2016 ASIAN BUSINESS FORUM on Risk Reduction and Resilience Building

Co-organized by

UNISDR The United Nations Office for Disaster Risk Reduction

PATA Pacific Asia Travel Association

GI:DRM Global Initiative on Disaster Risk Management

Hotel Resilient

With support from the German Government through giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Objective:

Improve disaster risk management and strengthen resilience in hotels/resorts and throughout tourism destinations

Approach and Outputs:

1. Hotel Resilient Steering Committee and Expert Group
2. Promotion and agenda setting
3. Publication of the scoping study 'Developing strategies to strengthen the resilience of hotels to disasters'
4. Handbook on the multi-hazard risk management standard module (standards, checklist, tools etc.)

With support from the German Government through

The Multi-hazard Risk Management Standard Module:

- Development in a participatory approach in the field to ensure the product is tailored to demands of hotels/resorts
- **Selected destinations:**
  Bohol & Cebu in the Philippines
- **Major components:**
  risk assessment, preventive structural and non-structural measures, business continuity planning
- Focus on natural and technological hazards

With support from the German Government through

Next steps:

- Draft version of standard module was reviewed with stakeholders (Field trips to Philippines in February and April)
- Revised version will be validated in Philippines in May
- Pilot to further test the standard module and ensure its global applicability
- 2-3 tourism destinations in the region will be selected based on an Expression of Interest
- Standard Module will be launched as open source tool

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Co-organized by ADB, Canada, adpc, giz, GI:DRM, +C Global Disaster Preparedness Center, The Asia Foundation

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Technical Partner:

KIT Karlsruher Institut für Technologie

CEDIM

Consortium members:

Bournemouth University

The University Of Queensland AUSTRALIA

UQ BUSINESS SCHOOL

Griffith UNIVERSITY

risklayer

TwoEco, Inc. Consultants for Tourism Development

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The Hotel Resilient Multi-hazard Risk Management Standard Module

within the framework of the

GI:DRM Global Initiative on Disaster Risk Management

With support from the German Government through

Dr. Bijan Khazai

Karlsruher Institut für Technologie

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Objective

- Standards for the **multi-hazard risk assessment** of hotels and resorts buildings.

- Standards for the design of **safety systems and management processes** for making hotels and resorts more resilient.

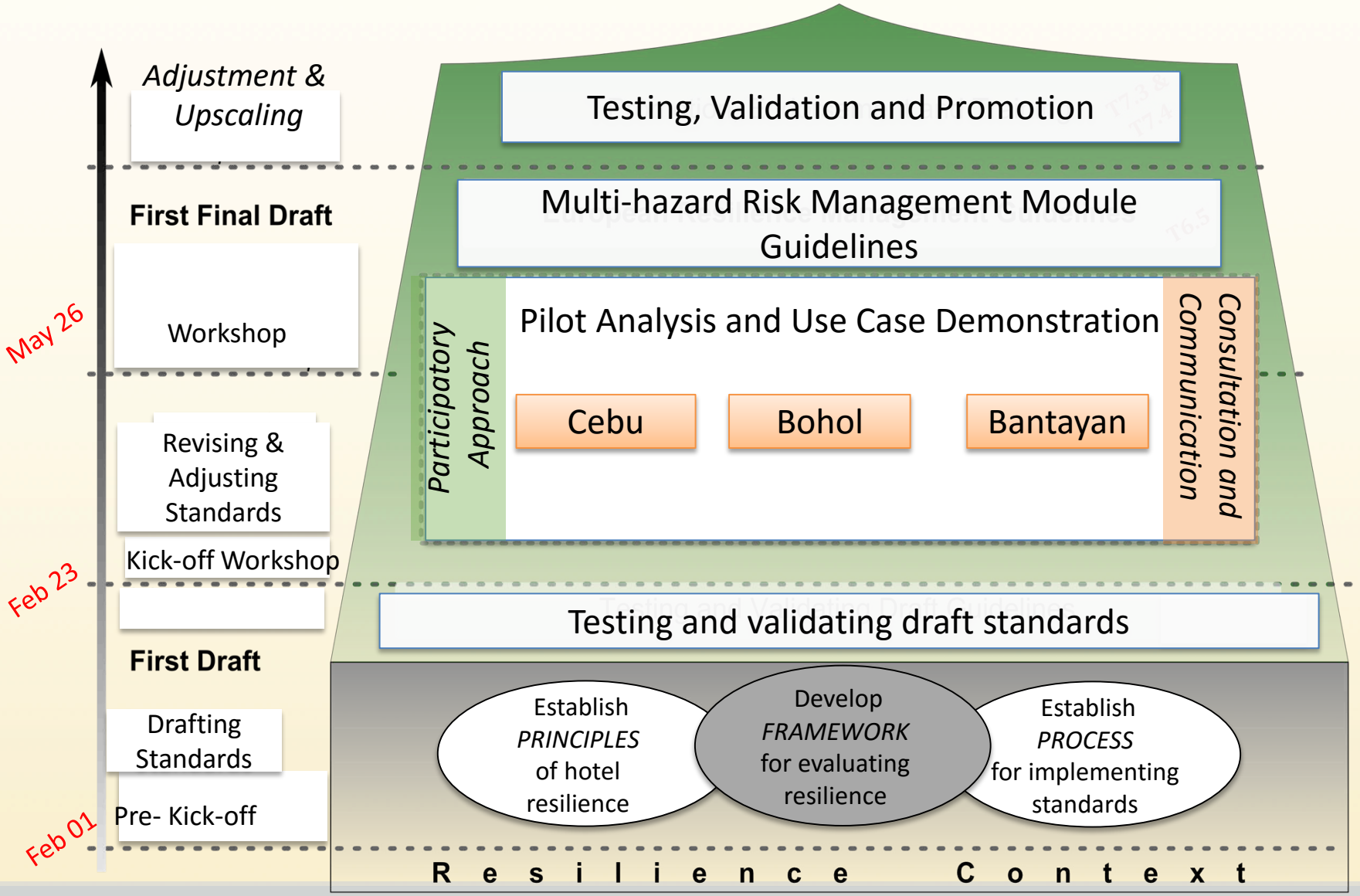
Core Criteria for Standards

Open: standards and methodology of how information is synthesized, are open and fully documented.

Defendable: results are reproducible and methodology is validated

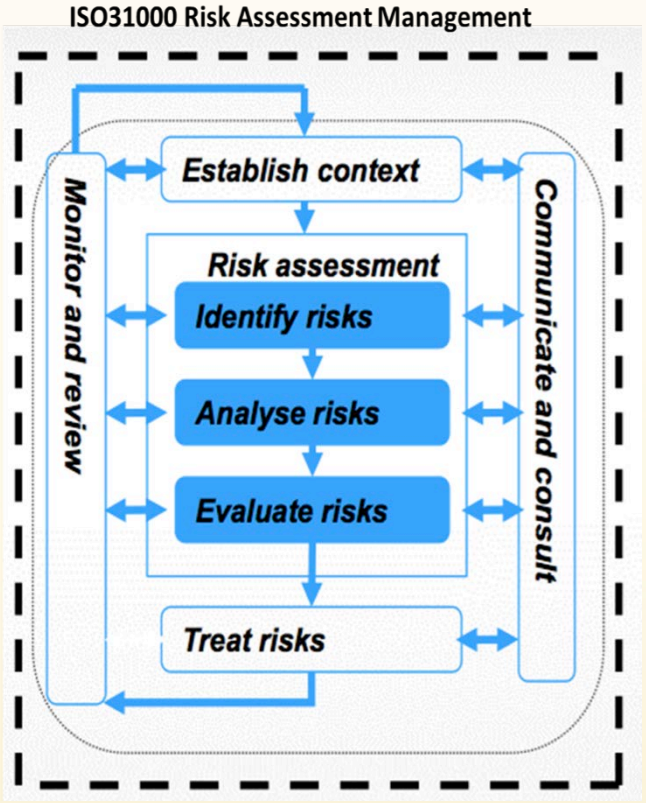
Marketable: implemented easily, clear marketing advantage and economically viable, consumer information tool.

Process


Adjustment & Upscaling
First Final Draft
Workshop
May 26
Revising & Adjusting Standards
Kick-off Workshop
Feb 23
First Draft
Drafting Standards
Pre- Kick-off
Feb 01
Testing, Validation and Promotion
Multi-hazard Risk Management Module Guidelines
Participatory Approach
Pilot Analysis and Use Case Demonstration
Cebu
Bohol
Bantayan
Consultation and Communication
Testing and validating draft standards
Establish PRINCIPLES of hotel resilience
Develop FRAMEWORK for evaluating resilience
Establish PROCESS for implementing standards
Resilience Context

Resilience Context

- **Building on existing international standards:**
  - ISO31000 Risk Management
  - ISO22310 Business Continuity Management
  - ISO 22320 Emergency Management
  - NIPP (US-National Infrastructure Protection Plan, DHS 2009)
  - FEMA 454 (Earthquakes)
  - FEMA 543 (Flooding and High Winds)
  - Others
- **Building on existing initiatives:**
  - Ready, Set, Go! (Earthcheck)
  - TsunamiReady
  - Perry Johnson Hurricane Preparedness
  - REDAS Rapid Visual Screening
  - Saferplace Cristal Standards
  - Global Infrastructure Basel SuRe
  - LEED
  - HACCP (Hazard Analysis and Critical Control Points) Certification



Process for Managing Risk, ISO 31000

BSM Methodology
3 Categories &18 sub-categories

Categories

BUILDINGS

SYSTEMS

MANAGEMENT

B1	General Information
B2	Site/Location
B3	Grounds
B4	Design
B5	Structure
B6	Architectural Elements
S1	Fire Protection
S2	Critical Infrastructure
S3	Evacuation System
S4	Communication
S5	Emergency Response
S6	Environmental Safety
M1	Roles and Responsibilities
M2	Training and Drills
M3	Disaster Prep & Response Pla
M4	Evacuation Plan
M5	Communication Plan
M6	Business Continuity Plan

Communication Plan	
M5.1	Staying informed of local weather updates/emergency warnings
M5.2	Disseminating emergency warnings to guests and staff
M5.3	Communicating with guests and staff before and after a crisis
M5.4	Communicating with external and organizations stakeholders
M5.5	Communicating with media
M5.6	Back-up communication plan

BMS (BUILDING, SYSTEMS AND MANAGEMENT) METHODOLOGY

Categories

- BUILDINGS
- SYSTEMS
- MANAGEMENT

Steps

Hazard Model

Multi-Hazard Score

Vulnerability Screening

Multi-Risk Score

Requirements Audit

Resiliency Rating

Performance-based calculation of risk

- Risk scores on a scale from 0 to 100 are obtained in terms of *goals* and *performance criteria*:
  - L: Life Safety
  - U: Usability
  - R: Recovery Time

acceptance criteria to be validated

qualify for certification

Performance Class	Life Safety (L)	Usability (U)	Recovery Time (R)
A (70 – 100)	No Injuries	Fully Usable	4hrs
B (50 – 70)	Minor Injuries	Minor Impairment	3 days
C (30 – 50)	Moderate Injuries	Moderately impaired	30 days
D (0 – 30)	Loss of life Serious Injuries	Major impairment	> 30 days

Software

- Combine model-based risk calculations with information obtained from hotels

- Step-by-step guidance for conducting assessments

Information on hazards is provided to the assessors for each site based on verifiable hazard and risk models for that area

Reporting Risk Ratings

Risk is shown in terms of total risk and de-aggregated risk score for each hazard scenario.

		Earthquakes		Flood		Wind		Landslide		Fire		Total
		General Shaking	Ground Failure	Riverine	Coastal	Hurri-cane	Other High Wind	Rainfall	Earth-quake induced	Techno-logical	Arson	
Hazard		31	36	20	14	64	64	49	55	51	97	48
Vulnerability		88	69	38	69	49	40	44	69	85	97	63
Risk	Life Safety	98	89	69	49	88	85	81	95	98	98	92
	Usability	68	71	35	28	69	78	47	63	82	97	64
	Recovery	61	73	48	26	68	68	48	60	69	97	62

From Risk to Resiliency Rating

Does not qualify for certification	Risk: The total risk score fall under the acceptable threshold on life safety, usability and recovery time. Resilience: The building has taken few or no steps to maintain continuity of operations and/or has taken little or no action to ensure that key functions will not be significantly affected by an event.
Minimum requirements to meet certification needs	The building has taken minimum required steps to maintain continuity of operations and/or ensuring that key functions will not be significantly affected by an event.
Exemplary actions for highest resilience rating	The building has taken exemplary action in addition to fulfilling all minimum requirements to ensure continuity of operations and an emergency management plan and ensuring that key functions will not be interrupted by an event.

From Risk to Resiliency Rating

Use a “credit system” for Systems and Management Categories.

M5 Communication Plan

Credits 1-3

M5.1 Intent
M5.2 Requirements
M 5.3Exemplary Performance
M5.4 Issues to consider
M5.5 Resources

Minimum requirements are needed to obtain certification

Exemplary performance increase the resilience rating

18 hotels and resorts in Bohol and Cebu

Radisson Blu

White Sands

Waterfront

Mövenpick

Shangri-La

Harolds

Parklane

Costabella

Validation of Draft Standards: February 23 – March 8

Training Needs: April 4 - 8

Key Informant Interviews

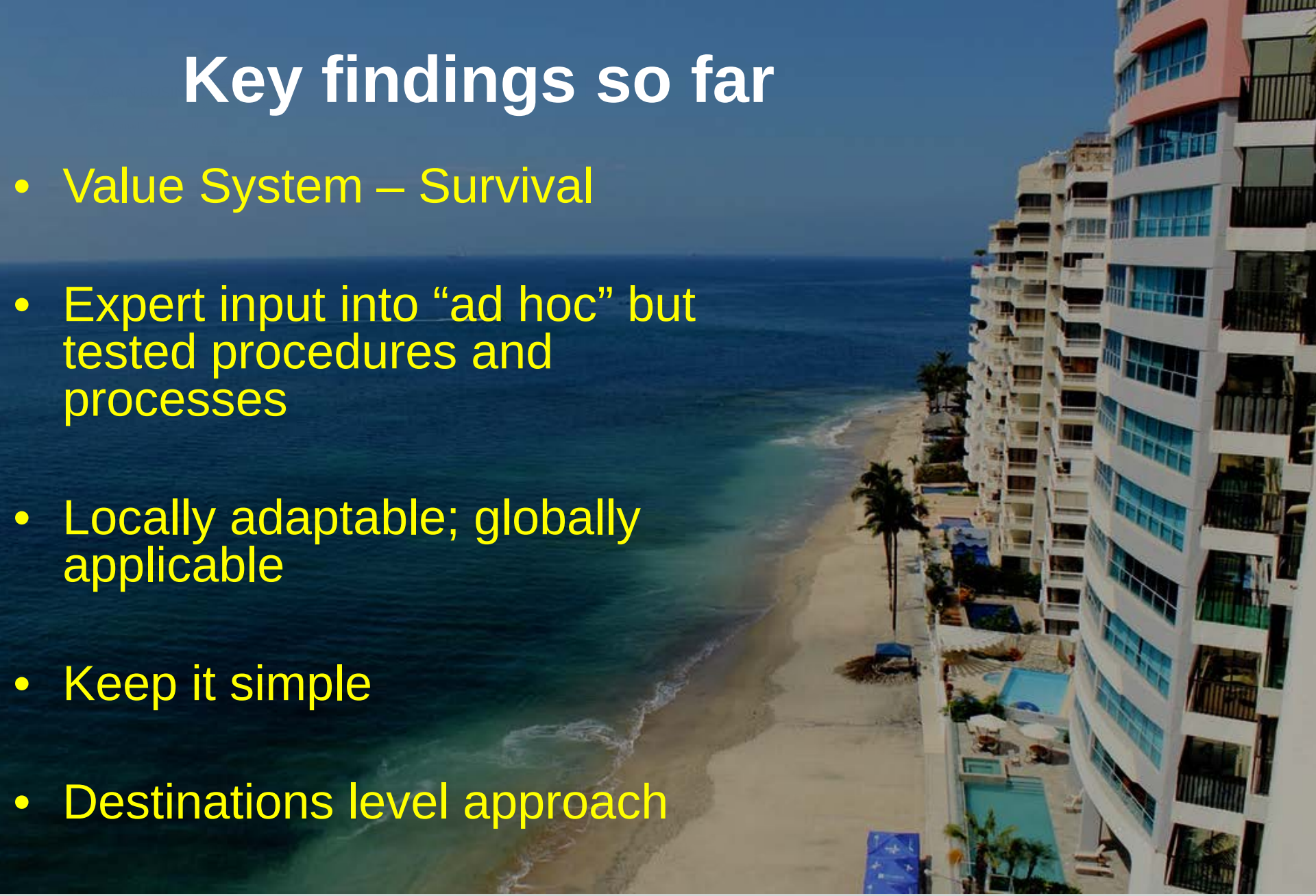
Institutions

- Hotels and Resorts
- Hotel Associations
- LGUs and DRM Officers
- Travel Agency
- Insurance Commission
- Mega Cebu
- Lapu Lapu Tourism Office
- Cebu Chamber of Commerce

- Department of Tourism
- Tourism Infrastructure and Enterprise Zone (Flagship Projects)
- Philippine Hotel Owners Association
- Department of Trade and Industry
- Department of Science and Technology
- Department of Public Works and Highways

Key findings so far

- Value System – Survival
- Expert input into “ad hoc” but tested procedures and processes
- Locally adaptable; globally applicable
- Keep it simple
- Destinations level approach



Thank you!

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