DoD Advanced Geophysical Classification Accreditation Program (DAGCAP) Update M2S2 Webinar

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Overview

- DAGCAP Overview and Accomplishments
- Major Program Elements
- Road Ahead
- Questions/Panel
IDQTF and EDQW Efforts for Advanced Classification

Develop and implement a quality system based on national and international standards for the performance of Advanced Classification at DoD Munitions Response Sites

- Develop a Quality Assurance Project Plan template using the *Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP)*
  - Implements ANSI/ASQ E4 (IDQTF)

- Develop quality systems documentation for the 3\textsuperscript{rd}-party accreditation of organizations performing advanced classification
  - Implements ISO/IEC 17025 (EDQW)
DAGCAP Overview

Why Use Accreditation?

• Provides formal recognition to competent testing organizations
• Provides a means to identify and select testing organizations that meet minimum program requirements
• Provides for ongoing demonstrations of capability and periodic re-evaluation for continued compliance
• Quality System (QS) QA/QC includes corrective action, prevents QS non-compliance reoccurrence, and establishes frame-work for continual improvement

Enhances confidence in results by clients, regulators and the public
DAGCAP Overview

• Modeled after DoD Environmental Laboratory Accreditation Program (ELAP)
• Third-party Accreditation Bodies (ABs) conduct assessments to Quality Systems Requirements (QSR)
• Applies to all testing organizations regardless of size or volume of business
• Applies to use of advanced geophysical classification at all munitions response sites (MRS)
DAGCAP Accomplishments

• EDQW DAGCAP Subgroup created-fall FY15
• DOD Policy Memo establishes DAGCAP – May 2015
• Develop Quality Systems Requirements – Dec 2015
• Develop Demonstration Test Site-begin FY 15 (ongoing)
• Select/recognize/train Accrediting Bodies (ABs)-July – Sept 2015
• ISO 17025/QSR Training (NAOC sponsor) – Dec 2015
• DOD Policy memo implements DAGCAP – Apr 2016
DAGCAP
DoD Organizational Support

- DoD Environmental Data Quality Workgroup (EDQW) oversees program as chartered activity
- EDQW recognizes DAGCAP ABs based on Conditions and Criteria agreement
- EDQW Advanced Geophysical Classification Subgroup (AGCS) created
  - Membership includes all component services including AGC research, geophysicist, and QS specialists – chaired by EDQW Army Principal
- EDQW AGCS implements program
- DoD components commit resources for DAGCAP for five years
EDQW AGCS Responsibilities

- Develop program doctrine/products (e.g. QSR, DAGCAP Manual, and SOPs) – incorporating stakeholder input
- Participate in AB selection and training
- Observe and report on AB assessments of Geophysical Classification Organizations (GCOs)
- Monitor/oversight of ILAC Peer Reviews of ABs
- Periodic meetings with ABs
- Post information DENIX (public website)
- Responsibilities related to individual accreditations (e.g. support AB in validation seed corrective action evaluation)
International Program Standard
ISO/IEC 17025

• Quality Systems Requirements (QSR) for DAGCAP based on ISO/IEC 17025:2005 (“General Requirements for the Competence of Testing and Calibration Laboratories”)
• ISO 17025 – “laboratory” and “conformity assessment body” (CAB) refer to orgs that conduct testing or calibrations
• DAGCAP will use Geophysical Classification Organization (GCO) term in place of CAB
• ISO 17025 establishes 2 types of requirements:
  √ Management & Technical
DAGCAP Quality Systems Requirements (QSR) Document

• Designed to be used in conjunction with ISO/IEC 17025
• Users must obtain a licensed copy of 17025:2005
  ✓ [webstore.ansi.org]
• Presented in “checklist” format using 17025 outline
• Supplemental DoD text is provided in relevant sections of the 17025 outline
  ✓ Clarification: Explains 17025 requirements in the context of advanced classification
  ✓ Requirement: Supplements 17025 requirements with DoD-specific requirements for advanced classification
  ✓ Guidance: Provides information to assist with implementation
DAGCAP Overview

QSR elements based on ISO 17025:

• Qualifications, training and experience of staff
• Demonstrations of capability
• Proper equipment maintenance
• Documented organizational quality systems
• Management accountability
• Measurement traceability
• Recordkeeping and reporting
• External assessments
AB Responsibilities
DAGCAP Assessment Process

• Three primary elements – sequential/gated:
  ✓ GCO Document Reviews – desk audits
  ✓ AB On-Site Assessments – QM/QS audits/interviews
  ✓ GCO Demonstration of Capability – APG Site

• Prepare final assessment reports – includes non-conformances and accepted corrective action
• Conduct reassessment and surveillance
• Suspend or withdraw accreditation
• Report accreditation status for posting on DENIX
DAGCAP Accreditation of GCOs

• Single field of accreditation – Technology – Electromagnetic Induction (EMI)/Method - AGC
• Attest to the capability of GCO in meeting minimum requirements expressed in QSR – AGC data is accurate, traceable, and reproducible
• DOD component contracts to require DAGCAP (additional tech requirements may be contained in QAPP)
• Renewal every two years
• Timing/sequencing of annual activities to support accreditation can vary by AB
Aberdeen Proving Ground Site
DAGCAP Demo of Capability (DOC)

• Totally reconfigured ESTCP test site with preliminary evaluation by DOD geophysicists
• GCO responsible for all hardware, software, and staffing
• Indoor area provided for data analysis operations
• Conceptual Site Model based DOC
• Scoring by APG Staff reported to ABs
• AB assessor present for all GCO DOC operations, including observing compliance with GCO SOPs
• Overall test site configuration allows multiple GCOs (without test repetition) and multiple DOCs by the same GCO
Aberdeen Proving Ground Site
DAGCAP Demo of Capability (DOC)

Operation of Test Site:
• Goal – one week on-site for complete DOC
• All data collection and analysis to be performed on-site
• Contractor access to Calibration area and IVS instrument check out
• Dynamic survey to select anomalies
• Cued survey over anomalies chosen by contractor
• Product - ranked anomaly list with stop-dig threshold identified
DAGCAP - Road Ahead

• Contractual requirements for MRSs implementing AGC for accredited GCOs by milestone in policy memo (end CY 2016)
• Ongoing training for stakeholders – ISO/QSR, AGC hardware and software operations
• DAGCAP oversight and coordination-collaboration by DOD EDQW
Questions for Panel

✓ Dr. Jordan Adelson
✓ Dr. Herb Nelson
✓ Mr. Kevin Coats