand mega earthquakes – where can happen? What will be the impacts?

Pillar 2: What are the new possibilities for tsunami detection and characterisation? Some that come up are:

- Real time GPS and strong motion techniques
- Using submarine cables
- Remote sensing techniques

There are others – we need to keep a watch brief on, and encourage developments.

We need to keep refining how we deliver out alert information to Member States – refinement and improvement of the Enhanced Products.

Pillar 3: A long “to do” list including:

- Preparedness
- Public alerting
- Exercising
- Training
- Last mile issues (or is that first mile?)
- The importance of “natural warning signs” and how this information is conveyed
- Sustainability of the high public awareness following recent events

Over the last five years we have concentrated on the Enhanced Products – using the best available science to inform alerting. This includes threat-based forecast models delivered in a variety of forms.

My vision is that for the next five years we concentrate on ensuring that the advances in science and the availability of the Enhanced Products lead to better life-safety outcomes. Here I am talking about using the best science available to inform evacuation zone, route and planning and procedures so that communities can react effectively when tsunamis occur. The best outcomes will happen when communities have a “culture of evacuation”, a philosophy espoused by the new mayor of Otsuchi, a small seaside city destroyed by the 2011 Great East Japan. So the challenge is to implement a programme aimed at ensuring every community at risk has full evacuation plans socialised at the community level and informed by the best physical and social science. We should adopt that outcome as our challenge for the next five years!

Achieving this will require changes in the governance of PTWS to ensure better representation of the emergency management community within our system.