# Other CAP-related Topics

*presented*

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at the "Regional Multi-stakeholder Workshop on
the Role of Telecommunication/ICTs for Disaster
Risk Reduction and Management for the Arab Region"

# Presentation Outline

1 IFRC Alert Hub

2 Example CAP System: India

3 Example CAP System: China

4 Policy Discussions

# CAP Alert Hubs

- A CAP Alert Hub is a online service that aggregates CAP alert feeds, thereby simplifying access to alerts
- International examples: AccuWeather, Global Disaster Alert and Coordination System, Google Alert Hub, HKO Severe Weather Information Center, IFRC Hazards App, MeteoAlarm, Weather.com, WMO Alert Hub ...
- The world needs a reliable, free, global-scale, CAP Alert Hub addressing all types of hazard  threats, endorsed by a well-known and well-trusted organization

# IFRC Alert Hub

- The IFRC (International Federation of Red Cross and Red Crescent Societies) is well-known and well-trusted, and it deals with all manner of hazard threats
- IFRC is actively working on an "IFRC Alert Hub", a free online source for published emergency alerts from national, regional and local sources.
- It aims to enable CAP to be leveraged for all manner of emergency preparedness and response activities, at all scales: from city to country and up to global.

# IFRC Alert Hub

- Users of the IFRC Alert Hub will include Red Cross and Red Crescent National Societies, news organizations, telecommunications providers, international and national emergency managers, and disaster relief organizations, among many others.
- The IFRC Alert Hub is in line with IFRC's ambitions to ensure early warning messages reach "last mile" communities so that communities everywhere receive emergency alerting to safeguard lives and livelihoods
- IFRC is seeking funding and technical partnership opportunities to include the IFRC GO platform

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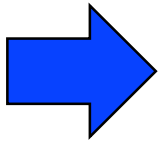

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# Project Stakeholders

## Forecasting/Early warning Agencies

- IMD
- CWC
- GSI
- INCOIS
- NCS
- SASE
- AERB
- MoEFCC
- MoAFW
- MoHFW

**C-DOT Integrated Disaster CAP-Early Warning Platform**

NDMA 36 SDMA 707 DDMA

## Authority /Controlling Agencies

## Dissemination Agencies

- Telecom Service Provider
- All India Radio
- Television
- Public Addressing System
- Electronic Siren
- Electronic Road Signage
- Railway Announcement System
- Social Media

# India's Integrated Disaster Early Warning Platform (IDEWP) Quick Facts

- India's Common Alert Protocol compliant Integrated Disaster Platform is in use by Disaster management authorities.
- All Mobile Operators of India has been integrated with the platform and are in use for warning dissemination via SMS.
- Most Mobile Operators of India has been integrated with the platform for cell broadcasting.
- Now, Location based Social Media feeds can also be generated to ensure more penetration.
- All India Radio is now on board. Successfully integration testing completed in this year, Country wide roll out is in process.
- 65 % of the population has been covered in regional languages with Hindi, Tamil, Malayalam language support.
- CAP implementation in Indian Meteorological Department (IMD) centres located across the country is in process.
- Alert disseminations through Television is at advance stage.

# India's IDEWP- Working Model

## Typical Vertical Horizontal Integration

2 "Vertical"

National

State level

District level

Block, City, Town, Village level

1 "Horizontal" info sharing

| | | | | |
|---|---|---|---|---|
| IMD | CWC | GSI | INCOIS | SASE |
| NCS | Railway | MHA | MoAFW | MoHFW |

3 A Variety of Means to Public

TV News

Radio

Social Media

SMS

Pop Up on Internet

IVR Call

**Integrated CAP –Early Warning Platform**

| | | |
|---|---|---|
| Collection | Process | Transmission |
| Store | Control | Monitor |

Project Management System

Network Management System

Electronic Siren / Railway Announcement System

Electronic Road Signage

# India's IDEWP Working Model

- Weather Warning
- Flood Warning
- Tsunami Warning
- Earthquake Warning
- Forest Fire Warning
- Landslide Warning
- Law & Order Warning
- Health Advisory
- Fisherman Advisory
- Farmer Advisory

Emergency Operation Center

- National
- State
- Territorial

Disaster Management Authorities

- SMS
- Cell Broadcasting
- Radio
- Television
- Internet
- Mobile App
- Facebook
- Twitter

First Responders

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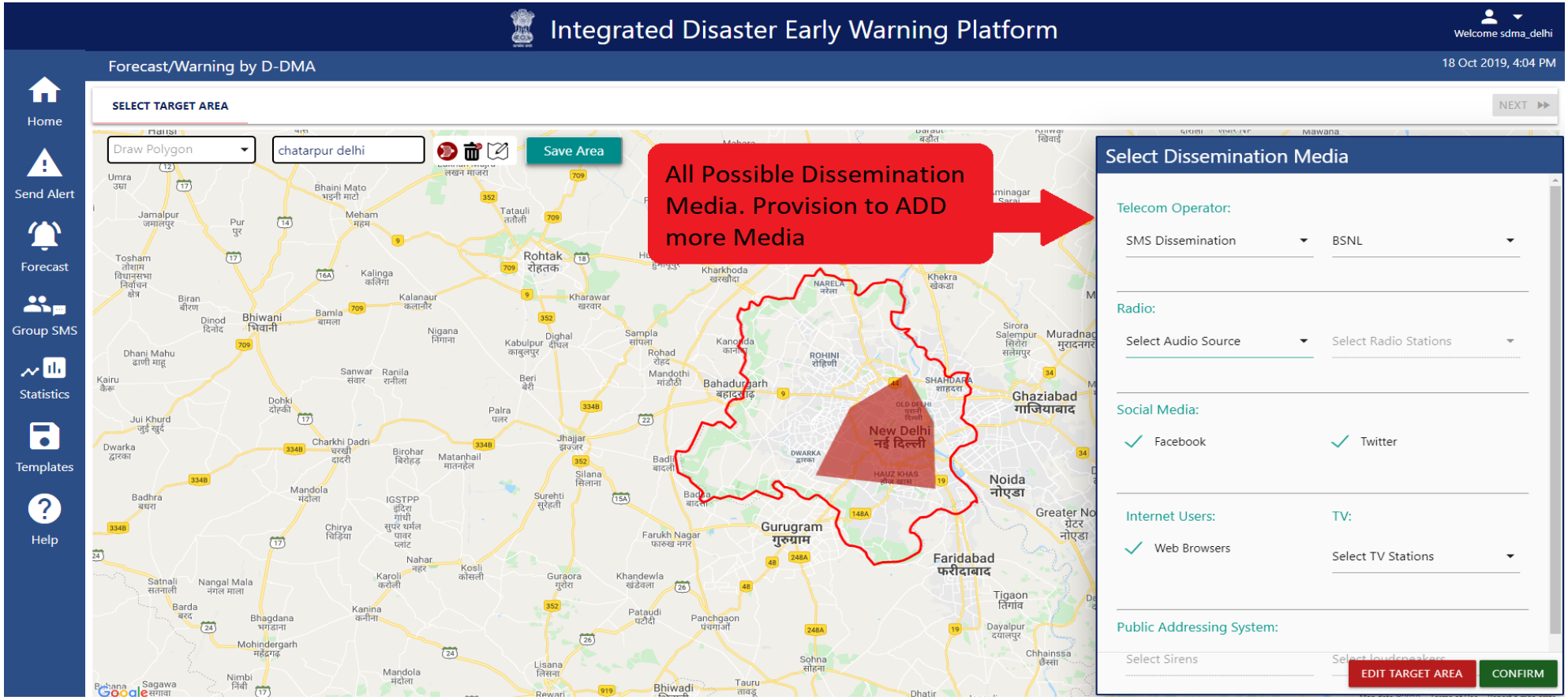
# India's Integrated Disaster Early Warning Platform



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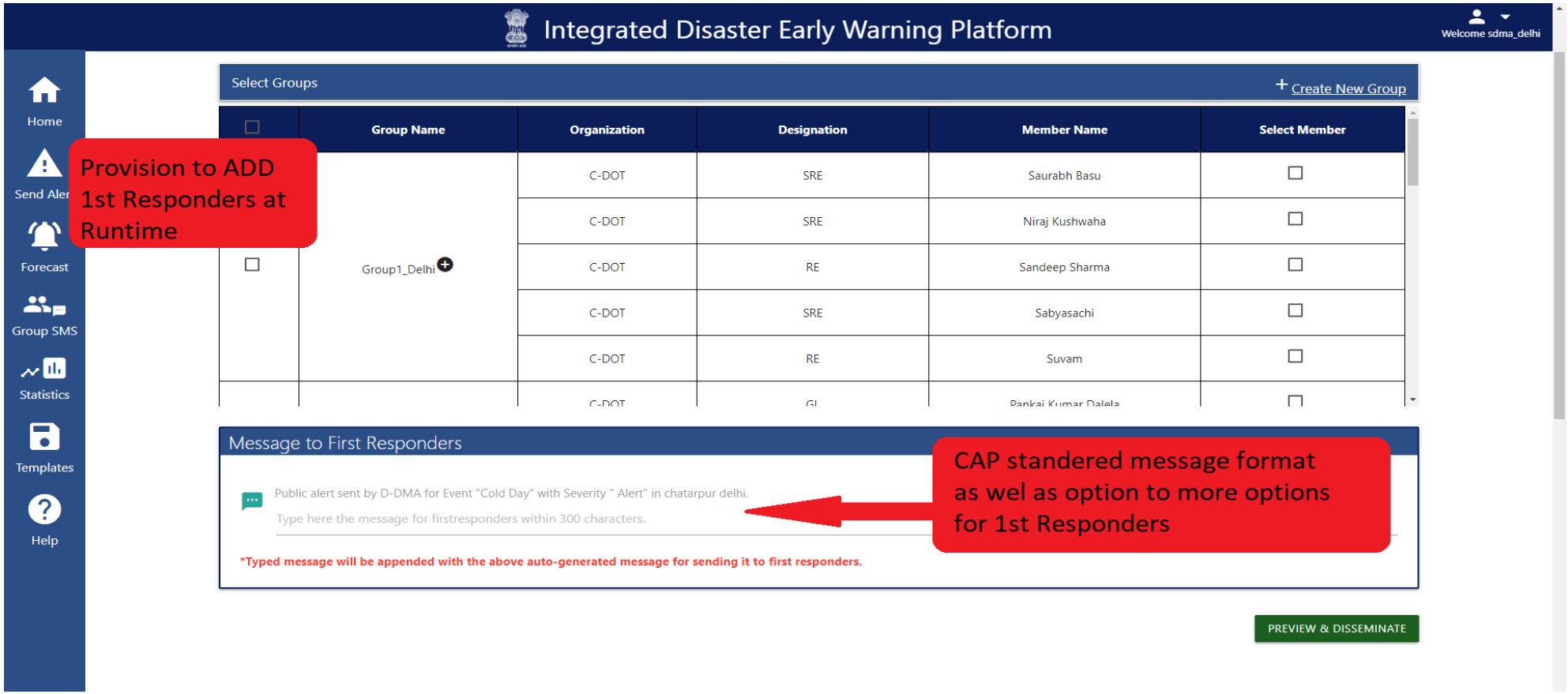

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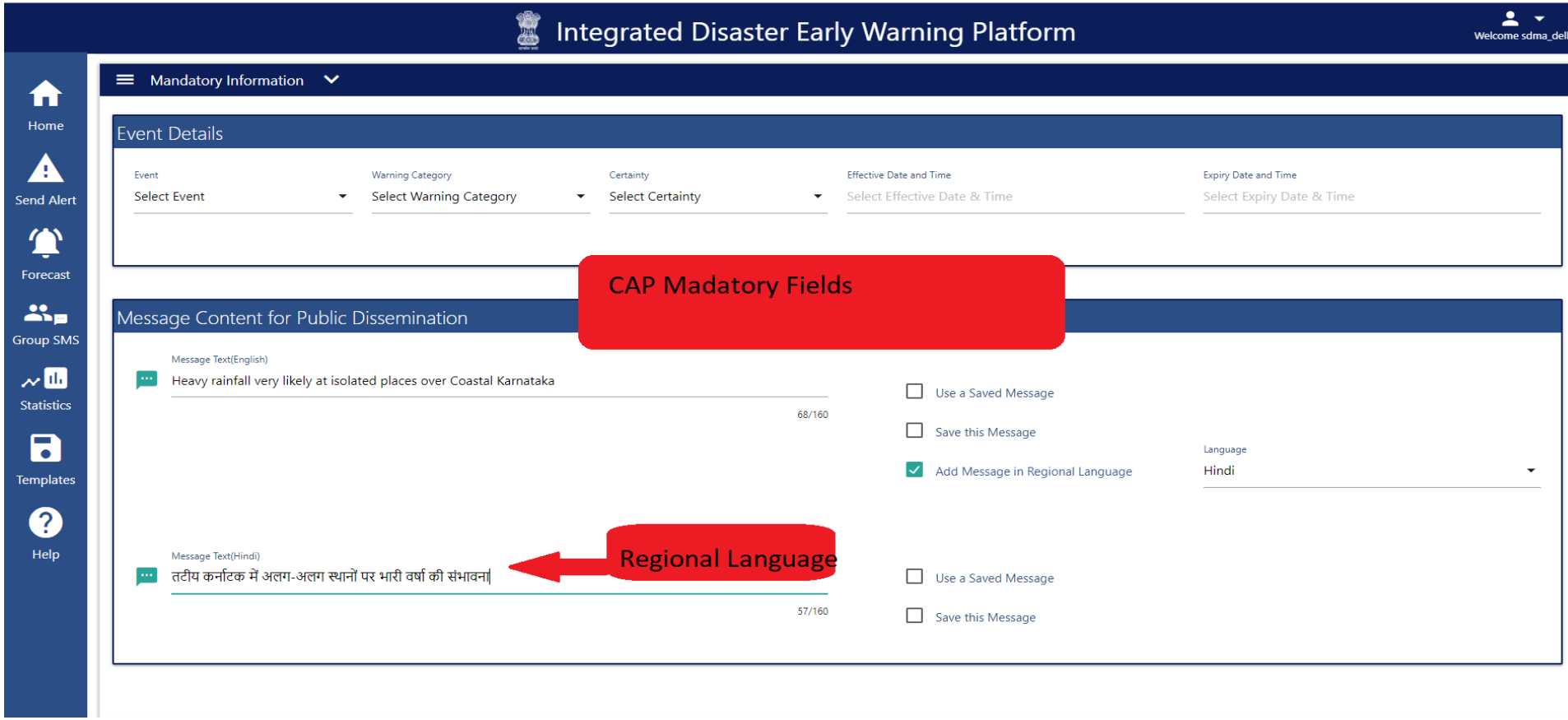


# India's Integrated Disaster Early Warning Platform

Integrated Disaster Early Warning Platform

Welcome sumit_cwc

Flood Forecast/Warning From Central Water Commission

Oct 18, 2019, 4:56 PM

Home

New Forecast

All Forecasts

Statistics

Templates

Help

**Verify Message & Area**

REUPLOAD NEXT

1. Extreme flood situation in Buridehing at Khwong
2. Severe flood situation in Godavari at Bhadrachalam
3. Severe flood situation in Godavari at Kunavaram

Flood forecasting for East Godavari (Andhra Pradesh) disaster management authority

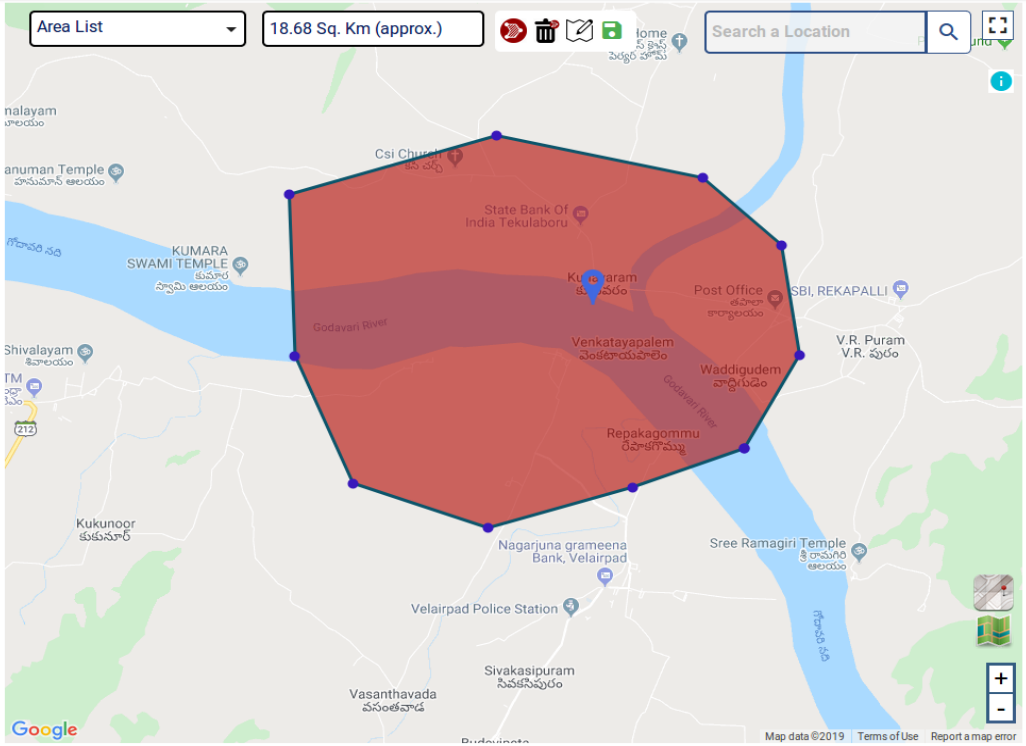
EDIT

**Message to be Forwarded to Andhra Pradesh SDMA :** Severe flood situation recorded in Godavari at Kunavaram at 18-10-2019 11:00. Water level is expected to rise by 19-10-2019 23:00

**Alert Description :** The water level of Godavari at Kunavaram was measured at 41.25 meters at 11:00 on 18-10-2019. This exceeds the danger level of 39.24 meters, but is below the previous highest flood level of 51.3 meters recorded on 16-08-1986. It is expected to rise to 42.25 meters by 23:00 on 19-10-2019

**Web URL:** http://ffs.tamcnhp.com/ffs

REJECT ACCEPT




**Flood forecasting area as per CWC database**

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# Real Time Feedback or Incident Reporting by the Community

| | |
|---|---|
| Feedback about given Early Warning | • Through App/ intuitive reverse SMS technique people can give feedback for given Early Warning |
| | • People can report about any disaster situation with location info and Image through mobile app. |

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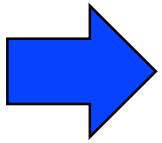


3 Example CAP System: China

4 Policy Discussions

# China's National Early Warning Release System (NEWRS)

http://www.12379.cn/

**1 national center**

**31 provincial centers**

**343 municipal centers**

**2015 county centers**

**10126 specialty staff**

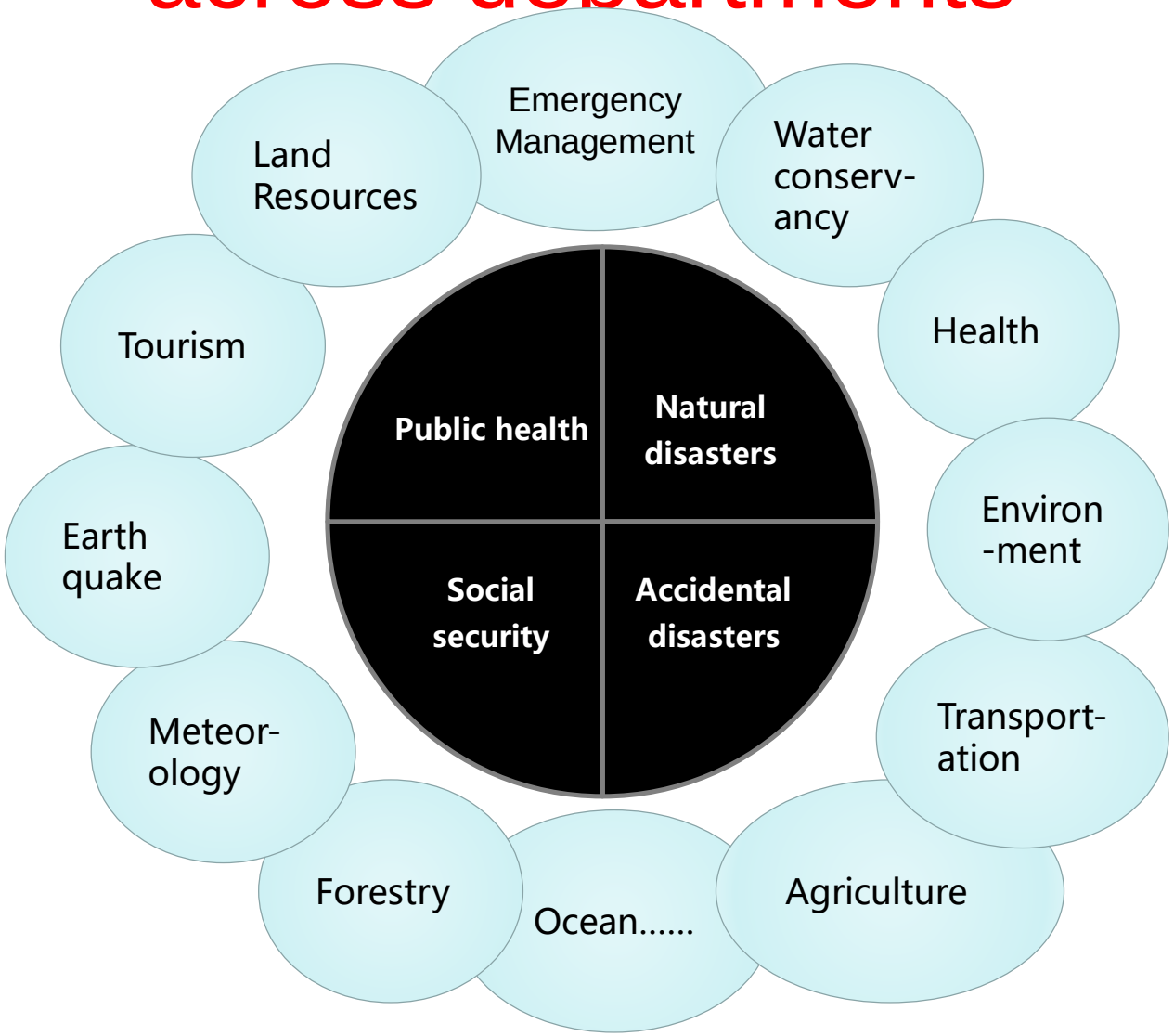
Example CAP System: China

# Provide overall solutions and service

1. **All-media release of early warning**
2. **Rapid release of the designated area via entire network**
3. **Barrier-free sharing of early warning across departments**
4. **Dedicated channel for local messengers**
5. **Real-time feedback of release effect**
6. **Warning release security assurance**

Example CAP System: China

# barrier-free sharing of early warning across departments



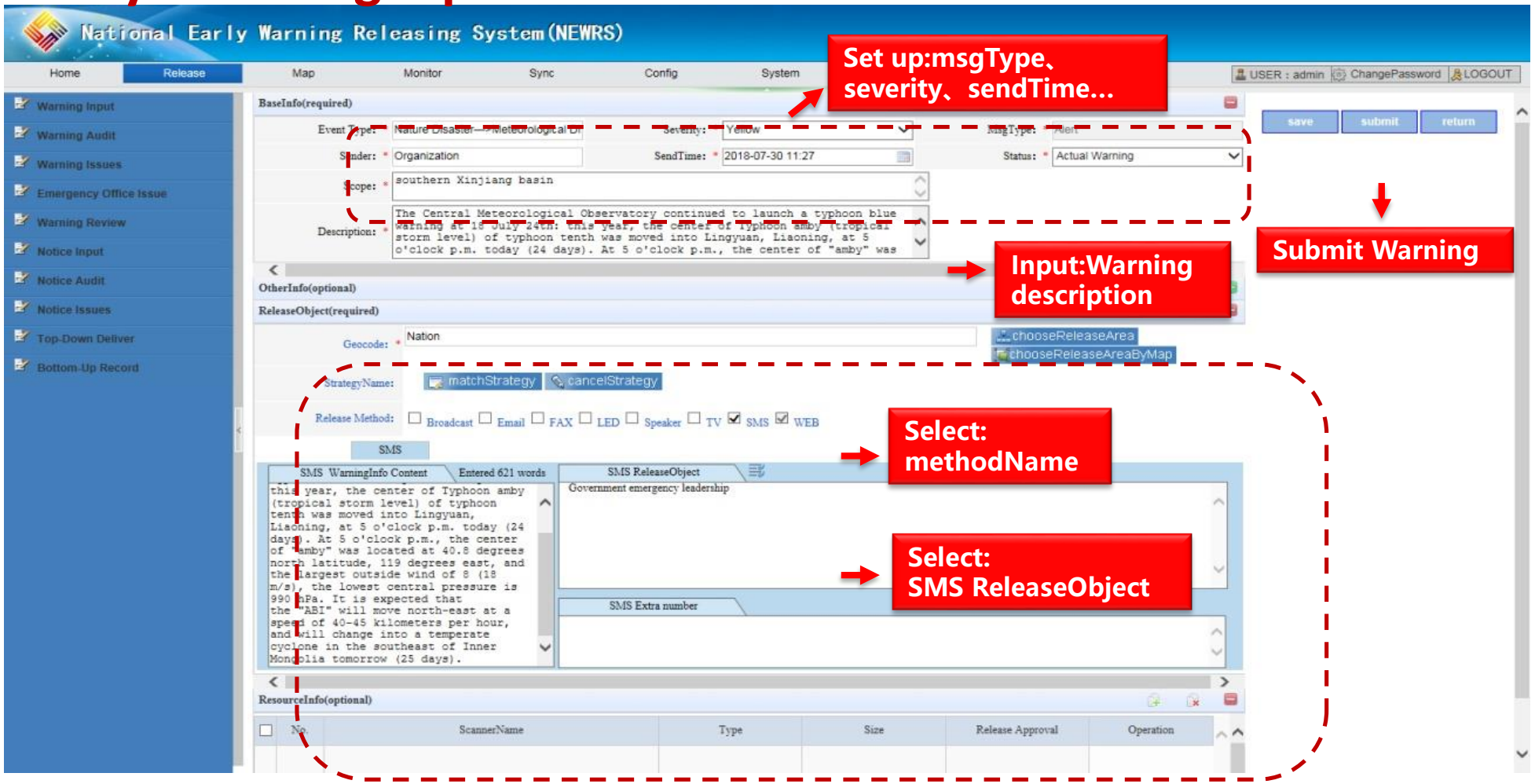
# Warning Release Process

## The login screen

Example CAP System: China

# Warning Release Process

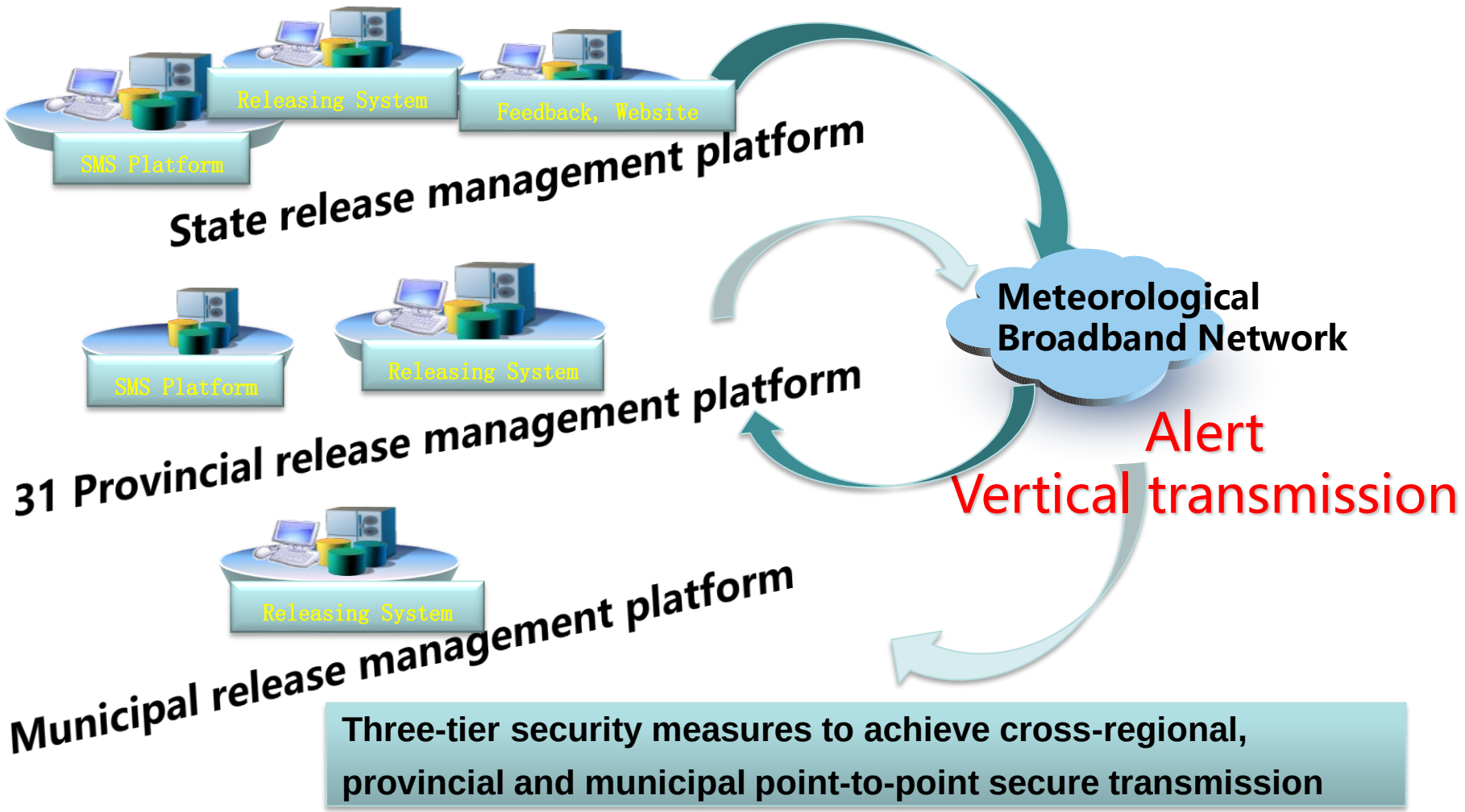
## Early Warning Input Interface




Example CAP System: China

# Vertical transmission between the three-level platform

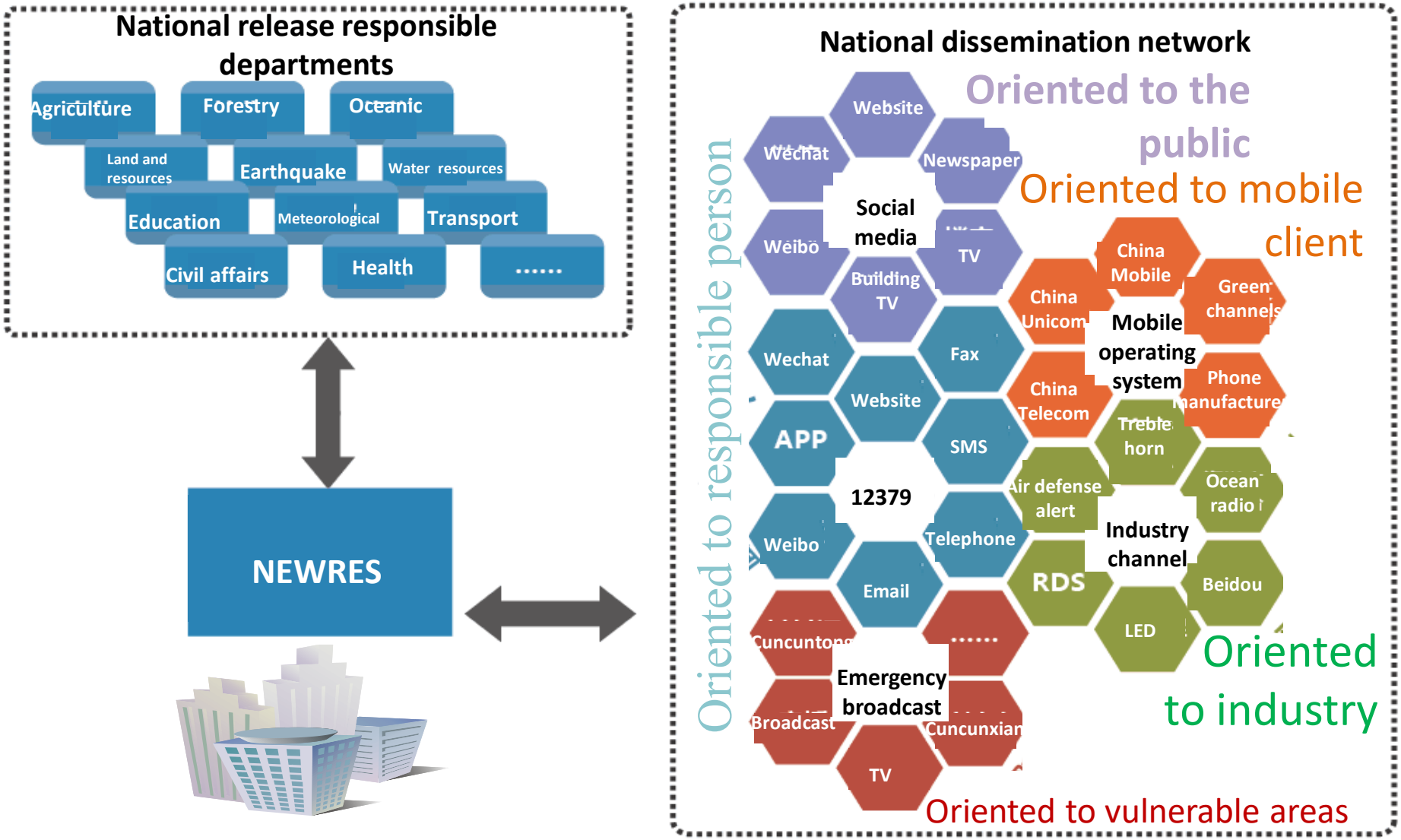
| Reliable transmission of information | Trackable life cycle | Unified standard, flexible configuration | Release channel flexible configuration |
|---|---|---|---|




Three-tier security measures to achieve cross-regional, provincial and municipal point-to-point secure transmission

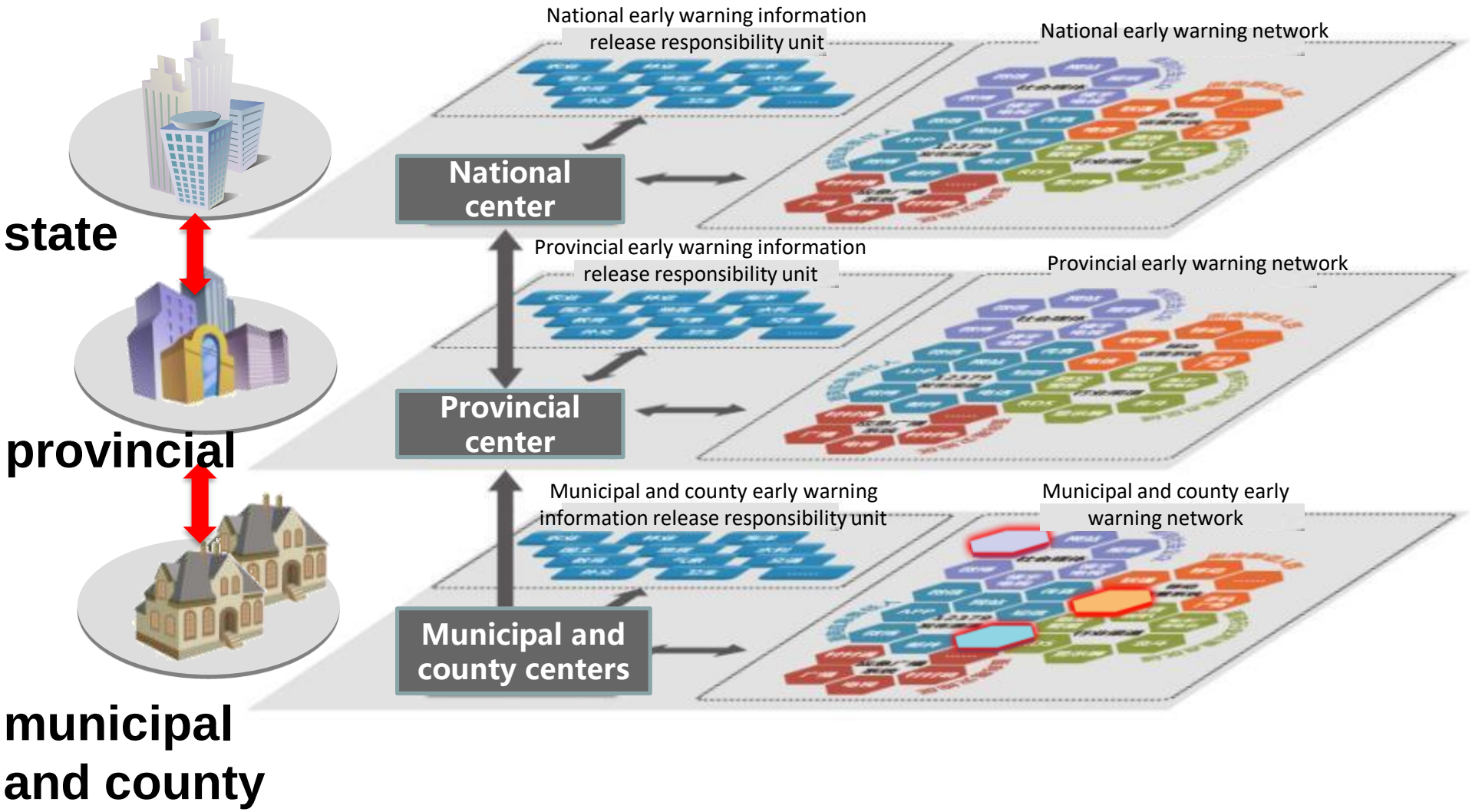
Example CAP System: China

# All-media release of early warning




Example CAP System: China

# Rapid release to the designated area via entire network



# Overall process

Live image
and public opinions

Release
situations

100%
TV

90%
inter
net

100%
broadc
ast

95%
loudsp
eaker

SMS

Early
warnings

Leader
approval

Warning
release

Track,
feedback

System
approval

Approval
documents

Quick report

warning
types

warning
levels

warning
contents

print
documents

Analyze,
summarize

Generate analysis
report

Releasing department

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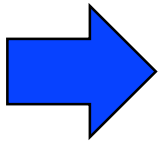

4 Policy Discussions

# Ten Policy Topics: Open for Discussion

1. Authority issues an imprecise social media message and also issues a precise CAP alert
2. Roles: to describe a Hazard Threat vis-a-vis to direct people on how they must respond
3. Tension between national/local civic authority vis-a-vis international alerting authorities
4. In your country, which actors are often left out
5. Is your country's policy clear regarding efforts to alert all people affected

# Ten Policy Topics: Open for Discussion

6. "Last mile" challenges and how a CAP-enabled backbone can help
7. Disaster management: "top-down" or "scale up"
8. Incorporate voluntary collaborators in alerting
9. Does your country leverage "cell broadcast"
10. Processes (e.g., education, outreach, testing and exercises) to identify and correct public trust issues

# CAP Information Resources

http://preparecenter.org/resources/cap

- CAP Implementations by Country
- CAP Introduction (video, 15 minutes)
- CAP Basics course (online)

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