U.S. DEPARTMENT OF ENERGY
Office of Science
ORNL Site Office

EFCOG Contractor Assurance Working Group

A DOE Perspective

Johnny Moore

March 18, 2014

Topics

- SC Focus in 2009
- Peer Review Process
- Forensic Workshop
- Current/Future Actions

Early in Journey

ISM

- DNFSB Recommendation 95-2
- Implementation of ISM
- Hiccups along the way (recision/reaffimation, etc.)
- ISSM Issues

CAS

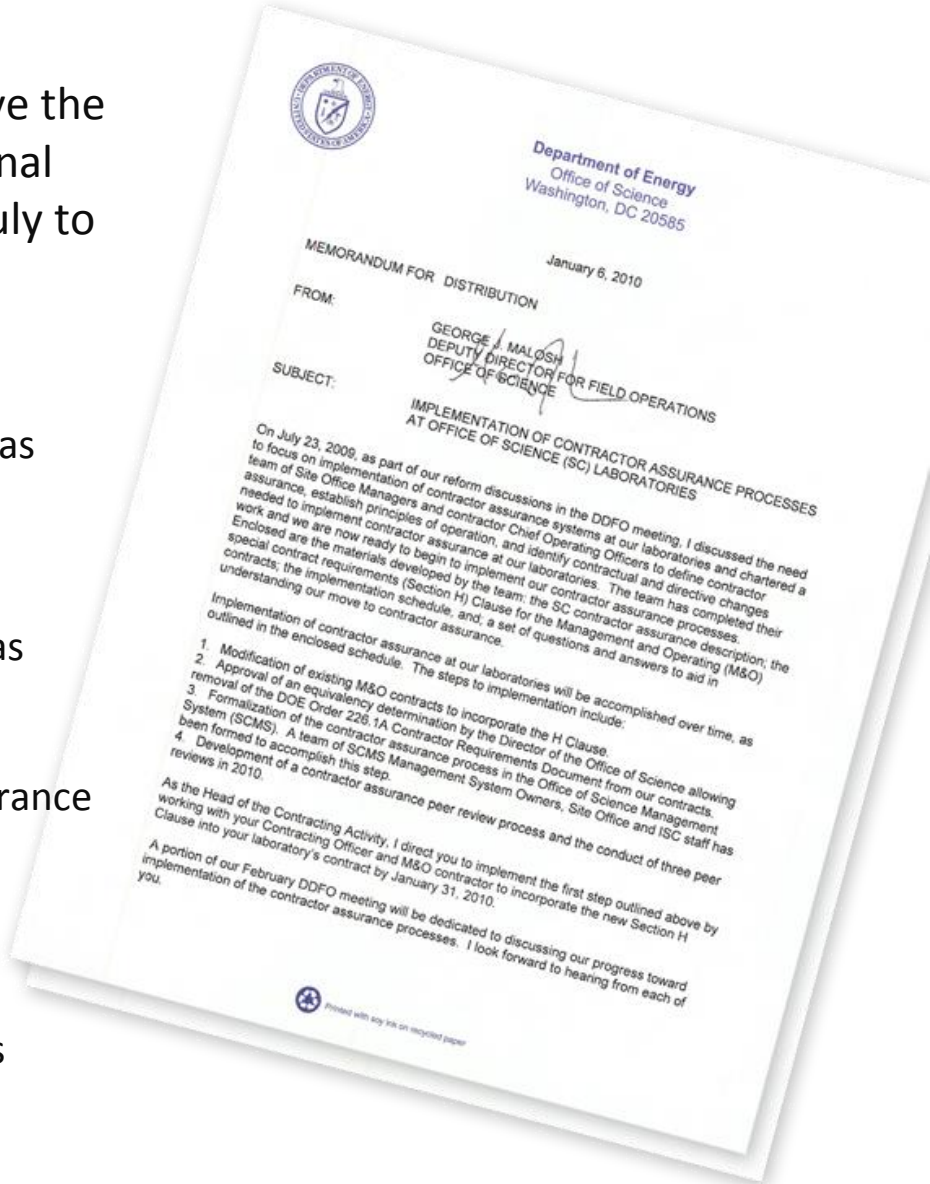
- Draft Policy 2003 finalized 2005
- 226.1 2005
- 226.1A 2007
- 226.1B 2011
- Line management oversight
- Is it Effective?

Office of Science Approach (2009)

The SC Deputy Director for Field Operations chartered a federal/contractor team to improve the execution of Contractor Assurance at SC National Laboratories considering reform initiatives. (July to December 2009)

The team established expectations:

- ✓ Try to work within existing approaches as much as possible
- ✓ Eliminate redundancy
- ✓ Apply Contractor Assurance to all operating areas
- ✓ Remove DOE O 226.1 to reduce confusion
- ✓ Connect to PEMP, contractor management assurance systems/processes
- ✓ Laboratory systems and processes should be transparent to the Site Office Manager
- ✓ Oversight can be modified as Assurance Systems mature



Department of Energy
Office of Science
Washington, DC 20585

January 6, 2010

MEMORANDUM FOR DISTRIBUTION

FROM:

GEORGE J. MALOSH
DEPUTY DIRECTOR FOR FIELD OPERATIONS
OFFICE OF SCIENCE

SUBJECT:

IMPLEMENTATION OF CONTRACTOR ASSURANCE PROCESSES AT OFFICE OF SCIENCE (SC) LABORATORIES

On July 23, 2009, as part of our reform discussions in the DDFO meeting, I discussed the need to focus on implementation of contractor assurance systems at our laboratories and chartered a team of Site Office Managers and contractor Chief Operating Officers to define contractor assurance, establish principles of operation, and identify contractual and directive changes needed to implement contractor assurance at our laboratories. The team has completed their work and we are now ready to begin to implement our contractor assurance processes. Enclosed are the materials developed by the team: the SC contractor assurance description; the special contract requirements (Section H) Clause for the Management and Operating (M&O) contracts; the implementation schedule, and, a set of questions and answers to aid in understanding our move to contractor assurance.

Implementation of contractor assurance at our laboratories will be accomplished over time, as outlined in the enclosed schedule. The steps to implementation include:

1. Modification of existing M&O contracts to incorporate the H Clause.
2. Approval of an equivalency determination by the Director of the Office of Science allowing removal of the DOE Order 226.1A Contractor Requirements Document from our contracts.
3. Formalization of the contractor assurance process in the Office of Science Management System (SCMS). A team of SCMS Management System Owners, Site Office and ISC staff has been formed to accomplish this step.
4. Development of a contractor assurance peer review process and the conduct of three peer reviews in 2010.

As the Head of the Contracting Activity, I direct you to implement the first step outlined above by working with your Contracting Officer and M&O contractor to incorporate the new Section H Clause into your laboratory's contract by January 31, 2010.

A portion of our February DDFO meeting will be dedicated to discussing our progress toward implementation of the contractor assurance processes. I look forward to hearing from each of you.

Office of Science Approach (2009)

- What is different?
- We adhere to the H clause as base
- We do not apply the DOE O 226.1, DOE G 226.1-1, or HSS-recommended CRADs
- Scope includes all areas – not just those mentioned in DOE O 226.1
- We properly document in SCMS the federal approach
- Execution is done in the field and transactions/approvals/acceptance are between contractor and site office

Office of Science Approach (2009)

What should we commit to?

- Reestablishing line/mission management responsibilities.
- Holding the contractor accountable when event occurs instead of proliferating changes and new requirements broadly.
- Effective assurance can only happen in a trusting environment.
- Modifying behaviors to enhance trust from contractor (and Parent) to site office to HQ.
- Balancing risk avoidance/mitigation with mission accomplishment.
- The approvals for different activities should be as close to the accomplishment of work as appropriate.
- Execution is done in the field and transactions/approvals/acceptance are between contractor and site office.

Science Approach Challenges (2009)

- All agreeing to same methodology/approach
- Stay the course if bad things happen
- Modifying our oversight as contractor exhibits CAS performance

  (Partner/modify frequency or focus)
- All parties' behavior has to change
- Getting peer process going so in the journey for continuous improvement, SC sites can help each other

Specific Assurance System Expectations are Derived from the H-Clause

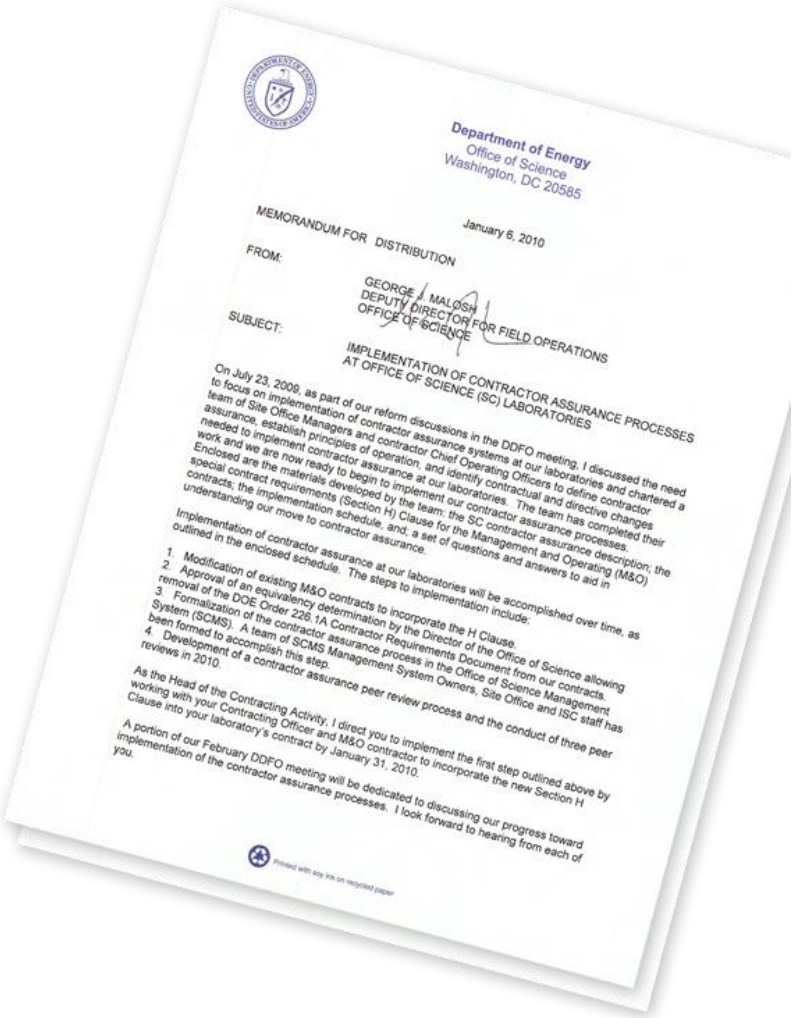
H Clause: Contractor Assurance System

(a) The Contractor shall develop a contractor assurance system that is executed by the Contractor's Board of Directors (or equivalent corporate oversight entity) and implemented throughout the Contractor's organization. This system provides reasonable assurance that the objectives of the contractor management systems are being accomplished and that the systems and controls will be effective and efficient. The contractor assurance system, at a minimum, shall include the following key attributes:

(1) A comprehensive description of the assurance system with processes, key activities, and accountabilities clearly identified.
(2) A method for verifying/ensuring effective assurance system processes. Third party audits, peer reviews, independent assessments, and external certification (such as VPP and ISO 9001 or ISO 14001) may be used.
(3) Timely notification to the Contracting Officer of significant assurance system changes prior to the changes.
(4) Rigorous, risk-based, credible self-assessments, and feedback and improvement activities, including utilization of nationally recognized experts, and other independent reviews to assess and improve the Contractor's work process and tc carry out independent risk and vulnerability studies.
(5) Identification and correction of negative performance/compliance trends before they become significant issues.
(6) Integration of the assurance system with other management systems including Integrated Safety Management.
(7) Metrics and targets to assess performance, including benchmarking of key functional areas with other DOE contractors, industry and research institutions. Assure development of metrics and targets that result in efficient and cost effective performance.
(8) Continuous feedback and performance improvement.
(9) An implementation plan (if needed) that considers and mitigates risks.
(10) Timely and appropriate communication to the Contracting Officer, including electronic access, of assurance related information.

The initial contractor assurance system description shall be approved by the Contracting Officer.

(b) The Government may revise its level and/or mix of oversight of this contract when the Contracting Officer determines that the assurance system is or is not operating effectively.



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Peer Review Process* Conclusions

The conduct of the reviews applied a **consistent set of expectations** across the SC complex, provided a vehicle for uniform **corporate parent engagement**, strengthened partnerships between the Site Office, and provided a "forcing function" to self-assess CAS status and address gaps relative to expectations prior to the review. Overall, the ten peer reviews indicated that SC Laboratories have adequately developed CAS programs at their respective sites. All teams noted that the CAS is adequately defined and contains the essential elements which, if fully implemented, will result in a realization of the benefits of continuous improvement, transparency and trust, sharp mission focus, and provision of a streamlined and nonintrusive approach to performance assurance. It was clear that most laboratories had realized several current benefits from CAS notably in the areas of improved communication among the tri-parties, reduced oversight burdens through assessment partnering and streamlining, greater insight into risk management, and more effective leveraging of external resources to provide their laboratories a competitive edge. However, most reviews acknowledged that further maturity was necessary in order to assure that CAS benefits were fully realized and sustainable and transferrable from the leadership/managers down to the first line supervisors and working level staff. **More run time** and experience with implementation was a frequent observation from the peer reviews. Essentially all of the CAS related systems exist at the laboratory instead of the Corporate Parent or the Site Office, and typically over 85% of the staff implementing CAS are at the laboratory. A key attribute of management systems strength is the **contractor's inherent ability to find and correct weaknesses before they become problems** The Corporate Parent and Site Office engagement in CAS is very important. Due to a much larger organization**, cultural changes are more challenging at the laboratory**. **Whatever CAS improvements are developed, we would need representation from each of the four CAS partners – Laboratory Management, Corporate Parent, Site Office and SC-3 to effect change.**

The CAS Steering Committee, or a subset of the Committee, is an appropriate forum for the development of a strategy and implementation plan for our future SC-Contractor CAS effectiveness in support of the DDFO. The Steering Committee should further refine the approach to ensure SC benefits from the future efforts and **CAS implementation stimulates a learning and growing environment and continuous improvement.**

***Peer review conducted at all 10 laboratories / Ten site reports generated**
Integrated Report was developed and issued (12/12)

From Forensic Workshop Conducted 2013

CAS Shortcomings

(not necessarily prevalent in all case studies)

- Existing performance management processes were ineffective at the program level
- Performance Issues were uncovered by external or independent reviews rather than program owners
- Assessments did not fully evaluate all risk areas (compliance versus risk focus)
- Previous attempts to correct issues were not effective
- CAS programs need to adapt to dynamic risks and changing expectations
- Senior management was either not informed, or sufficiently engaged, on the issue prior to the "defining event" – important information was compartmentalized
- Multiple negative performance indicators prior to all parties aligning on the problem and resolution
- Lack of analysis or "conversation" around performance indicators
- Cultural weaknesses were recognized but not fully evaluated or corrected

From Forensic Workshop Conducted 2013
What Worked Well

- Good collaboration and partnership between Lab, Corporate Parent, and DOE once an issue is raised
- Effective use of external and independent assessments
- Significant effort to understand key lessons and use them to improve overall CAS effectiveness
- Accountability mechanisms were utilized; DOE held contractor accountable, contractor held lab management accountable.
- Sharing of lessons learned across Lab and Department
- The reviews and investigations related to the four case studies did ultimately reduce risks and strengthen the Lab's CAS system

From Forensic Workshop Conducted 2013
CAS Basic Principles to be Sustained

- Need very strong partnership between Lab, Corporate Parent, and DOE
  - ✧ Must enable frank conversations and transparency
- Senior management engagement drives the improvement agenda
  - ✧ It is important to understand the culture and impact on effectiveness
  - ✧ Make it safe for staff to identify risk areas
  - ✧ Consider human factors
  - ✧ Managers must be “in the field” evaluating operational practices and engaging staff in direct conversation about the conduct of work.
- Must be informed and engaged in performance management
- Focus on improvement and sustainability – there is no static end state

From Forensic Workshop Conducted 2013
CAS Improvement Themes

Internal to Laboratory

- Need to institutionalize CAS improvements across all program areas
- Good effectiveness reviews of corrective actions is very important
- Need for an appropriate 'institutional' corrective action review process prior to implementation
- Assurance processes need to be risk-focused and effective at all levels of the organization

Peer Input and Perspective

- Greater use of external, independent, and partnered assessments are needed to strengthen internal assurance processes
- Performance management process need to pay more attention to leading indicators

From Forensic Workshop Conducted 2013
Questions, Comments, Potential Actions

Questions

- Are risk areas calibrated across laboratories?
- How are we looking for our blind spots?
- What are the missed opportunities?
- Are we accepting ineffective assurance processes (i.e., MAM)?
- Are we adequately testing ourselves during peer reviews?

Comments

- After an event, don't let communication of "good news" or "what went right" overwhelm the key lessons that need to be learned and acted on.
- Managers need to spend time at the working level to determine how the culture is responding to expectations
- We need more candid, frank discussions of risks and mitigations
- Contractor assurance systems needs to have a "rapid response" element that quickly identifies compensatory measures and corrective actions

Potential Actions

- Review use and effectiveness of the Manager's Assurance Memorandum
- There is a need to include the Science perspective in DOE's response to the IG report on NNSA's CAS
- We should evaluate how expected changes in DOE Leadership and the evolving financial budget outlook will impact how we execute our CAS program

Ongoing Actions

- SCMS Refresh – Federal Behavior
- Metrics Examination – How do we Measure Progress?
- DDFO Measures – Engagement, Resolution, Continuous Improvement
- DDFO Meeting in April

Science Site Office Oversight Approach
(Examples)

Performance Management

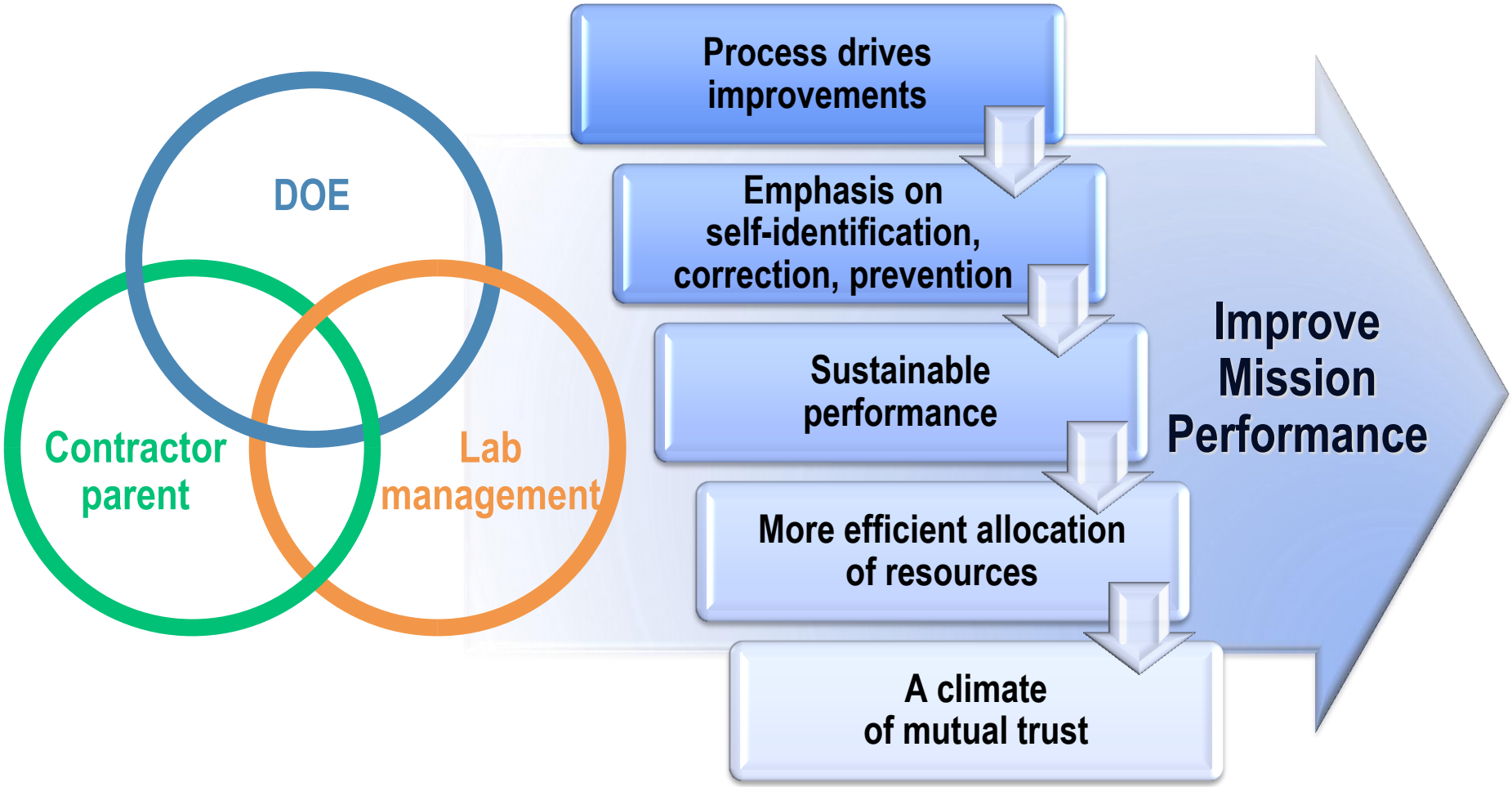
- Goals/Notable Outcomes established in PEMP
- Formal progress monitoring at mid and end of year
- Informal monitoring throughout FY
- DOE conducts annual appraisal

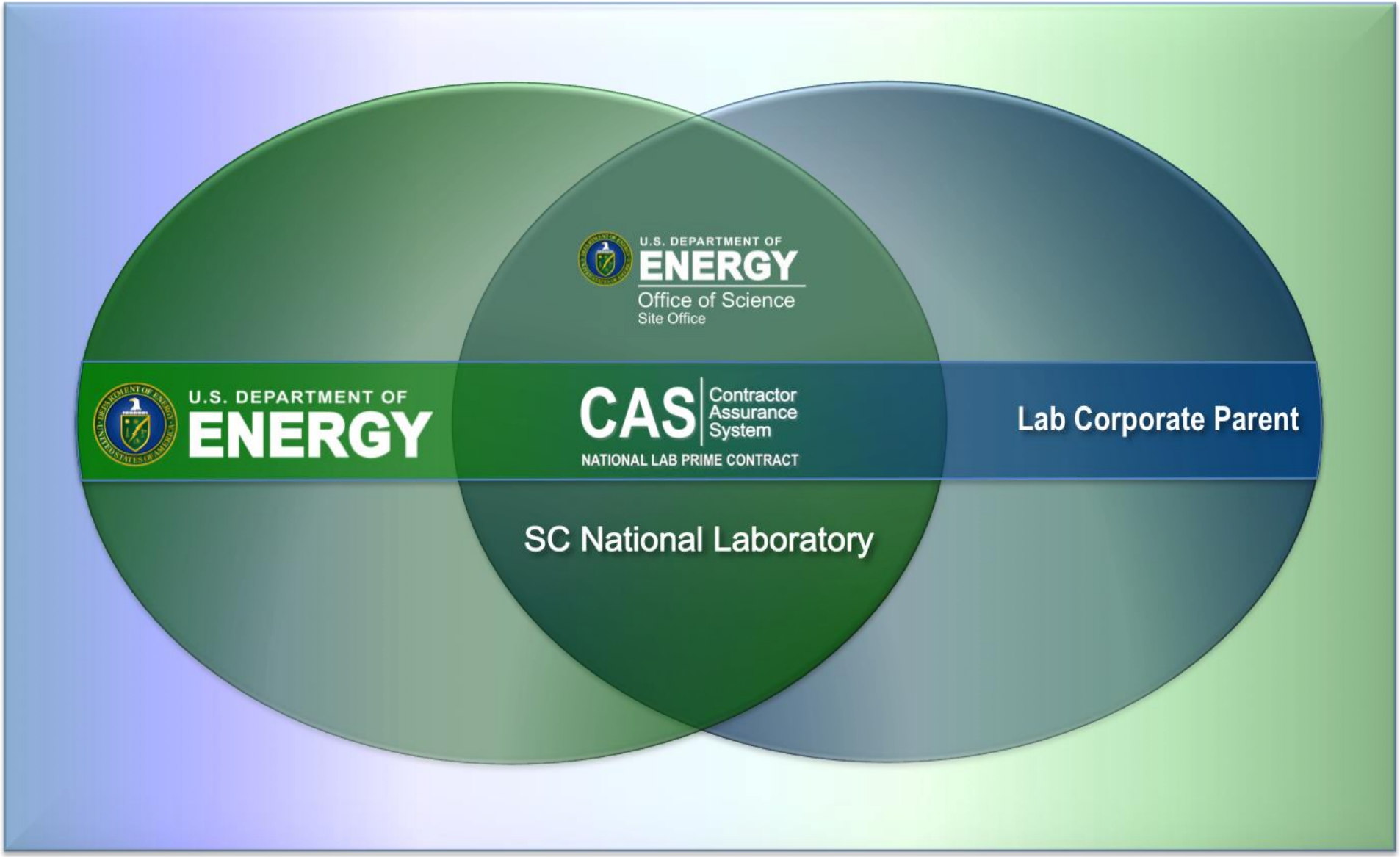
Set Expectations	Facilitate	Monitor/assess	Evaluate
• Establish contract terms and conditions • Implement DOE directives and SCMS • Set/Approve standards • Authorize work (WAs, FWPs, LDRD, WFO, CRADAs)	• Program/project management • Facilities/infrastructure planning/prioritization • Owner's responsibilities: MOAs, permits, etc. • DSA review and approval/ startup and restart • Federal functions: CO/COR, Davis-Bacon, NEPA, etc.	• Monitor performance • Program/project reviews • Coordinate reviews by external organizations • Regulatory compliance oversight • Assessment Program • Commitment tracking	• Measure performance • Day-to-day interactions with Lab management and staff at all levels • Feedback from oversight activities

Outcomes

- Mission execution
- Contract compliance

Success Depends on the Engagement of Three Parties: DOE, Lab Management, and Contractor Parent

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CAS
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Assurance
System
NATIONAL LAB PRIME CONTRACT
Lab Corporate Parent
SC National Laboratory

Suggested Critical Factors

Human Performance

- Federal Leadership
- Contractor Leadership

Special Relationship with NLDC (Chu/Moniz)

- Lab Leadership communication pathway
- Partner with SO/DOE for success

Site Office

- Performance Based not compliance based
- Mission delivery rewards
- Risk focus needs to yield integrated plan for recognition/abatement

Behaviors Exhibited – Ideal World

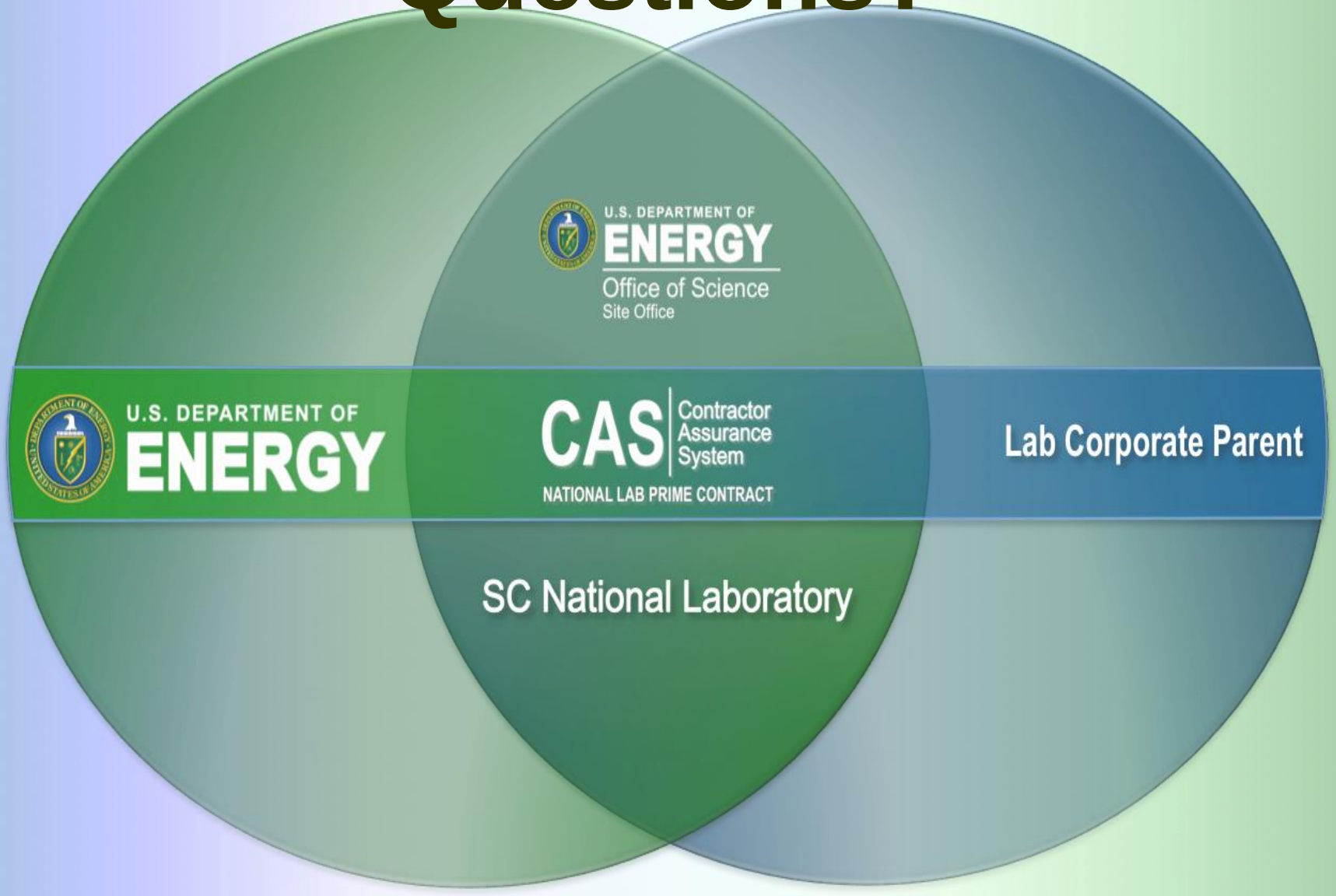
- Trust
- Mutual respect
- Every one knows their swim lanes
- Open for learning
- Critical in self assessment
- Act on deficiencies and willing to partner or change course if not working for staff
- Committed

Ways to Measure Progress along Continuous Improvement Interstate

DRAFT Office of Science
CAS Engagement Achievement Matrix

	Characteristics	Demonstration Features	Federal Activity Focus	Corporate Parent Activities
Implemented	• Tri-party commitment to approach • Lab work reflects CAS principles and self-assessment	• H-clause in contract • CAS defined with clear Lab R&R • CAS description in place • Management systems developed	• Structured and constant interface • Confirmation of management systems and performance data • Direct activity observation to confirm performance • Direction as needed to align performance	• Routine contact • Development of key measures • Evaluation of Lab CAS data and direction • Lab resource augmentation
Proficient	Implemented+: • Emerging risks identified and addressed • Alignment of tri-party activities • Lessons learned are applied	Implemented+: • Management systems producing meaningful performance data and predictive insight • Risk based decision processes in place	• Routine interface • Analysis of Lab CAS data • Direct activity observation with Lab personnel • Influencing improvements	• Routine contact • Monitoring of key measures • Feedback and experience sharing with Lab • Lab resource development
Mature	Proficient+: • Performance predictable and repeatable • Trust improved and with stakeholders	Proficient+: • Investment increasing-more mission work done • Others using model of success	• Routine interface • Collaboration with Lab on improvement initiatives • Focus on enabling activities	• Routine contact • Monitoring of improvement initiatives • Sharing success and Lab resources with other Labs

Questions?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