4.8 CAP NTWCs implementation guideline and TSP Public Bulletin

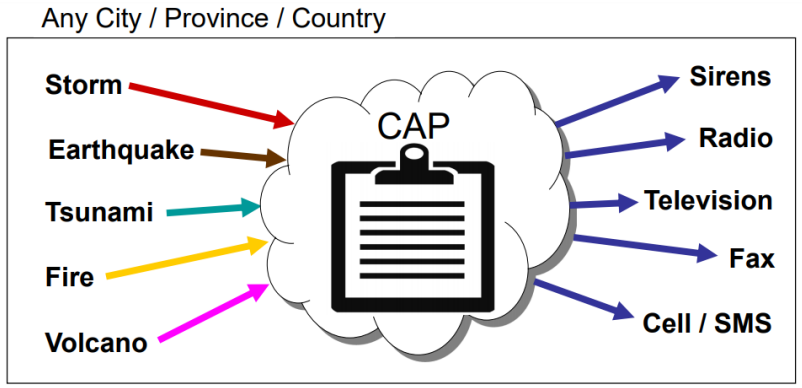
J. Padmanabham

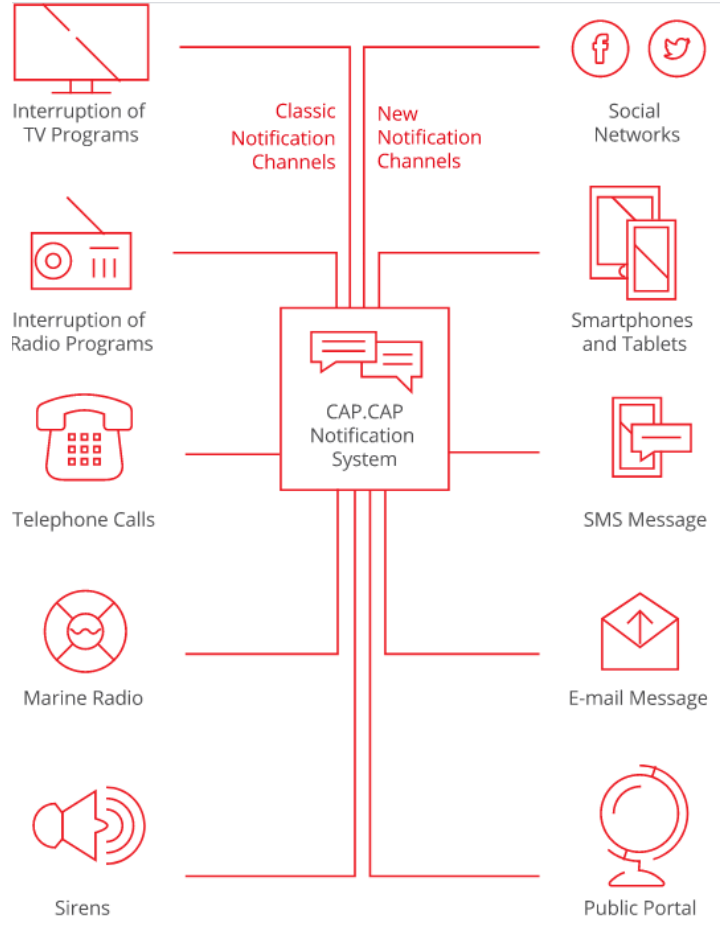
WG2- Vice-chair

padmanabham@incois.gov.in

What is CAP?

The Common Alerting Protocol (CAP) is a standardized, XML-based data format designed for exchanging public warnings and emergency alerts across different communication systems. Developed by the Organization for the Advancement of Structured Information Standards (OASIS), CAP has become an international standard for delivering critical information during emergencies or disasters.





Key features of the CAP protocol

unesco
Intergovernmental Oceanographic Commission

1. **Interoperability:** CAP enables seamless integration and sharing of alert messages across various communication systems, platforms, and applications, promoting better coordination among different organizations and agencies.
2. **Flexibility:** Supports a wide range of alert types.
3. **Multiple languages and channels:** CAP messages can be created in multiple languages and distributed through diverse channels.

Comprehensive information: Provides essential details for effective public response.

CAP general Guidelines- NTWCs

Use the CAP format: **Ensure that the alerts are created using the CAP format, adhering to the CAP standard defined by OASIS .**

I. Defining Scope and Target Audience

- Identify affected areas
- Determine the intended recipients of the warning message
- Include Threat information in the CAP message

II. Provide clear, concise, and actionable information

The CAP message should include essential **details about** the **tsunami threat**, such as **the expected arrival time**, **potential wave height**, and any **recommended evacuation routes**. Be concise and use plain language to ensure understanding.

CAP general Guidelines- NTWCs -- Cont..

unesco
Intergovernmental Oceanographic Commission

III. Specifying Urgency, Severity, and Certainty

A. Indicate the level of urgency

1. Immediate
2. Expected
3. Future

B. Indicate the severity of the event

1. Minor
2. Moderate
3. Major
4. Extreme

C. Indicate the certainty of the information

1. Unlikely
2. Possible
3. Likely
4. Observed

CAP general Guidelines- NTWCs -- Cont..

IV. Include Recommended Protective Actions

Provide guidance on protective measures

1. Moving to higher ground
2. Evacuating specific areas
3. Following local authorities' directives

V. Utilizing Multiple Communication Channels

Disseminate the CAP message through various means

1. Sirens
2. Radio
3. Television
4. SMS alerts
5. Social media

VI. Update and cancel messages as necessary

As the situation evolves, issue updated CAP messages to provide new information or cancel previous messages if the threat has passed.

CAP general Guidelines- NTWCs -- Cont..

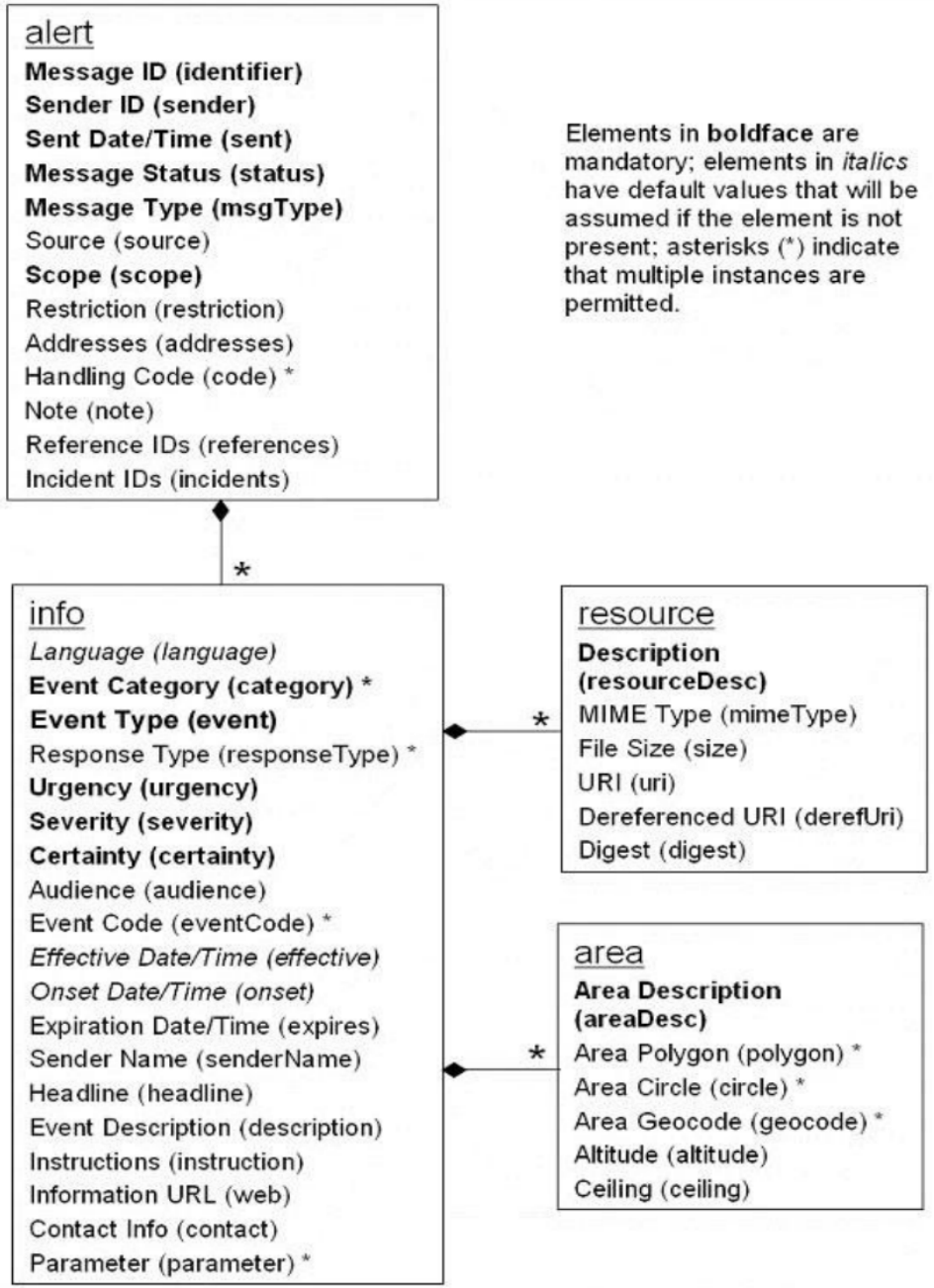
VII. Collaborate with relevant agencies and organizations

Coordinate with local, national, and international organizations to ensure a consistent and coherent response to the tsunami threat.

VIII. Review and evaluate the effectiveness of the CAP messages

After the event, assess the effectiveness of the CAP messages in terms of timeliness, accuracy, and the public's response. Use this information to improve future warning efforts.

CAP Parameters



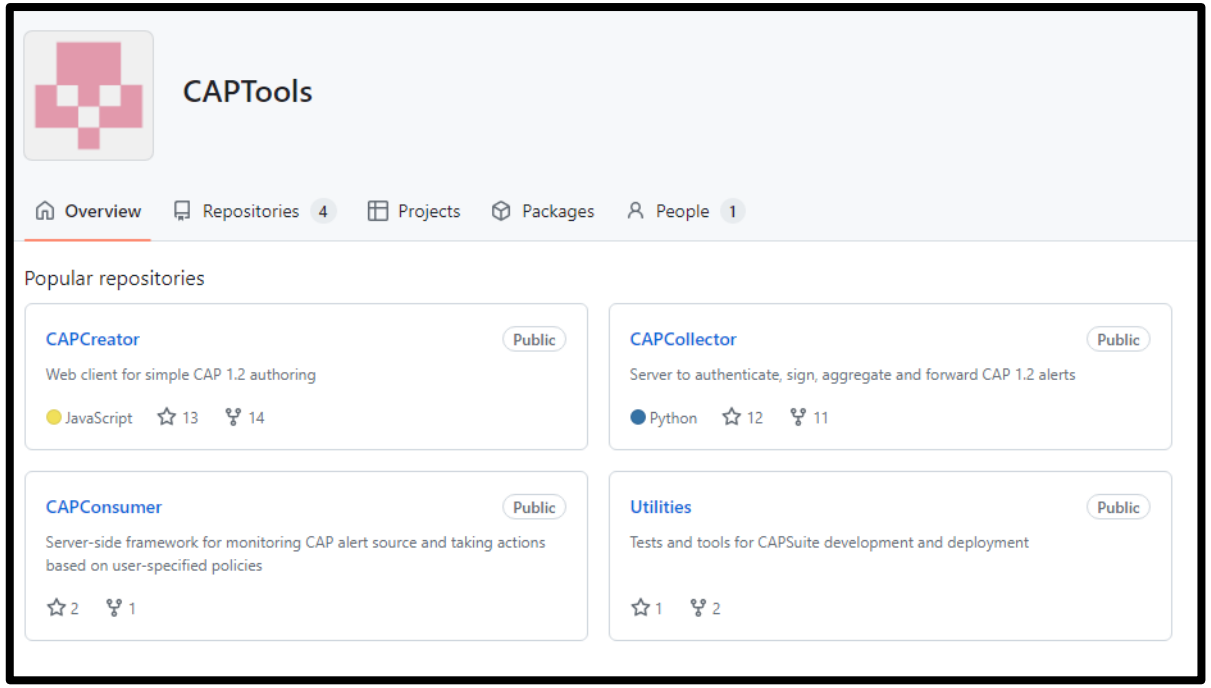
unesco
Intergovernmental Oceanographic Commission

Opensource Tools to generate the CAP

unesco
Intergovernmental Oceanographic Commission

CAPTools (https://github.com/CAPTools) :

CAPCreator is a simple tool for authoring alerts and other messages using the Common Alerting Protocol (v1.2).



CAP - TSP Public Bulletins

unesco
Intergovernmental Oceanographic Commission

The following are the key challenges for TSPs to generate public CAP messages for IO Rim member states.

- **Area** is one key parameter in CAP message that needs to be defined to determine the geographic polygon to target the messages.
- The **local/regional alerts** are the **sovereign responsibility** of the member states.
- TSP public CAP messages **should not contradict or conflict** with NTWC alerts or messages.

unesco
Intergovernmental
Oceanographic
Commission

Thank you …