

## **RTCM 12800.0 Standard for Satellite Emergency Notification Devices (SEND), August 1, 2011**

This document contains minimum requirements for the functional and technical performance of Satellite Emergency Notification Devices (SENDs) operating over any satellite system except Cospas-Sarsat for which regulations and standards already exist. (See standards developed by RTCM Special Committee 110.) A SEND designed and manufactured to the standards contained in this document should provide the user with a high degree of confidence that in an emergency the device will perform as intended thereby maximizing the chances of successful notification of a distress to the appropriate emergency services. SEND devices may be portable devices designed to be carried by individuals or they may be fixed in a vehicle. SENDs are envisioned to be used in three general environments, water based activities, land based activities and in secondary market fixed installations.

There are many national and international satellite systems in existence and many devices designed to provide either or both voice and data communications over these systems. Devices designed for normal day to day communications over these satellite networks are outside of the scope of this standard (e.g. paging services, remote monitoring) which specifically addresses devices designed to provide emergency communications in the event of a distress situation. SEND devices may be dedicated satellite emergency notification devices or they may include a SEND function within a device capable of performing other communications functions as well (e.g. text messaging, tracking). Regardless of the type of SEND device if it provides a dedicated emergency notification function (e.g. SOS, 911, Help) designed to notify either private or public emergency services of a distress situation then this standard is applicable. Mobile satellite service devices that offer real-time, two-way switched voice service that is interconnected with the public switched telephone network are excluded from the requirements of this standard as are terrestrial cellular based devices.

This standard focuses on the Operational, Technical and Environmental requirements for Satellite Emergency Notification Devices designed to be carried by individuals or fitted to vehicles, in general it does not concern itself with the infrastructure and support services which may be required to receive a distress message and route it to the appropriate private or public emergency response services, except to the extent indicated in Annex D which covers requirements for Emergency Call Centers that received SEND emergency messages.