Status Report from the NATO Radio Meetings

11–13 March 2008

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Meetings of 11–13 March 2008

- Bruges, Belgium

- First (trial) meeting of combined Radio WG
  - Parallel meetings of V/UHF and BLOS Comms
    - Termed "syndicates"
  - Followed by 2 days of plenary sessions

BLOS Comms Meeting
11 March 2008

BLOS Comms Chairman

- Don Kallgren (NC3A) continued from the previous meeting as acting chairman

- Eric Campbell (USN) was nominated and elected to serve as chairman going forward

NATO HQ Staff Summary

- SC/6 report: Interoperability is worst in the land environment
  - Maritime is pretty good
- Legacy of the Cold War
  - Nations each had a slice of Europe to defend
- Now (e.g., ISAF) need fine-grained interop
- HF radio is key component due to its range

NATO HQ Staff Summary

- What HF package (singular) should be specified?

- Currently the services use the following:
  - Land: STANAG 4538 is clearly the best
  - Sea: 5066 with 4539 modems dominates
  - Air: Same as sea plus 2G ALE

- Would 4538 be appropriate for all?

STANAG 4444 (EPM)

- Two implementations (FR/IT and GE)

- Incompatible approaches in two areas
  - AES mode of operation: embedded or not
    - "Implementation issue"
  - MELPe (Interoperable at 2400, incompatible at 1200 and 600 bps)
    - Telefunken: no business case for the lower rates
    - Mandate only 2400?

STANAG 4538 (3G Suite)

- Edition 1 amendment 1 is promulgated

- Edition 1 amendment 2 in development
  - TAC formed; members from US, UK, and NO
  - IP interface will accommodate STANAG 5067
  - Multicast protocol in development
    - Decision: unacknowledged mode only
  - Higher speed data link in development

STANAG 4539 (Modems)

- Data Modems (similar to 188-110 Appx C)

- Higher bandwidths are of interest

  - 64 kbps in 12 kHz?

  - SC/6: make HF standards "net ready" implicit tasking to get to at least 64 kbps

  - "Fly off" between serial tone and OFDM?

STANAG 5066 (Data Protocols)

- Edition 1 amendment 1 has 14th ratification Ready for promulgation (at last!) as "ed 2"

- Edition 2 will add LAN features (channel access control protocols), Internet integration
  - Annex L: Token-passing channel access
  - Annex M: (future dynamic TDMA)
  - Annex N: regional address allocation scheme
  - Annex O: integration with IP networks

Joint Meeting of Radio WG
12-13 March 2008

(HF topics only)

ITU Update: WRC '07

- Nur Serinken, WP-9C chair reviewed WRC'07

- Action Item 1.13
  - Res 729: no changes needed to accommodate adaptive HF systems
  - Res 351: no changes to channelized bands in Maritime Mobile Service for digital technology
  - Res 544: no new allocation to broadcasters; issue is closed
  - No new allocation to hams in 5.2 MHz band

ITU Preview: WRC '11

1.9   Rollover of Res 351 of WRC 07 regarding
new digital technology for MMS

1.15 Oceanographic radar spectrum in the
3-50 MHz range (low power)

1.19 Consider regulatory measures for SDR and
cognitive radio technology

- SG-9 will propose 12 kHz HF allocations

Next Meeting

- Munich, Germany
  8-11 September 2008

  Second combined meeting of Radio WG
  - AHWG/1: BLOS Comms
  - AHWG/2: V/UHF

Questions?