

## Standard Operating Procedures for Emergency Alerting over Social Media

Traditional public alerting infrastructures assume that mass media, such as broadcast radio and television, are the best way to get emergency alerts to a large percentage of people in harm's way. Television stations insert "crawl text" with the warning message, and radio stations insert a recording. This public-private collaborative effort dates from the 1960s, and it consumes huge, ongoing investments in specialized technology. Yet, this mass media approach does nothing to reach users of online media. More and more people are missing out on emergency alerts as they increasingly substitute online media for mass media.

Use of social media (Facebook, YouTube, WhatsApp, WeChat, Instagram, Twitter, et al) account for a large percentage of online media users--nearly 2.8 billion users worldwide in 2019. Many people are using social media for hours each day, hours in which they would have been receiving mass media. Consistent with this trend, social media are now considered a critical component in all four phases of disaster management (as noted elsewhere in this document).

Accordingly, each NETP must address standard operating procedures for social media. Such procedures for social media must also take into account that modern emergency alerting increasingly leverages the international standard Common Alerting Protocol (CAP). Today, CAP is an essential part of the NETP (also as noted elsewhere in this document).

In comparison to a CAP alert, an emergency message in today's social media is problematic in several respects. A typical social media emergency message lacks the means to assert its authority in a way that is internationally recognized. A social media emergency message is also relatively imprecise, as it does not: indicate its relative priority (in CAP terms, the alert's "urgency", "severity", and "certainty"); delineate its exact alerting area (CAP polygons and circles); delimit the onset and duration of the alert; nor, provide specific instruction on actions people should take. Moreover, the structured data in a CAP alert enables processing by devices to a much greater degree than the unstructured text in a social media message.

The NETP should recognize that the public often receives imprecise social media emergency messages intermixed with precise and authoritative CAP-based alerting. This intermixing causes confusion among people in the alerting area, which confusion can be life-threatening in the case of high-priority alerts.

Certainly it is possible for social media emergency alerting to minimize conflict with CAP-based alerting. For instance, social media companies could enhance their emergency messages by simply using the CAP standard or linking to authoritative CAP alerts. In fact, Google pioneered this approach many years ago. As CAP becomes well-integrated into social media, the resulting fusion promises to support and enhance the timeliness, reach, and interactivity of emergency alerting, perhaps in profoundly positive ways.