Disseminators of CAP alerts need to distinguish which CAP alerts qualify as a "high priority public warning" that should be sent right away to people in the alerting area.

For me, this matter comes up as I am working with the Global Disaster Preparedness Center and the International Federation of Red Cross and Red Crescent Societies on itsUniversal App Program. The Universal App Program helps each RC/RC National Society customize local emergency information delivered via mobile apps for giving First Aid, finding shelter, and being alerted to hazard threats (see for example the American Red Cross mobile apps). For hazard alerting, the Universal Hazard app uses CAP alerts from one or more official CAP alert feeds.

Deciding whether a particular public CAP alert should be a "high priority public warning" is typically a matter of local civic authority policy, but there is a crucial technical aspect to that policy: How should alert disseminators distinguish which CAP alerts qualify as a high priority public warning?

For the purpose of the Universal Hazard app, I envision one or more aggregated sources of official CAP alerts ("alert hubs") that offer a filtered CAP alert feed containing only these high priority public warning CAP alerts. First, such a CAP alert feed will include only CAP alerts that pass this filter:

alert/status = Actual (filter blocks Exercise, System, Test, Draft)
alert/msgType = Alert or Update (filter blocks Cancel, Ack, Error)
alert/scope = Public (filter blocks Restricted, Private)

Next, a further filter is needed to select only high priority public warnings. In CAP terms, such alerts could be alerts informing people who need to act immediately or within the next hour (high Urgency), in response to an extraordinary or significant threat (high Severity), that is already observed or is likely to occur (high Certainty). In the U.S., a Universal App feed could filter such CAP alerts using criteria already codified in U.S. Federal regulation (47 CFR 10.400). This regulation specifies that the U.S. Wireless Emergency Alert (WEA) system will only send CAP alerts that have Urgency, Severity, and Certainty values each in the top two levels:

alert/info/urgency = Immediate or Expected (filter blocks Future, Past, Unknown)
alert/info/severity = Extreme or Severe (filter blocks Moderate, Minor, Unknown)
alert/info/certainty = Observed or Likely (filter blocks Possible, Unlikely, Unknown)

Unfortunately, a Universal Hazard app feed aggregating sources beyond the U.S. cannot assume that all official CAP alert sources use these same criteria. For instance, official alerting authorities in Canada add to each CAP alert a "broadcast immediately" parameter (discussed in Broadcasting Decision CRTC 2011-438). Accordingly, the Universal Hazard app customized for Canada CAP feeds needs a different filter: a filter that checks for an alert/info/parameter with the valueName = 'layer:SOREM:1.0:Broadcast_Immediately' and the value = 'Yes'.

Here I am asking you to please let me know what filter criteria are needed to select CAP alerts that should be processed by Universal Hazard app, for any existing or planned public CAP alert feeds you know about. Also, please forward this note to any other persons or e-mail lists that may have an interest in the immediate broadcasting of official CAP alerts to the public.

When responses have been received, I will compile this filtering information into a report for the Universal App Program. That Report will be maintained here on the PrepareCenter.Org site, so that CAP implementors can read about and comment on the filtering criteria appropriate for CAP alert feeds in various places around the world.