

Welcome Greeting by

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**Fourth International Symposium on Catastrophe Risk Management –
Evolving Risks due to Extreme Events in Asia-Pacific**

Tuesday, 19 February 2013
9:00 a.m. @ Nanyang Executive Centre, NTU, Singapore

Good morning,

Guest of Honour, [Mr Peter Ho](#), Senior Advisor, Centre for Strategic Futures, Singapore

[Professor Bertil Andersson](#), President, Nanyang Technological University (NTU)

[Professor Su Guaning](#), President Emeritus, NTU

[Professor Haresh Shah](#), Chairman, Advisory Board of the Institute of Catastrophe Risk Management (ICRM), and Member of the NTU Board of Trustees,

Distinguished Speakers, Delegates and Guests

Colleagues

Ladies and Gentlemen

On behalf of ICRM at NTU, I would like to extend our warmest greetings to everyone to the Fourth International Symposium on Catastrophe Risk Management, *Evolving Risks due to Extreme Events in Asia-Pacific*. We have about 190 participants from over 10 countries. To our guests from overseas, welcome to Singapore!

ICRM Development

ICRM was launched in January 2010 by Mr Heng Swee Keat Minister for Education now, together with Prof Su Guaning NTU President then, and Mr Derek Teo President of General Insurance Association of Singapore. Since then, ICRM has received encouraging support from the government as well as the finance industry in its R&D activities in catastrophe risk management.

Since August 2011, we have been working on two key R&D projects funded by Singapore government for flood and earthquake risk assessments of major cities in Southeast Asia region. In addition, Aon Benfield Asia has provided a gift to establish PhD Research Awards, while Willis Research Network has funded Post-doctoral Fellowships at ICRM. We have also received generous supports

from Asia Capital Re, RMS Inc, Guy Carpenter, Munich Re and Asia Risk Centre.

We have also been in active discussion with many international aid agencies towards building the capacity of ASEAN community for regional risk assessment. We are expecting a pilot project of the ASEAN Earthquake Model proposal to start in 2013.

These public and private financial supports are in parallel to NTU's strategic funding support for ICRM to collaborate with our academic partner, Centre for Risk Studies at Judge Business School of the University of Cambridge in UK, on the System Shock Research Programme.

ICRM Symposiums

ICRM has held four international symposiums on catastrophe risk management since its launch in January 2010. The four symposium themes are: "Public-Private Partnership in Understanding, Communicating and Managing Catastrophe Risk" in 2010, "Climate Change – Implications on Food & Water Security" in 2011, "Black Swan Events" in 2012, and today "Evolving Risks due to Extreme Events in Asia-Pacific".

Black Swan Events

In March 2011, when we met at the 2nd ICRM Symposium on *Climate Change Effects*, little did we expect the massive Tohoku Earthquake in Eastern Japan to occur one week after our Symposium, which caused devastating tsunami that in turn led to the catastrophic meltdown of nuclear power reactors. The Tohoku Earthquake was then followed by the Great Thailand Flood in October/November 2011 which devastated a huge area of the country together with her people and the industry.

Were these events Black Swan Events, ie *unknown unknowns*? Or, they were just *known unknowns*?

This was part of the reason that we set the theme of our 3rd Symposium in 2012 as *Black Swan Events*. However, if you recall the symposium paper titles, there were *black swan*, *red swan* and *grey swan*. Therefore, you can see that we seemed to have trouble even to agree on the colour of the swans, let alone **identifying the black swans!**

Nevertheless, we all seem to agree that there appears to be a higher frequency of occurrence of major natural catastrophes in recent years. Rare and improbable events do occur much more than we dare to think. It is thus equally challenging to build resilience into our society **to cope with the black swan events.**

Therefore, one of the goals of the Symposium today is to provide a platform where we can learn from the world's leading experts and from one another. This will hopefully help us to better manage the evolving risks associated the extreme events in Asia-Pacific, which will in turn lead to the development of innovative public-private partnerships towards mitigating such risks.

In closing, I would like to thank our Guest of Honour, Mr Peter Ho, Senior Advisor, Centre for Strategic Futures, Singapore, and all of you for joining us at the Fourth Symposium on *Evolving Risks due to Extreme Events in Asia-Pacific*. I wish all of you a fruitful time at the Symposium.

Thank you.