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Introduction to Emerging Risk Management in Korea

Purpose: Information
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APEC 2025
KOREA

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Introduction to Emerging Risk management in Korea

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Contents

I. Emerging Risk dealt with in Korea

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Background

- ✓ The Itaewon crowd crush Accident in 2022 catalyzed a shift towards pre-emptive risk governance model.
  - ☞ Establish "the Comprehensive Reform Plan for the National Safety System"
- ✓ NDMI(National Disaster Management Research Institute) plays a central role in the nation's capacity

Center for Risk Identification and Assessment (CRIA) under NDMI ('23.2.~)

- Three teams for
  Emerging Risk Identification (RI), Emerging Risk Assessment (RA), Risk Scenario Planning (RP)

Three Main Tasks

- Identification of Emerging Risk
- Deliberating Emerging Risk (w/ the Emerging Risk Assessment Committee)
  (Members) 20 experts from various fields (environment, transportation, meteorology, industry, ICT, [···])
  and four director-level officials from government agencies of the first responder (MOIS, NPA, NFA, CGA)
- Publication of "National Emerging Risk Report"

I. Emerging Risk dealt with in Korea

Emerging Risk dealt with in Korea

"Entirely New Risk" (causing damages w/ unprecedented types of hazards)

"Dramatically Increasing Risk" (by already-known hazards and changes in environments)

"Combined/Complex Risk" (by both or more hazards)

"Risk NOT to be quantified" (due to lack of available data to assess it)

- Climate Changes → Winter Heat wave, Tornadoes, Summer Wildfire
- Advanced Technologies → Autonomous Vehicle(additional threat), ICT (life-log)
- Political Issues → Green Energy(hydro-energy), Super Urbanization
- Economic Issues → Public Infrastructures funded by Private Capital
- Social Structure → Aging Society, Isolations, Vacant houses …

Ⅱ. Workflow of Emerging Risk management

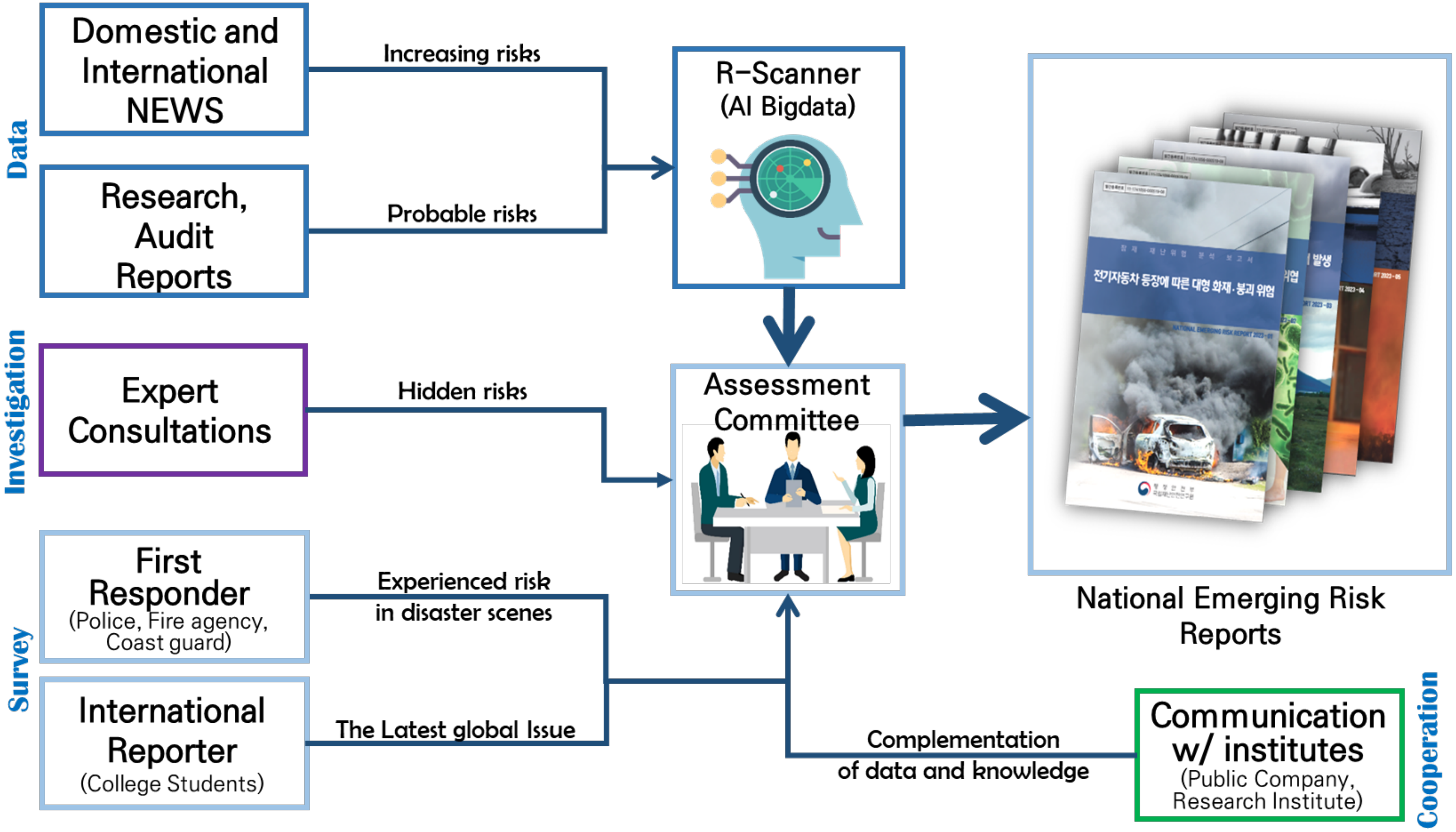
✓ The risk identification process explores risk factors through big data(News, Research paper, etc.) analysis, surveys of experts, as well as collaboration with public institutions.

- The simplified diagram showing the workflow of emerging risk identification & assessment

Scanning & Survey	Assessment	Impact Analysis	Publication	Follow-up & monitoring
NEWS, SNS, Research Paper & Report, Audit Report, Cooperation with Agencies …	Operation of Assessment Committee 	In-depth analysis (Impacts, Improvements required, Scenario…)	Every half year 	Recommendations and monitoring implementations (Headquarter of MOIS)

Ⅱ. Workflow of Emerging Risk management

Risk Scanning & Survey (Big data analysis)



Ⅱ. Workflow of Emerging Risk management

Assessment of Emerging Risk

✓ The CRIA operates the Emerging Risk Assessment which brings together experts and officials

- Experts : 20 members from various fields (such as heath, society, environment, engineering, etc.)
- Officials : 4 members from government agencies of first responders

  (National Fire Agency, National Police Agency, Korea Coast Guard, Ministry of the Interior and Safety)

✓ This Committee analyze the likelihood of occurrence and potential impact of the Emerging risks

- Likelihood : For example, at least one chance of occurrence within a few years
- Potential impact : Injuries & deaths / shutdown of critical facilities and services

Ⅱ. Workflow of Emerging Risk management

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Follow-up & Monitoring

✓ (Publication) a series of reports titled "National Emerging Risk Report" were published in '23 to '25

* It's provided in English reports on our website (www.ndmi.go.kr)

- These reports are published twice a year including the risk scenarios and ripple effect analysis results of the emerging risks identified and assessed.

✓ (Monitoring) Feedback from across Government on the reporting is required. Also, we suggest to relevant governments about revised laws and regulations

- Every 6 months, we monitor their implementations of recommendations

Thank you

Ministry of the Interior and Safety
National Disaster Management Research Institute