



# Call for Innovation (CFI)

## Opportunities for Member Consideration

**Objective:**

The EDGE Network is requesting Member collaboration to identify keyword speech recognition technologies in noisy environments for an anticipated need within the United States Coast Guard Rescue 21 system. Other potential applications include: Law enforcement, Homeland security, and other First Responder needs.

**Requested Innovation:**

The focus of this Call for Innovation (CFI) is to demonstrate high accuracy keyword speech recognition of approximately 20 different keywords, or combination of keywords, received in broadcasts from commercial and military grade VHF and UHF radios. In this situation there is no control of the type or quality of the radio the transmission is being received from.

**Description:**

Keyword speech recognition could be used to augment watch standers in monitoring radio broadcasts listening for distress calls. This effort is focused on providing an accurate reliable solution that can be integrated into an existing PC based workstation. No DSP or hardware add-on solutions are being sought.

The solution will process radio transmissions converted to audio and identify keywords such as mayday, help, sinking, fire, etc. There can be no dependencies on radios and transmission quality. The final evaluation will be to use lab generated and actual United States Coast Guard distress call to see if a high enough accuracy level can be achieved

**Targeted Timeline:**

Confirmation of interest in the CFI not later than July 7th, 2009. Overview whitepaper concept by July 17th with discussions following on July 24<sup>th</sup>.

**Contact Information:**

Ben Tausch (480) 441 – 0125  
[P26711@gdc4s.com](mailto:P26711@gdc4s.com)