

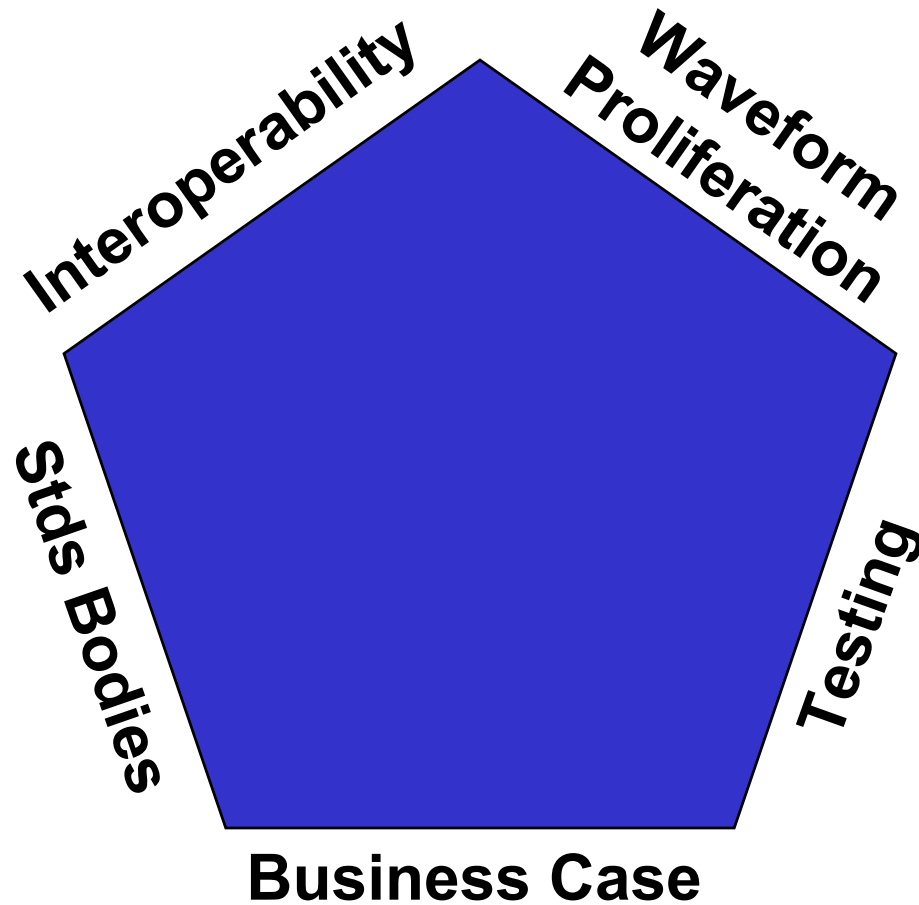
# ***Future of HF Standards***

## ***Follow Up***

W. Beamish

May 2003 HFIA Meeting

- Standards that customers will buy
- Tradeoffs objectively made (ie feature value)
- Timely and regular maintenance
- Manageable configurability
- Testable without going “shall by shall”
- Minimal spec gaps
- Feature set based on *COMMOM* requirements
- Optional, yet standardized features
- Room for innovation without affecting interoperability



- Waveforms today solve difficult problems
- Several overlapping waveforms
- Highly confusing to customers
  - Try explaining 1045, 141A, 141B, 2G, 3G, FLSU, RLSU, AQC
- Expensive to all
- Interoperability
- Maintenance

- New waveforms are highly complex
- Interact with external systems (ie networks)
- Difficult to make work between 2 of the same radio
- Interoperability between different vendors very hard
- Not easy for vendors to test interoperability
- Need mechanisms
  - Test
  - Problem resolution
  - Quickly change/amend standard
  - Establish and publish standardized system configs

- Issue summed up as “level of mandatory-ness”
- Emphasis (grossly simplified):
  - Industry: positive ROI on development
  - Gov’t stds: provide full function working system
  - Gov’t users: get working and supported system at a good price
- Std’s are usually initiated by government(s)
- Standards and their features developed for many reasons: programs, IOP, problems, etc
- Cost effectiveness not always a high priority
- Result can be Std that is expensive to implement and maintain
- Customers pay for this
- Not unusual that the capabilities that are used 10% of the time, consume half the cost

- Exert a more unified front when discussing requirements
- Establish an interoperability test center
- Create and document standard configurations for interoperability
- Make HFIA recommendations on waveform consolidation
- Develop “HFIA standards” or “HFIA working drafts” when the gov’t process is not timely enough
- HFIA review and/or generation conformance and interoperability test plans

1. Consolidated review and comment on JITC STANAG 5066 Test Plan
2. Develop interoperability configurations for STANAG 4538 and STANAG 5066
3. HFIA recommendation for ALE Std consolidation
  - USG
  - NATO
4. STANAG 5066 next edition
  - Recommendation
  - HFIA or Interim specification
5. Interoperability test center
6. Appeal to USG for BLOS AHWG support

- Key organization for development and maintenance of HF NATO stds
- Spotty attendance, support, continuity by USG
- Regular Industry involvement (ie Harris, Collins)
- Lack of Gov't continuity can have negative impact on Industry (ie STANAG 4203)
- Recommend HFIA appeal to appropriate USG offices for long term support