

Translating Locally-led Resilience into Action
in the Age of Complex Risk and Digital Transformation
복합위험과 디지털 전환시대, 지역주도 복원력의 실행

The 5th



International Disaster Resilience
Leaders Forum **Incheon 2026**

인천 국제재난복원력 지도자 포럼



2026. 9. 7.(월) - 9. 8.(화)
September 7-8, 2026



송도컨벤시아 그랜드볼룸 A
Songdo Covensia, Grand Ballroom A

Artificial Intelligence Empowers Disaster Management

Ming Zhang

Ministry of Emergency Management of
the People's Republic of China

Part One

Seizing Opportunities Planning Holistically



Frequent and Extreme Natural Disasters



Traditional disaster management models can no longer meet new demands.

New tech brings new opportunities



AI, big data, cloud computing, and other new-generation IT are advancing at a rapid pace.

Plan Scientifically and Arrange Systematically



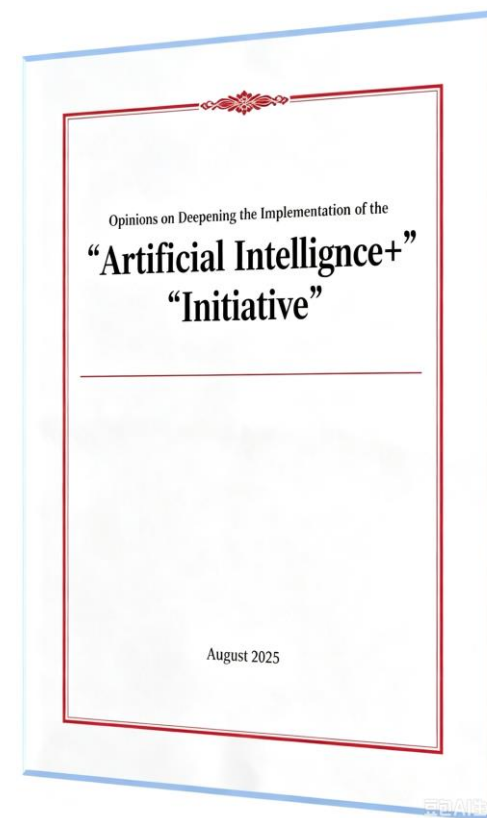
Policy Documents



Special Plans



Key Tasks



Policy documents enacted to guide scientific, orderly and efficient AI development.

Part Two

Building the Emergency Brain Consolidating Development Foundations



Smart and Responsive Emergency Brain



Smart Hub for Emergency Management

"Jiu'an" large model for emergency management

Trained on massive
emergency data

Operational-scenario
integration

Multi-modal Fusion
Analytics



Professional
expertise



Training and
fine-tuning



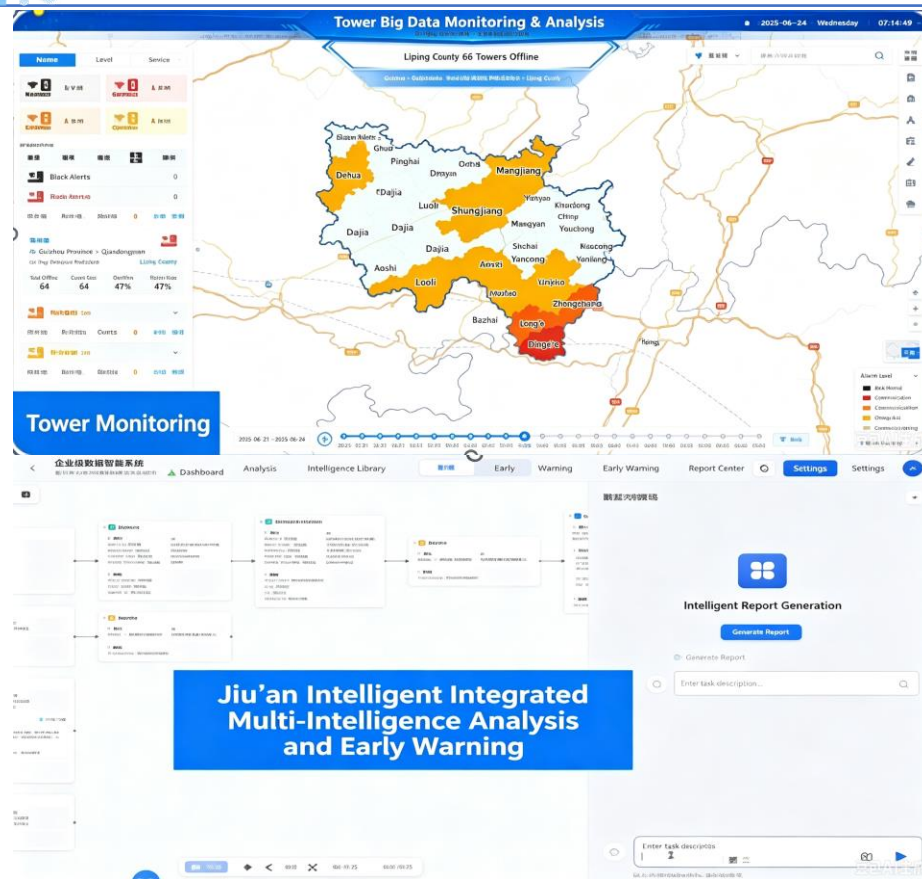
Scenario
Adaptation

Part Three

**Focusing on Operational Scenarios
Boosting Practical Effectiveness**



Disaster Monitoring



Jiu'an Intelligent Integrated Multi-Intelligence Analysis and Early Warning



Auto-Generated Report

No.	Indicator	Unit	Val	—	—	—	0
2	Value-Value Proportion	7%	10%	35.0%	—	—	0
	Status						
	Remotion						
	Remarks	735	10%	25.0%	—	—	0
3	Public Opinion Monitoring	9%	18%	—	—	—	0
5	Risk Warning Event Tracking	25	60%	—	—	—	0
6	Data Analysis Report Summary	—	—	25.0%	—	—	0

Multi-source data fusion (rainfall, towers, communications) enables real-time detection of suspected disaster areas, cutting response times.

Disaster Assessment

I Pre-disaster Remote Sensing Illustration



I Post-disaster Remote Sensing Illustration



Building Damage Statistics



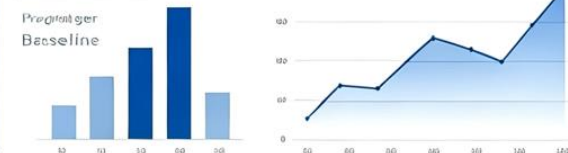
Road Damage Statistics



Bridge Damage Statistics



Damage Assessment



Pre-disaster Image

Change Detection

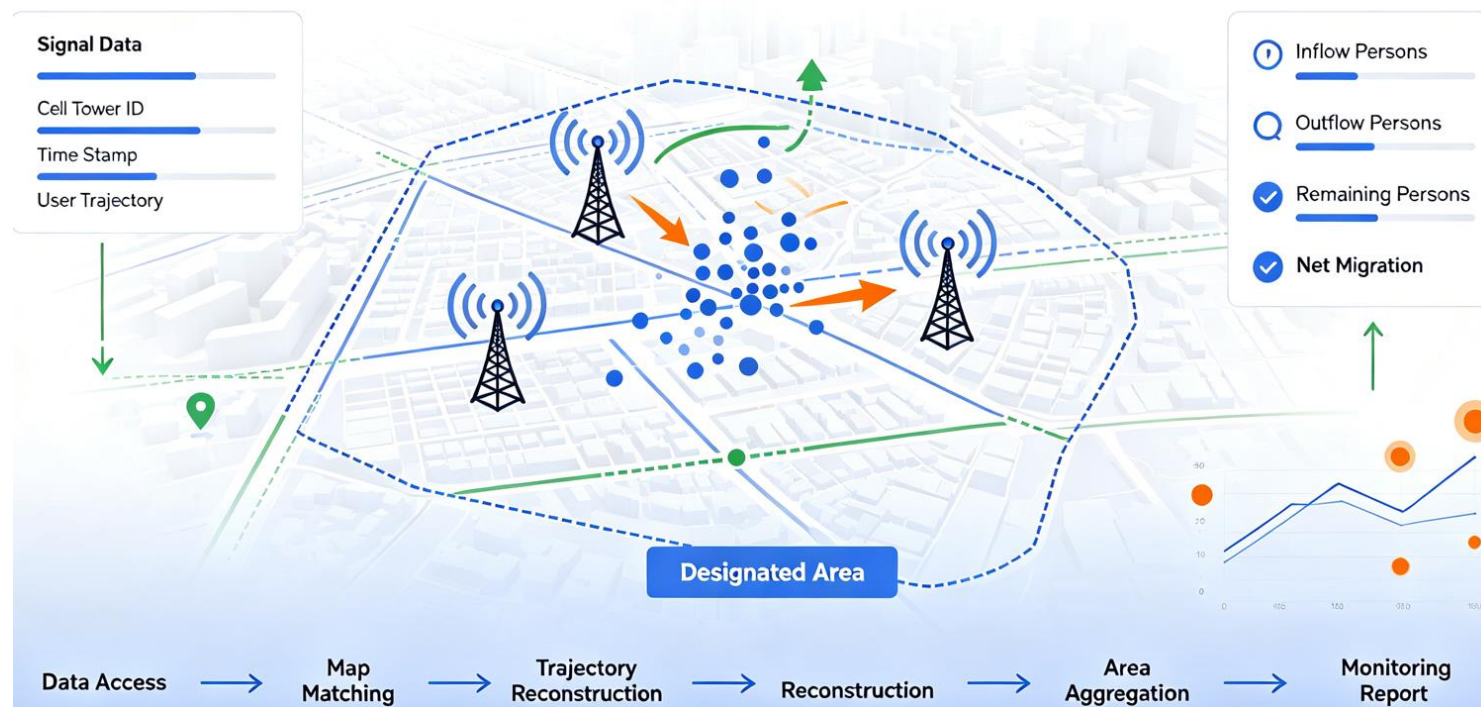
Damage Assessment



Satellite remote sensing for rapid disaster risk assessment and early wildfire detection and dynamic tracking.

On-site Dispatch

Population Migration Monitoring Using Mobile Signaling Data



Big data enables population density estimation, real-time evacuee tracking, and key-target surroundings monitoring.

Going forward, we will stay demand-driven and focus on deeper AI-disaster management integration to ensure tangible results. We look forward to working with all partners to share experience, explore innovations, and strengthen global resilience for a more resilient world.

Thank you

