



EHM Impacts to ATE Study

Study Request Extract



From: DoD ATS Executive Directorate

To: Chairman, National Defense Industrial Association Automatic Testing Committee

Subj: Request for Study and Recommendations Relative to the Impact on Automatic Test Equipment of Enterprise Health Management Approaches

1. “Ten years ago many industry pundits were **forecasting the disappearance of ATE, to be replaced with redundant, self-repairing systems, smart diagnostics, prognostics and extensive built-in-test.** As predicted, all of these technologies have advanced enormously, but survive today as true partners with traditional ATE augmenting its functions, focusing its applications and working in Harmony to achieve the common goal of maximizing prime systems availability.” (Mike Ellis, Technical Program Chair AUTOTESTCON 2009)
2. These improvements to the Health Management Enterprise are indeed contributing to weapon system availability. However, they are being interpreted by some DoD Program Managers and senior leadership as an opportunity to eliminate at-system and off-system ATE.
3. It is requested that the NDIA Automatic Testing Committee perform a **study to determine (1) where diagnostics, prognostics or any other elements of Enterprise Health Management have been introduced into a complex platform, and (2) the effects of this introduction on weapon system support, including weapon system availability and ownership costs, as well as any impact to the weapon system's ATE over the life cycle.**
4. Please direct questions to the undersigned at (301) 757-6907 (e-mail william.ross@navy.mil) or to Jay Romania at (973)724-5832 (email jay.romania@us.army.mil).

A handwritten signature in black ink that reads "W. A. Ross".

W. A. ROSS
Assistant Director

- ATE Still Exists
- New/Obsolescence Mitigation Projects for ATE Ongoing
 - Legacy Weapon Systems
 - New Weapon Systems
- Near-Term Future Indicates the Need
 - Two or Three-level Maintenance
 - Factory/Production

- Platforms May be Implementation of:
 - Embedded Diagnostics
 - Prognostics
 - Other Enterprise Health Management

- DRS TEM Both EHM (ED and CoBRA) and ATE
 - Abrams
 - Bradley

- Experience with Other Platforms
 - In Both EHM and ATE
 - EHM Only
 - ATE if Experience Impact from EHM

Impacts for Study to Consider



- Availability (Ao) of System
- Lower/Higher Skill Levels of Maintainers
- Reduced Requirement for ATE
- ATE Requirements for Connection to the Enterprise (IA Issues for ATE and EHM)
- Improved Ownership Costs (Weapon Platform)
- Improved Diagnostic Time on Platform
- Improved Diagnostic Time Off-Platform (ATE)
- Improved Diagnostics (Ambiguity Group) On and Off-Platform
- ????

POC for Volunteers



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