

WHY ICT STANDARDS MATTER FOR PUBLIC WARNING

Mention Standards to most people and they may think 'boring!'. Yet Standards support our everyday life. Without them, the world would be very different. Emergency alerts rely on Standards to be effective.

Information & Communication Technology (ICT) is the backbone of modern living. We rely on it constantly. A large percentage of the population can't imagine a world without the Internet, a laptop, or a mobile device. This rapid progress in innovation and adoption is only possible due to standardization. Standards create the basis for technology to evolve.

■ What has this got to do with Public Warning?

Studies have proven that effective early warning solutions substantially reduce deaths, injuries and damage. Although it's possible to use sirens, radio, or TV for alerts, it's the ever-present mobile device that lets Governments reach the highest number of people quickly. Whether a Government chooses an Application, Location-Based SMS, or Cell Broadcast as the primary technology for an emergency alert, all the messages are sent to a mobile device.

Standards play a critical role in achieving compatibility and interworking. They provide a common reference. For instance, Standards make it possible to use your mobile anywhere in the world - even if you're not on your own Operator's network.

From a public warning solution perspective, standardized interfaces are of vital importance. One2many's Cell Broadcast Center interfaces with network elements of other core network vendors. If each vendor only used their proprietary interfaces, which they may not be willing to share with other vendors, notably competitors, a seamless public warning service wouldn't be possible. Without Standards, public warning alerts wouldn't be as effective.

Although the different underlying technologies: applications or location-based SMS adhere to their relevant technology Standards, it is only the Cell Broadcast Service that has been explicitly standardized for public warning. From a user's perspective, one of the most noticeable outcomes is that there is a unique ringtone with a vibration used across the world. It's only used for emergency alerts, ensuring the alert can't be confused for an SMS or App message.

■ One2many and Standards Bodies

One2many prides itself on developing standards-compliant solutions. We're an active member and contributor of three key Standards Bodies: ETSI, ATIS and 3GPP.

ETSI, the European Telecommunications Standards Institute, founded in 1988, is a European Standards Organization (ESO). ETSI is the recognized regional standards body dealing with telecommunications, broadcasting and other electronic communications networks and services. ETSI has a special role in Europe. This includes supporting European regulations and legislation through the creation of Harmonised European Standards. Only standards developed by the three ESOs (CEN, CENELEC and ETSI) are recognized as European Standards (ENs).

ATIS, the Alliance for Telecommunication Industry Solutions, began life in 1983 and leads the way for North America. ATIS is accredited by the American National Standards Institute.

3GPP, the 3G Partnership Programme, is the overarching standards body. Membership of 3GPP is only through any of the partner organizations and, as such, unites 7 telecommunication Standards Development Organizations (SDO).

As the name would suggest, the drive for 3GPP came when the 3G was going to be developed. Previously, GSM (2G) was developed by ETSI, and GSM was very successful, being adopted globally. When

3G was on the horizon, other SDOs across the world wanted 3G to become globally standardized. ETSI's partner organizations in Japan, China, South-Korea and the US formed 3GPP, with India also now being included. 3GPP developed 3G, then 4G. It's currently working on 5G and 6G is already in their sights.

■ Award-winning involvement

When it comes to progressing and evolving the Standards, one2many takes its responsibilities seriously. Each of the organizations is contribution driven. One2many actively contributes as a participant of working groups as well as an editor to advance the standards for public warning. In fact, our very own, Peter Sanders received the 2015 achievement award from ATIS for his work on Wireless Emergency Alerts (WEA).