

## 4.8 CAP NTWCs implementation guideline and TSP Public Bulletin

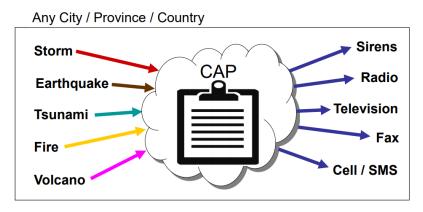
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#### What is CAP?

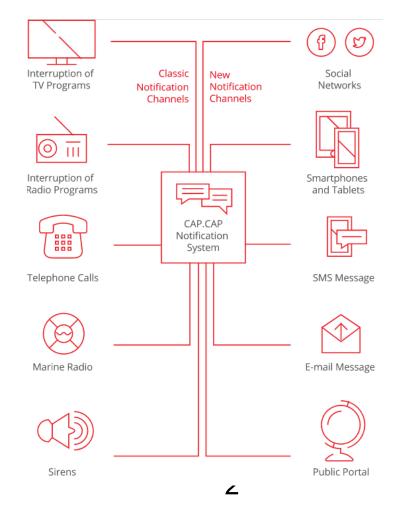
The Common Alerting Protocol (CAP) is a standardized, XML-based data format designed for exchanging public warnings and emergency alerts different across communication systems. Developed by the Organization for the Advancement of Structured Information Standards (OASIS), CAP has become an international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







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## Key features of the CAP protocol



- 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**

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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..**

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#### 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..

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#### 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 commission 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**

#### alert

Message ID (identifier)

Sender ID (sender)

Sent Date/Time (sent)

Message Status (status)

Message Type (msgType)

Source (source)

Scope (scope)

Restriction (restriction)

Addresses (addresses)

Handling Code (code) \*

Note (note)

Reference IDs (references)

Incident IDs (incidents)

Elements in boldface are mandatory; elements in *italics* have default values that will be assumed if the element is not present; asterisks (\*) indicate that multiple instances are permitted.

#### info

Language (language)

Event Category (category) \*

**Event Type (event)** 

Response Type (responseType) \*

\*

Urgency (urgency)

Severity (severity)

Certainty (certainty)

Audience (audience)

Event Code (eventCode) \*

Effective Date/Time (effective)

Onset Date/Time (onset)

Expiration Date/Time (expires)

Sender Name (senderName)

Headline (headline)

Event Description (description)

Instructions (instruction)

Information URL (web)

Contact Info (contact)

Parameter (parameter) \*

#### resource

Description (resourceDesc)

MIME Type (mimeType)

File Size (size)

URI (uri)

Dereferenced URI (derefUri)

Digest (digest)

#### area

Area Description (areaDesc)

Area Polygon (polygon) \*

Area Circle (circle) \*

Area Geocode (geocode) \*

Altitude (altitude) Ceiling (ceiling)



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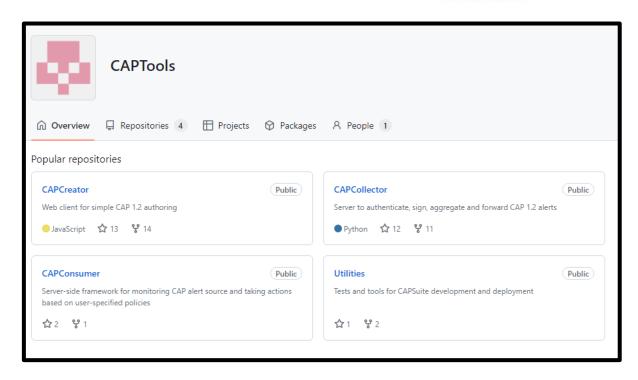
### Opensource Tools to generate the CAP



#### **CAPTools**

#### (<a href="https://github.com/CAPTools">https://github.com/CAPTools</a>):

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



### **CAP - TSP Public Bulletins**



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.

## Thank you ...

