

EXHIBIT A - MANAGEMENT - INTEGRATION OF ARES(r), NTS, and NTSD

What is missing in the integration equation at present, due in part to lack of a national organizational superstructure in ARES(r), is a certain way to ensure that there are root connections to the Radio-email network (and others as may be established from time to time) during any and all emergency activations as necessary to achieve total agency interoperability - the objective of the updated MPG6 guidance.

The NTSWC has proposed that ARES(r) is best positioned to deploy stations to the key messaging points during disasters, hence is capable of providing those root connections. This is what ARES(r) already does for basic tactical communications for served-agencies. An organizational regimen is needed to help ensure that ARES(r) is charged with that root responsibility; applies the technology suitable to reach beyond the boundaries and local radio horizons using a common, compatible messaging format; and has the national support to ensure coordination with other services both within and outside of the ARRL Field Organization.

This involves guidance on proper equipment, operational training, coordination above Section level, and guidance on having appropriate equipment everywhere to access the Radio-email layer both for locally deployed ARES(r) points of contact, but also for ARESMAT deployment with the capability of re-establishing the Radio-email connections and Gateways within the last mile. This must be through the use of a common technology used by all involved stations regardless of local, Section, Region, Area, and Division boundaries.

It is clear that assigning ARES(r) such a responsibility is not currently possible by the NTS leadership under the terms of the ARRL *Public Service Communications Manual* (PSCM), and there is no national organizational structure for ARES(r) above the Section level to coordinate all this.

Currently, the NTS/NTSD is managed by an elected staff, headed by Area Chairs, and including Digital Coordinators, TCC, and Regional system managers, which has worked well since its inception by George Hart. Mission definition and operating policies are articulated in the PSCM and NTS Terms of Reference (Appendix A, PSCM).

CONCEPTUAL PROPOSAL

This conceptual proposal for integration, shown in figure 1 below, is to create a parallel ARES(r) organizational structure above Section level at Region, Area (or Division), and national levels, which like the current NTS management can coordinate operations, exercises, and the establishment of MOUs, etc. This structure would help coordinate consistent national messaging layer access within and between Sections and coordination of all such operation across the aforementioned boundaries.

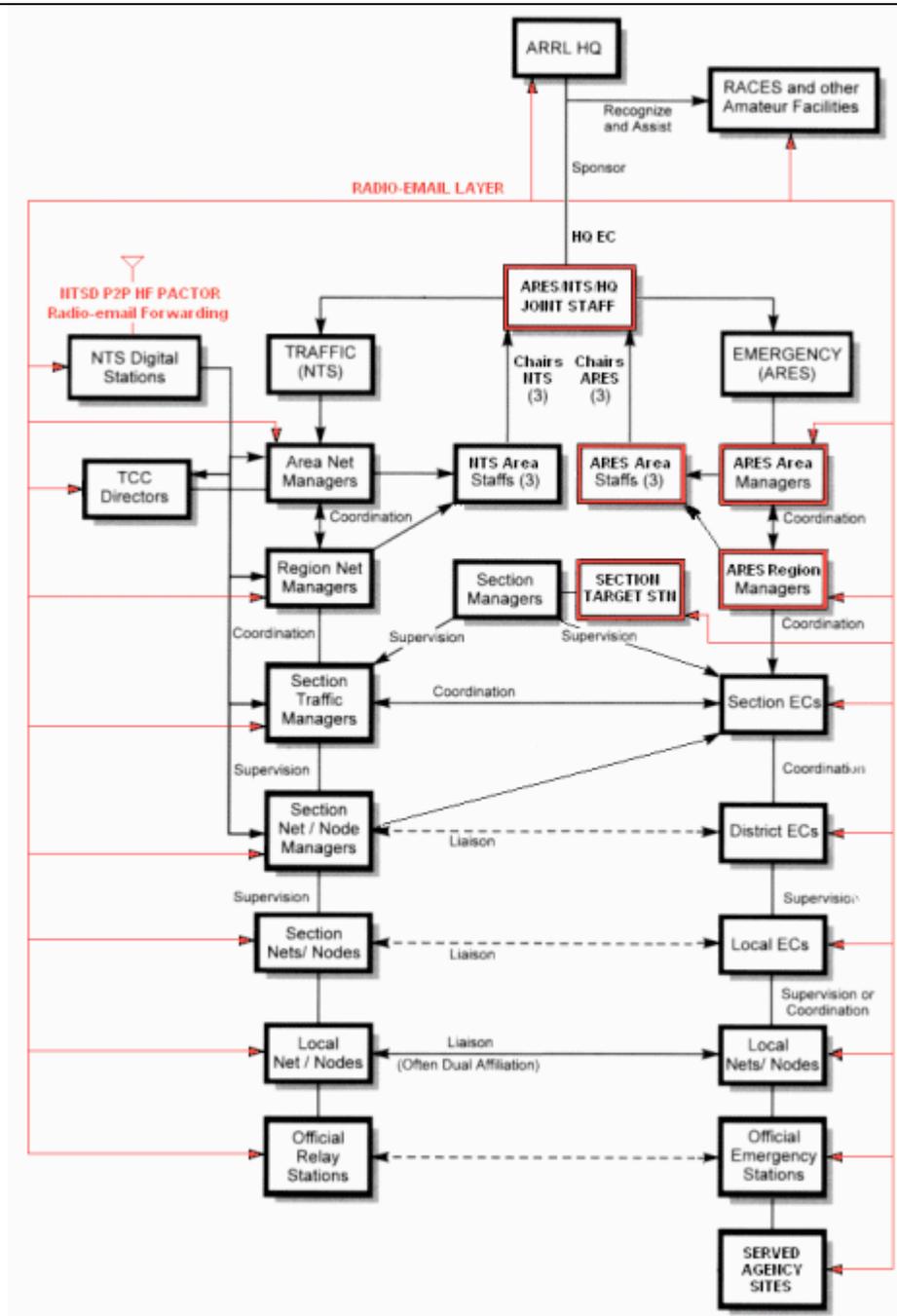


Fig. 1 NTS - NTSD - ARES(r) STRUCTURAL CONCEPT

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A key word change in such a proposal would be the word “requirement” applied to both ARES(r) and NTS/NTSD Section operations with respect to providing the root networking connections and mutual support. This would essentially codify the integration and ensure interoperability above Section level at the same time

Each Section’s ARES(r) staff would elect an ARES(r) representative to the Region ARES(r) staff. Each ARES(r) Region would elect a representative to the ARES(r) Area staff, reporting to the respective Area Chair, elected by the staff as done in the NTS. Regions and Areas (or Divisions) may be defined for ARES(r) as done for the NTS, or adjusted to suit typical disaster domains and served agency locations or domains. National operations for ARES(r) would be coordinated by the elected Region/Area (Division) staff.

Each Section's NTS staff (STM, Managers of NTS affiliated Nets, and ORS appointees) would elect one NTS representative to the NTS Area staff. Section level NTSD MBO operators and DRS stations already report to the NTS Area ADCs. Above Section level, the management team at Region, Area, TCC, and NTSD levels is already operational under the NTS TOR and MPG. The Section's monthly STM NTS activity report would be filed with the Area Chair as well as with F&ES. Section NTS activities would continue to be conducted in accordance with the PSCM, NTS MPG, NTS TOR, and Area staff policies set by the NTS Area Chairs.

The Chairs of the ARES(r) staff would, under a Terms of Reference, meet and consult jointly with the Chairs of the NTS/NTSD staff in order to coordinate and exercise the integrated services, and together, as joint ARES(r)/NTS/NTSD Chairs, meet and consult with the HQ emergency planning leadership. This organizational nexus would coordinate joint EMCOMM and ARESMAT operations, exercises, and coordinate the creation and application of ARRL MOUs with served-agencies. The joint Chairs and their staff would also be responsible for training of leadership and providing training support for Section operations, and, upwards, supporting the creation of appropriate training and educational literature for HQ publication. The joint Chairs would also manage the Target Station database for maintaining current records of clients on the Radio-email system and/or other networks.

The NTSWC suggests preserving the NTS and NTSD and sustaining their organizational pride for the real and essential service of handling Radiogram addressed messaging as well as providing services in the Radio-email system. Likewise, such an ARES(r) structure allows preserving the integrity of all the ARES(r) groups as traditional organizations while integrating their operational responsibilities in both Radiogram and Radio-email services.

This approach might produce much less upheaval compared to other approaches, and it can be implemented without infringing upon the elected Section Manager's discretionary appointment powers.

The essence of such codification of responsibility already exists within the job descriptions for management within Section’s ARES(r) and NTS, as well as above Section level, but is not now uniformly applied to mutual operations, or applied in a uniform way in all Sections. The PSCM would need to be updated to reflect these changes.

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The updated MPG 6 guidance is structured to operate within just such an organizational arrangement. The "Target Station" concept is part of the guidance to open the door exactly to the ARES(r) deployment responsibility, joint use of the Radio-email and NTS/NTSD layers, and to a new upper level organizational strategy.

A Target Station Database must be established, accessible via Radio-email by stations throughout the country as agreed to in ARESCOM in 2004, which would provide a dynamic registry of Target Station client identification easily retrieved and/or modified prior to and during emergencies. Thus, all clients wishing to direct network traffic to specific Sections and NTS/NTSD stations will be provided the client addresses to be used in the "To:" line of such Radio-email. Each Section would establish at least one Section Primary Target station which would check for Radio-email daily, and be able to communicate with Section staff independent of the ground infrastructure.

The NTS and NTSD would also assign Target Stations. The NTSD Area Digital Coordinator's MBO stations already check for Radio-email at least daily to accept Radio-email messaging for forwarding, and to receive and post Radiogram traffic carried by Radio-email, from clients anywhere in the country. Section digital relay stations (DRS) would be able to send and receive Radiogram traffic via direct connection to NTSD MBOs as well as via Radio-email.

The NTS manual net system, particularly through Section affiliated nets and DRS liaisons, will continue to facilitate the handling of Radiogram traffic without network or email addresses, and the Radio-email capability of stations on those nets can coordinate the movement of Radio-email via liaisons. Hopefully both Section NTS and ARES(r) stations would cooperate in the delivery of Radiogram traffic as needed.

Thus, the Radio-email layer provides the means for national alerting, exercises, and operations messaging for ARES(r), NTS, NTSD, and ARESMAT, and during emergencies permits contact with clients as often as necessary. ARES(r) shelter and served-agency "root" station operators may exchange Radio-email with Target clients anywhere, including Radio-email exchanged with addressees on the public internet, virtually real-time, via radio, and without the need for extensive manning for intermediate relaying stations or nets.

This concept hopefully provides the concept of an organizational structure to help coordinate joint ARES(r) and NTS/NTSD operations across any boundaries as is consistent with ICS/NIMS strategies, and helps ensure efficient execution of Section Emergency MOUs and those with other agencies involved in the emergency response.

Prepared by the NTS Winlink Committee, November 5, 2013, W3YVQ, Chair, for the NTS Area Staff Chairs.