Southeast Asia Disaster Risk Insurance Facility

PROTECT THE GREATEST HOME OF ALL:

OUR COUNTRIES

SEADRIF is a regional platform to provide ASEAN countries with financial solutions and technical advice to increase their financial resilience to climate and disaster risks.
High-Level Implementation and Stakeholder Road Map

Facilitator: Benedikt Signer

Speakers:
- Greg Fowler
- Salvador Perez
Objectives of the factsheets and webinar

- **Why** should governments develop a financial protection strategy for public assets?
- **When** can insurance be a good option for the financial protection of public assets?
- **Who** are the key stakeholders (both external and internal) that play roles in each stage of the insurance development process?
- **What** are the most important step-by-step considerations involved in the development of a strategy for public asset insurance?

**INTENDED OUTCOME:**
Government officials to develop strong understanding of the steps required to design, develop, deliver and operate effective financial protection of public assets, particularly through risk transfer and insurance.
Structure of Webinars

- 90 minute webinar for each factsheet
- Different guest speakers
- Poll results will be included in final outputs
- Live polls: Please participate
- Please share questions via Q&A function
Roles and responsibilities for the government officials within an internal insurance program, the associated stakeholders, including auditing, compliance and governance, supervisory.

Multi year aspects such as renewals and re-assessment of exposures.

Review of procurement considerations

Dealing with claims management

Incorporating innovations and technologies

Development of an implementation roadmap for a public asset financial protection program

How governments can agree objectives and build consensus around priorities

How to develop internal governance and oversight functions, and ownership at each level of the insurance programme

How risks are allocated across asset owners and operators

Roles and options available to construction of cost-effective insurance, including common insurance structures and case studies, their pros and cons against considerations of budgets, risk appetites, and government priorities

Introduction of pooling and mutualization of large scale public assets insurance programs

Insurance/reinsurance concepts of retention, deductible and exclusion

The importance and development of Public Assets Registries, and associated Enterprise Asset Management systems.

How to assess and quantify asset exposure, sources of data, requirements for insurance transactions

Introductions to the use of catastrophe analytics, burning cost / technical and market rates, tariff structures, risk based pricing methods, and underwriting.
SOME KEY QUESTIONS
These are some of the key questions we will cover in the series of factsheets and webinars.

Which of these are of interest to you? (select all that apply)

- What are the strategic priorities for public asset protection? 74%
- What is the type and scale of the risk faced? 40%
- Is insurance suitable as an option? 53%
- Have all stakeholders been included in the strategy? 25%
- What are the key roles and responsibilities of each within the program? 46%
- What are the prerequisites necessary to enable effective financial risk transfer? 55%
- What procedures and systems are necessary to ensure effective management of the process? 69%

85 participants responded

Output from poll in last webinar
What do you think your (current/potential) role(s) in a public assets financial protection programme would be? (select all that apply)

- Overall risk management strategy development and alignment
- Development of policy and legislative frameworks
- Budget and financial planning
- Assessment of evidence and options
- Provider of data, models and subject matter expertise
- Establishment/procurement of the risk transfer solutions
- Operational set-up or preparation of the risk transfer solutions
Overview of a Financial Protection of Public Assets Program

Greg Fowler
Consultant, Crisis and Disaster Risk Finance, World Bank
Stages in preparation and delivery of financial protection strategy

**Design**

The creation of an agreed business strategy and objectives for the financial protection of public assets in line with government policy vis-à-vis asset management.

**Development**

The assessment of risk and the establishment of an effective and sustainable financial protection program to achieve the strategic objectives in line with the risk appetite.

**Delivery**

The operationalization of the insurance / disaster risk-financing program, under agreed procedural frameworks, ensuring effective disbursement of claims and transparent accounting in line with policy terms and conditions.

**Renewal**

The continued review, redesign and renewal of the program to account for changes in exposure, risk and market trends to ensure ongoing cost effectiveness and sustainability.
Designing a risk financing strategy

- **Strategic alignment**
  - Agree principles
  - Define intended benefits

- **Legitimacy**
  - Affirm mandate
  - Develop legislative/regulatory instrument
  - Agree operational base
  - Develop strategic governance process
  - Develop review process

- **Budget planning**
  - Establish core financial strategies
Strategic alignment

Strategic Context considerations:
- Economic resilience
- Protecting both sides of the balance sheet
- Better financial management
- Improved understanding of whole of government challenges/risks
- More efficient national/subnational funding flows
- Holistic and consistent allocation of relief and recovery funding
  - Improved allocation of expenditure on relief & recovery vs. mitigation
- Improved government & community incentives
- Improved linkages with social policy

**PRINCIPLES**

**OBJECTIVES**

**BENEFITS**

Key Performance Indicators (KPIs)

- Specific
- Measurable
- Achievable
- Relevant
- Timebound
Key guiding principles:

- **All of Government:**
  the primary goal is to achieve a better outcome for Government as a whole

- **Customer focus – stability and ease of transition:**
  the solution should maintain a focus on the agencies as customers

- **Risk management and data improvement:**
  the solution will facilitate excellence in risk management

- **Insurable risk financing and coordination:**
  the solution is a vehicle to pool, fund and coordinate the management of insurable risks. It is not an insurer.

- **Long term public value:**
  the solution will facilitate reduced costs over the long term

- **Equity:**
  The operations of the solution should be fair, and the treatment of different participating agencies transparent and defensible from an equity perspective

- **Simplicity and transparency:**
  Simple approaches and models, where adequate, will be preferred over more complex ones

- **Prudence:**
  where there is uncertainty, the solution should err on the side of caution

New Zealand Case Study:
All of Government Risk Financing Principles
Legitimacy

- Legislation
- Regulation
- Mandate
- Operational location
To what extent are the contingent liabilities associated with natural disaster impacts incorporated into government accounts?

If a program is set up in a way that it may experience a surplus, can these be accrued/accumulated over ensuing years on the basis this improves financial resilience over time?

If a program is set up in a way that it may experience a deficit, what is the role of central government to guarantee replenishment and/or manage losses above the capacity of the program?

If funds are to be accumulated within a program, what is the investment protocol?

Does legislation authorize the procurement and use of risk transfer through (re)insurance? If so, are there any restrictions on the choice of capital partners or intermediaries?

How will the operational solution be funded?

How will program implementation (e.g. the costs associated with delivery) be funded?

How will payouts flow to the asset owning / implementing unit following an eligible disaster event?
Developing and structuring the risk transfer framework

**Evidence gathering**
- Confirm scope
- Collect data
- Conduct loss modelling
- Develop the funding gap equation

**Options assessment**
- Conduct assessment of drivers
- Assess degree of risk retention vs risk transfer
- Define services, roles and responsibilities
- Assess costs and contribution arrangements

**Decision making and authorisation**
- Identify the preferred option of delivery
- Obtain required sign-off and authorisations
Evidence Gathering

- **Asset exposure characteristics (e.g., values, location, structure)**
  - Data on the location, value and characteristics of assets

- **Loss modeling (showing likelihood and severity of disaster impacts)**
  - Insight from government agencies, commercial providers and/or historical information

- **Current public asset financial protection funding arrangement**
  - Existing arrangements for financial protection of public assets

- **Financial protection gap**
Key influences

Internal Appetites:
- Risk appetite;
- Fiscal policy; and
- Financial tolerance;

Informed by:
- loss modelling;
- broader risk context; and
- other government priorities

External market forces:
- Global financial conditions; and
- Market pricing;

Informed by:
- Market election;
- market presentations;
- market negotiations; and
- price banding options
Options assessment: Risk retention versus risk transfer

Risk Retention Strategy
- Markets won’t insure or will charge excessive premiums
- Anticipated revenue and working capital can sustain losses in this range

Risk Transfer Strategy
- Revenue and capital are sensitive to losses in this range
- Markets may not insure or will charge excessive premiums

How much to retain?
- Revenue and capital are sensitive to losses in this range
- Markets may not insure or will charge excessive premiums

How much to transfer?
- Markets won’t insure or will charge excessive premiums
- Anticipated revenue and working capital can sustain losses in this range
Options assessment:
Roles and responsibilities

- Governance and oversight functions
- (Re)insurance broking (intermediary) services
- (Re)insurer services
- Claims Management Services
- Account Management Services
- Actuarial Services
- Risk Modelling Services
- Audit and Compliance Services

Outsource?

Develop and deliver in-house?
Which of these capabilities do you think may benefit from external support or greater capacity building? (select **top three**)

- Program management capability
- (Re)insurance broking (intermediary) capability
- Claims Management capability
- Account Management capability
- Actuarial capability
- Risk Modelling capability
- Audit and Compliance capability
Options assessment: Cost assessment

- **Estimated cost of retained losses:** Cost of losses retained over a pre-determined period as per the Risk Retention Strategy (informed by loss modelling)

- **Estimated cost of Risk Transfer:** The cost of risk transfer fees and premiums over a predetermined period (accounting for prescribed terms and conditions of coverage)

- **Estimated cost of Administration:** The cost to maintain in-house services and/or contract outsourced services over a predetermined period
Decision making

Option characteristics

Option description:
- Scope (Perils/assets/agencies)
- Vehicle (Standalone/business unit)
- Risk Retention strategy
- Risk Transfer strategy
- Service/Administration delivery strategy
- Cost (TCOR)
- Funding (allocation and implementation)

Option attributes:
- Benefits (Hard benefits (Financial) and Soft benefits (Non-financial))
- Disadvantages (Hard disadvantages or costs (Financial) and Soft disadvantages or costs (Non-financial))
- Risks and Issues
- Constraints
- Dependencies

Do nothing | Option 1 | Option 2
---|---|---
Do nothing | Option 1 | Option 2
**New Zealand Case Study: Choosing between different options**

**Option: Do nothing**

Continue current practice of agencies managing their individual arrangements.

**Option: Partial self-insurance**

Consolidate agency risk financing arrangements into an AoG solution, involving:
- Agencies paying a risk based contribution into a managed fund to cover expected losses;
- Crown self-insuring a layer of calculated risk within Crown’s financial risk tolerance; and
- Ceding risk above Crown tolerance to the insurer market.

**Option: Full self-insurance**

Consolidate agency risk financing arrangements into an AoG solution involving:
- Agencies paying a risk based contribution into a managed fund to cover expected losses; and
- Crown self-insuring the risk of exceptional losses (i.e. those losses exceeding the financial tolerance of the managed fund at a given point in time) without ceding risk to the insurer market.
Deliver the operational risk transfer mechanism

Setting the risk financing solution
- Establish the risk retention solutions
- Establish the risk transfer solutions

Preparing for the solution
- Establish the operational governance
- Establish the functional architecture
- Establish the external engagement procedures including communications and onboarding of agencies
## Risk retention strategy

Key steps may include the following:

1. **Develop early capitalization to provide initial financial resilience.** For example, central government may elect to inject early capital into the fund to ensure it has some financial resilience to manage early claims payments.

2. **Finalizing the terms and conditions attached to accessing the available funds.**

3. **Enacting any government replenishment and/or residual risk guarantees.**

4. **Testing and commissioning any claims payment mechanisms.**

5. **Finalizing and activating the investment vehicle (if required).** For example, the fund may be retained in the central government investment portfolio, or it may be run as a dedicated and segregated account.
### Risk transfer strategy

Key steps may include the following:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Procuring and formally appointing a qualified (re)insurance broker or intermediary (if necessary)</td>
</tr>
<tr>
<td>2.</td>
<td>Finalizing the preferred terms and conditions of (re)insurance coverage, including the policy wordings and any service level agreements as necessary</td>
</tr>
<tr>
<td>3.</td>
<td>Confirming the preferred types of risk transfer solution (e.g. indemnity insurance or parametric trigger arrangement), informed by the strategic requirements identified within the design stage. <a href="#">See also Fact Sheet 5.</a></td>
</tr>
<tr>
<td>4.</td>
<td>Confirming (re)insurer or capital market selection to balance premium cost competitiveness with (re)insurer financial security and underwriting expertise and experience, including requirement/preference to include domestic markets</td>
</tr>
<tr>
<td>5.</td>
<td>As facilitated by the broker, participating in presentations to the (re)insurer and capital markets, to promote and attract market participation and increase competitiveness</td>
</tr>
<tr>
<td>6.</td>
<td>Using selected market negotiations that position different price points for varying degrees of risk transfer (enabling the final decision regarding the cost trade off between risk retention and risk transfer)</td>
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<tr>
<td>7.</td>
<td>Having considered the available market options, give instructions to place or bind the preferred option, including evidence of the required insurance in advance of program activation</td>
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<tr>
<td>8.</td>
<td>Establishing the claims protocols (e.g. early progress payments, shared loss adjustor arrangements and management of the likes of betterment costs). <a href="#">See also Fact Sheet 7.</a></td>
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[See also Fact Sheet 5.](#)
Program architecture

Establishing operational governance layers

- Recruitment
- Procurement
- Training
- Corporate services support
- IT system testing and acceptance
Program governance

- **Strategic Governance Board**
  - **Strategic decision makers**
    - Authorizing or approving recommendations for evolution or change
    - Receiving reports and updates

- **Operational Governance Group**
  - **Operational direction**
    - Identifying and considering operational improvement and recommending evolution or change
    - Monitoring solutions performance

- **Financial Protection Vehicle**
  - (standalone entity or business unit)

- **Customer Advisory Group**
  - Providing customer perspectives
New Zealand Case Study: Organizational structure

**Business Unit**
- **Business Unit Head**
  - Executive Assistant
  - Leading Unit goals and objectives.
  - Effective Minister and inter-agency relationships
  - Managing strategic and operational risks

**Claims Management**
- **Claims Manager**
  - Claims Analyst
  - Claims Analyst (50%)
- **Risk Management**
  - Risk Management Services Manager
    - Risk Management Services Administrator (50%)
    - Risk Management Services Administrator
- **Relationship Management**
  - Relationship Manager
    - Data Information Specialist
    - Broker Liaison Specialist (Contract Admin)
- **Finance Management**
  - Finance Manager
    - Finance Analyst

**Shared Resource**
- **Claims Management Services** (0800)
- **Risk Management Services** Administrator (50%)
- **Risk Management Services** Administrator
- **Relationship Manager**
  - Account manager
    - 1FTE | 1 Outsourced
- **Finance Manager**
  - 1FTE | 1 Outsourced

**Key Responsibilities**

**Claims Management**
- Claims Management Services
- Monitoring, review and trend reporting
- Liaison with loss adjustor

**Risk Management**
- Strategic and agency specific risk management advice
- Identification and analysis of risks
- Capability benchmarking and reporting
- Risk Management Services (0800)

**Relationship Management**
- Agency asset/risk data collection, administration and analysis
- Underwriting information reporting
- Supplier relationship liaison

**Finance Management**
- Management of funds operations emerging issues & policy changes
- Actuary liaison
- Government and fraud assurance
- Monthly reporting
- Monitoring of transactions involving claims managers, legal teams and loss adjustors
Ongoing management of the insurance process

- Insurance contracts will typically cover a defined time period (usually 12 months)
- Renewal will require re-assessment of the risks
- Market conditions may change, capacity and price may vary
- Large scale losses may influence underwriting considerations
- Technological solutions may alter approaches taken – e.g. claims management systems, loss modelling and analytics
- Intermediaries and insurance partners may need to be consulted in advance of renewal
- Procedures should account for this, and adequate time given to ensure adequate cover is gained in time for inception of the next period
Annual service cycle

**Risk financing cycle**
- Regular (often quarterly) meetings, between key stakeholders (including intermediaries and markets) to discuss solution and service performance, lessons learned, claims, and market developments.
- Pre-renewal/expiry strategy meetings: held well in advance of the expiry date to discuss and position customer priorities associated with the upcoming renewal, develop renewal options and marketing strategies, confirm the nature of updated information that will be required to support the renewal.
- At this stage a focused update of the transfer market is undertaken, including a review of the risk retention versus transfer attachment in the event of significant changes in market pricing (e.g. due to adverse global financial conditions or globally significant natural disaster). This helps reduce price volatility and maintain sustainable pricing in the long run.
- Updated data collection and collation into the customized presentation and underwriting specification.
- Renewal process commences much the same as the initial placement process (i.e. presentations, negotiations, options assessment, preferred option selection, instruction to place and the delivery of evidence of bound cover).

**Service administration cycle**
- Regular performance monitoring of both internal services and outsourced services in line with agreed key performance indicators and service level agreements in contracts. Outsourced functions will be timebound and specific services may need to be retendered.
- Regular reporting to governance layers on financial and non-financial performance of the program.
- Reviewing on-going claims activity. This relates not just to claims that trigger a risk transfer instrument, but also to smaller claims that trigger a formal risk retention instrument or losses that remain with participating agencies (either because they fall below a value threshold or because they are uninsured for other reasons).
- The delivery or participation in relevant forums and seminars.
- Regular audit and compliance checks, especially in areas where funds are transacted.
Continuous improvement

- Stakeholder training and management
- Benefits tracking
- Lessons learned
- Risk management feedback loop
Perspective from Mexico: FONDEN

Salvador Perez
FONDEN: An example of insurance within a risk finance strategy

Background

- **Impacts.** Big disasters affected frequently Mexican territory. In 1985 big earthquake implied a lot of dies and economical losses.

- **Budget reallocation:** government redirect original budget to repair the damage suffered by natural disasters and to attend the affected population.

- **Programs not fulfilled:** the infrastructure projects and social programs were affected.

- **Specific mechanism:** Mexican government began to design for the allocation of resources in advance for the attention of natural disasters.

Strategic alignment

- **Ex ante resources:** disaster risk financing vision with the participation of national and subnational authorities.

- **Disaster response:** providing resources for the acquisition of aid supplies to respond to the immediate needs of the population affected by a natural disaster.

- **Recovery and reconstruction:** resources dedicated specifically for reconstruction actions.

“Original budgets will not modify more.”
FONDEN: An example of insurance within a risk finance strategy

Legitimacy

- **The Federal Budget Law:** 0.4% of the annual federal budget must be allocated to FONDEN.
- **FONDEN Trust:** specific financial instrument to manage resources for disaster response.
- **Operating rules:** set up full aspects to access the FONDEN resources. *Specific procedures, deadlines and entities responsible.*
- **Clear objective:** financing emergency expenses to relief affected population and post-disaster rehabilitation and reconstruction of public infrastructure.

Budget Planning

- **Annual budget:** Transference USD $600 on average by Ministry of Finance to FONDEN Trust
- **Extra budget:** FONDEN may receive additional resources. Excess revenues obtained from oil or extraordinary tax collections.
- **Accumulation:** Resources that are not used in years with fewer disasters can be added in the following years
**Data Gathering**

- **Geocoded inventory of public assets was developed.**

**Cat Modeling**

- **Stochastic models of the main hazards that affect Mexico were developed.**
MEXICO: Options assessment and Decision making

Financial Modeling

- Allows defining the optimal levels of risk retention and transfer
MEXICO: 
Set up of risk transfer solutions

The DRFI strategy of Mexico is based on:

**First losses**
- By law, the line ministries must contract insurance schemes to protect their infrastructure as first responsibility. (*low risks*)

**Risk retention**
- FONDEN acts as a mechanism to attend the first losses for cat risks.

**Risk transfer**
- Since 2006, Mexico has issued catastrophic bonds focused on obtaining *resources for emergency*.
- Since 2011: XL Indemnity Insurance, which provides resources *focused on reconstruction* of damaged infrastructure.

*Indemnities are managed by FONDEN Trust and the resources are used according with the operating rules.*
MEXICO: Organizational Structure

Reinsurance | Capital

Agroasemex

Geocode Data Bases
Risk Analysis
R-FONDEN

Risk Transfer
Risk Assessment

Ministry of France
Technical Committee
Ministry of Interior

National University

Coordinate the process to access the funds to attend the emergency and reconstruction

FONDEN

Resources to reconstruction
Support to population
Final remarks and Q&A

Benedikt Signer
Which of these are of interest within our factsheets on ‘Data, Information and Analytics’?
(select top three)

- Developing public asset registries or inventories
- Using and interpreting catastrophe loss modelling
- Identifying data and information requirements for insurance transactions
- Understanding how different stakeholders in the insurance supply chain use your data
- Understanding how data can inform improved risk management decisions
Questions and Answers

USE THE Q&A FUNCTION
Thank you

SEADRIF
SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY

An ASEAN+3 Initiative
In partnership with The World Bank
FONDEN:
An example of insurance within a risk finance strategy