



Risk Interpretation and Action (RIA)

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20th Science Committee Meeting
15 October 2018

Risk Interpretation and Action (RIA)

IRDR Science Plan- Objectives 2:

Understanding decision-making in complex and changing risk contexts.

Sub-objectives:

- (2.1) Identifying relevant decision-making systems and their interactions;
- (2.2) Understanding decision-making in the context of environmental hazards, and
- (2.3) Improving the quality of decision-making practice.

RIA focuses on four priority areas:

- Decision-making for uncertainty;
- Early warning systems;
- Adaptive management and resilience; and
- Individual perceptions and risk behaviour.

IRDR RIA Project plan 2018-2020

Objectives: Build capacity and network of networks, and synthesize good practices on early warning systems, risk communication and decision making under uncertainty.

Scientific questions: Aligned with the Sendai Framework, how do people make decisions in the face of disaster risk (individually, collectively)?

- 1. Human cognitive processes under risk and uncertainty** (micro-dynamics of perception, information processing and decision making; e.g., how do people respond to very short (seconds) early warnings as compared to longer term (hours to days) early warnings?),
- 2. Human behavior in hazardous processes** (e.g., natural hazards, such as earthquakes, tsunamis, hurricanes, floods, as well as technological hazards) (meso-scale; individual and group behaviors and dynamics in hazard contexts),
- 3. Causality in social and environmental changes resulting from hazardous processes** (geophysical and social macro-dynamics).

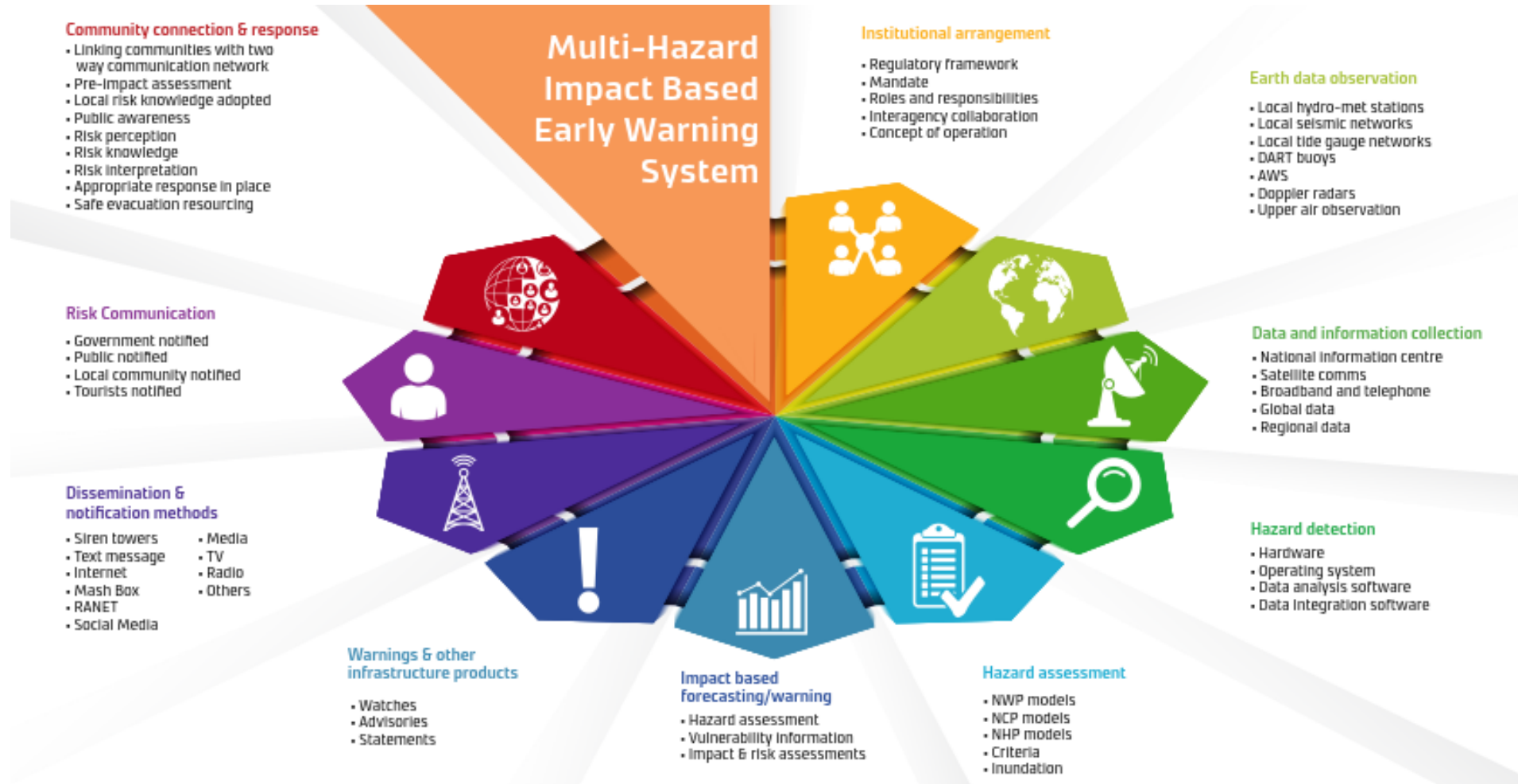
IRDR RIA Project plan 2018-2020 (continued)

Plan Activities: Global-strategic papers and policy documents; regional and national actions to ensure implementation and application to local contexts

Deliverables: Actively link WMO, UNISDR, 100 Cities Resilience, KAN and other partners (set up *“What Works Network”* - UK)

Support Needs: Funding to connect RIA networks, partnerships and projects.

Progress on Plan Implementation



Partnership with WMO for Total Warning System for Tropical Cyclone Workshop, 13 September 2018, Auckland

The main objectives of these workshops were to examine current knowledge, forecasting and research trends on tropical cyclones from an integrated global perspective and report on these aspects and to offer recommendations for future forecasting studies and research with special regard to the varying needs of different regions.



APEC Senior Disaster Management Officials Forum, in Kokopo, PNG, 25-26 September

- Promote disaster resilience by exchanging information on methods and disaster risk communications strategies to enhance all-hazards early warning system as well as through supporting research including satellite technology early warning platform.



Indonesian Tsunami Warning System- Radio NZ & German Radio (dw)

Indonesia tsunami - why was the warning lifted?

From **Sunday Morning**, 7:09 am on 30 September 2018

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Hydrologist Dr Bapon Fakhruddin helped design Indonesia's early warning system (EWS). He explains why Indonesia's National Disaster Mitigation Agency might have lifted the tsunami warning it initially put in place when Friday's 7.5 quake hit. A subsequent tsunami has claimed an indeterminate number of lives in the city of Palu.

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EWS session in the Understanding Risk Conference 2018, Vanuatu, 16-19 October (IRDR, UNISDR, ISC, WMO and T+T)



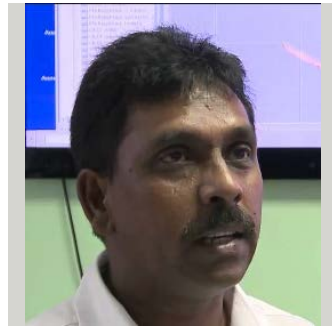
Andrew McElroy
UNISDR Pacific



- John Harding
- Climate Risk and Early Warning Systems (CREWS) Secretariat, World Meteorological Organization



- Bapon Fakhruddin
- Co-Chair - RIA, IRDR/ICSU and Technical Director, Tonkin + Taylor International



- Ravind Kumar
- Director, Fiji Meteorological Service



- Litea Biukoto
- Senior Advisor - Risk Reduction, SPC



- Salesa Nihmei
- Meteorology & Climate Officer, SPREP

Esline Garaebiti

Manager - Geohazards Division, Ministry of Climate Change, Vanuatu and Regional Coordinator - Oceania Regional Seismic Network

Proposed Activities

- Indonesian Tsunami Warning system review: Through IRDR, we would like to assist to review end to end Early Warning Systems for earthquake and tsunami in Indonesia based on our MHEWS framework. BMKG and BNPB is willing to accept this support
- Understanding Tropical Cyclone impacts on society for the purposes of advancing the total warning system concept in Ninth WMO International Workshop on Tropical Cyclones (IWTC-9) Honolulu, Hawaii, USA, 3-7 December 2018
- Organizing Committee for Global Platform 2019 for Early Warning System
- Young Scientist engagement in RIA research activities
- DRM 2020 for EU
- Publications on RIA