



# Beacon Two-Way Communications Update

Mr. Edwin Thiedeman

10 May 2024





# Topics



- **Two-Way Communications (TWC) activities**
- **Key TWC Elements being Discussed**
- **Upcoming Events (JC-38)**
- **U.S. SARSAT Program Perspective**
- **Questions**





# Two-Way Communications (TWC) activities



- **Correspondence Working Group (CWG)**
  - Regular meetings before and after EWG-6/2024 to advance the work
- **C/S Experts Working Group on TWC (EWG-6/2024)**
  - Held 12-16 FEB 2024 in Antalya, Türkiye
  - Significant progress made across most elements; progressed draft TWC Operational Concept and High-level Requirements (C/S R.02X)
  - New questions identified for addressing
- **C/S Experts Working Group on MEOSAR Coverage (EWG-2C/2024)**
  - Noted from EWG-6/2024 that TWC coverage analysis was desired; a revised EWG-2C Terms of Reference was approved at Council (CSC-70)





# Key TWC Elements Being Discussed



- **Question/Answer/Instruction (Q/A/I) Dataset Development**
  - Participants continued defining the initial question set and the dataset management process
  - Will continue this work at the Joint Committee in June
- **Beacon message structure**
  - Definitizing beacon message structure to address emerging decisions
- **Interface Requirements - Internal/External interface devices**
  - Identifying the minimum internal beacon interface requirements
  - Establishing external beacon interface guidelines/requirements
  - Document the agreed TWC beacon interface guidelines/requirements





# Upcoming Events



## C/S Joint Committee (JC-38) topics

- Further develop the TWC Operational Concept and High-level Requirements (C/S R.02X)
- EWG-2C to meet following JC to begin addressing TWC coverage
- Work to finalize the TWC rotating field message structure and bit assignments
- Discuss and reach agreement on internal interface, external interface, and/or hybrid interface functionality and associated requirements





# U.S. SARSAT Program Perspective



**The U.S. SARSAT Program is evaluating the TWC internal / external interface capabilities, considering:**

- Internal only interface functionality advantages/disadvantages
- External only interface functionality advantages/disadvantages
- Hybrid interface functionality advantages/disadvantages
- Typical operating modes and risk assessments, including Cyber/IA
- External link performance and compatibility
- Sustainability concerns (e.g., external device OS/App update processes, beacon/App compatibility, Q/A/I dataset compatibility, etc.)
- User education and familiarization





# Questions?

## USCG Points Of Contact:

**Mr. Layne Carter**

**Mr. Edwin Thiedeman**

**Mr. Brent Vizbulis**

**Layne.P.Carter@uscg.mil**

**Edwin.B.Thiedeman@uscg.mil**

**Brent.M.Vizbulis@uscg.mil**

