Benchmarking Foreign Visits and Assignments at DOE Facilities
or What Keeps Us Awake At Night

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Oak Ridge National Laboratory

National User Facility Organization
Annual Meeting
June 10-12, 2009
Users ~50% Are Foreign Nationals

- **NSF:** U.S. institutions awarded 43% of Science and Engineering Doctorates to non-U.S. Citizens in 2006

- **DOE:** Basic Energy Sciences’ Light Sources hosted over 8000 users with 50% foreign nationals in FY 2008

- **ORNL:** 6 largest user facilities hosted over 1800 users including 47% foreign nationals in FY 2008

- **ORNL and ANL:** 11th Annual National School on Neutron and X-ray Scattering included 50% foreign national participants from institutions in the United States held May 30 – June 13, 2009

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Users Have Expectations for Access

- Summarized in American Physical Society publication, Access to Major International X-ray and Neutron Facilities¹

  - ...it is necessary for users to have access to facilities across national and regional boundaries.

  - Use of facilities by foreign scientists from institutions outside the nation is significantly lower in the United States

  - Denial of access for security reasons at US national facilities remains a barrier to access

  - ...since the early 2000s, foreign scientists are less inclined to pursue research at US facilities because of visa requirements and the uncertainty of access entering the United States. Thus, while security is important, it remains a barrier to access, particularly because of the uncertainty in how it is applied.

  - Restrictions on visas for entry into the USA and the security reviews of non-US citizens at DOE facilities which may result in delay or limits on access remain a barrier to access. .. The security review at DOE facilities and on occasions the lack of transparency of the process and delay of access for these students often mean that these students elect to pursue other research.

User Access Driven by DOE Order and Local Interpretation

• DOE Order 142.3, Unclassified Foreign Visits and Assignments Program\(^1\) describes:
  - Passport, Visa, and USCIS Information
  - FACTS (Foreign Access Central Tracking System)
  - Security Plans
  - SME Reviews
  - Indices Checks
  - Graded Approach
  - Hosting

\(^1\)https://www.directives.doe.gov/pdfs/doe/doetext/restrict/neword/142/o1423c1.pdf
User Access Driven by DOE Order and Local Interpretation

- User Facility Issues
  - Definitions
    - Facility is *operated and protected as one unit*.
    - Host is *responsible for the day-to-day activities*
      - DOE or DOE contractor employee
      - US citizens or non-sensitive country foreign nationals
    - Sensitive Country National and National of a State Sponsor of Terrorism includes *was born in*...
User Access Driven by DOE Order and Local Interpretation

- Graded Approach for Reviewing and Approving Access
  - Public Areas and Open Information
  - Laboratories or Facilities that Perform No Classified Work and Have No Classified Materials
  - Property Protection Areas
  - Offsite Locations
  - Laboratories or Facilities that Perform Classified Work and/or Have Classified Materials
  - All Other Areas
  - Special Situations
Benchmark Impact of Order and Local Interpretation

- First Formal NUFO Survey
- Questionnaire sent to NUFO User Facility Administrators
- Goals
  - Quantify burden of the order
  - Identify local interpretations
  - Explore visa difficulties

NUFO Benchmark Questionnaire – Foreign Visits and Assignments

Quantify the burdens associated with foreign visits and assignments for your user facility.

1. Does your laboratory conduct classified research/have classified materials?
2. What is your lead time (number of days) for approving sensitive country foreign national assignments/visits?
3. How many assignments/visits were not approved within the lead time during FY 2008?
4. Do you accommodate requests that are not within the lead time?
5. Do you allow site access prior to receipt of complete indices?
6. If yes, who (what position) approves this access and/or what documentation is required?
7. Are the following changes listed below handled with little administrative effort or with complete reprocessing?
   a. Changes in scope of work within one visit or assignment?
   b. Changes in work area/change in building (e.g., beam line to beamline or light source to nano center)?
   c. Changes in host?
8. How many user facility experiments were not conducted because team member(s) could not get access in FY 2008?
9. Do you recognize completed indices that may be in place from another laboratory in order to expedite processing at your laboratory?
10. Have you noticed an increase in the time required to obtain business visas (for non visa waiver countries) to enter the US?
11. Have any of your users not been able to enter the country because they were not able to obtain a visa?
12. Have you had to cancel an experiment because the user was unable to enter the country?

Name: ________________________________
Position: ________________________________
User Facility: ________________________________

Rev 2
April 29, 2009
# Received 11 Responses from 17 User Facilities at 8 Laboratories

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Benchmark Results – 50% Have Classified Work or Materials

Classified Work or Materials at Facility

Yes

No

Number of Laboratories

0  1  2  3  4  5

Managed by UT-Battelle
for the U.S. Department of Energy
Benchmark Results – Sensitive Country Lead Times 0 to 60 Days

Sensitive Country Foreign National Lead Time

Lead Time (Days)

Number of Laboratories

Managed by UT-Battelle for the U.S. Department of Energy
Benchmark Results – Users Not Approved Within Lead Time 0 to >100

Users Not Approved Within Lead Time

Number of Laboratories

Number Users

0
5
100
>100
Benchmark Results – Most Accommodate Late Requests

Handle Requests Not Submitted Within Lead Time

- Yes
- No
- NA

Number of Laboratories
Benchmark Results – Most Allow Access Without Indices

- **Yes**: The majority of laboratories allow access before indices are completed.
- **No**: A small number of laboratories do not allow access without indices.
- **NA**: A few laboratories have not provided data.

The graph shows the distribution of laboratories based on whether they allow access before indices are completed.
Benchmark Results – Ease of Changing Assignment Parameters Varies

Changes to Access Request

- Work Scope/Purpose
  - Little
  - Start Over
  - NA

- Work Area/Building
  - Little
  - Start Over
  - NA

- Host
  - Little
  - Start Over
  - NA

Number of Laboratories

0 1 2 3 4 5 6
Benchmark Results – Small Number of Experiments Cancelled
Benchmark Results – 50% Can Use Completed Indices
Benchmark Results – 50% Note
Longer Visa Processing Time

An Increase in Visa Processing Time

Yes

No

Number of Laboratories

0 1 2 3 4 5

No
Benchmark Results – Most Users Still Entering Country

Users Unable to Enter Country

Yes

No

Number of Laboratories

0 1 2 3 4 5 6 7 8
Benchmark Results – Experiments Are Affected

Experiments Cancelled No Visa

Yes

No

Number of Laboratories

0 1 2 3 4 5 6 7
Benchmark Results – Summary

• Results based on facility’s designation – classified, no classified, property protection area, open

• PNNL’s EMSL is designated as a facility

• Only classified facilities have requirements for sensitive country foreign nationals

• All facilities have requirements for T4 foreign nationals

• Facilities differ in recognizing already approved indices and in handling assignment changes

• Most facilities approve without indices completed – what’s involved in this process, how often used, what’s risk?
What’s Our Next Step?

• Continue formal benchmarking – web based, chat room, post results
  – Visas
  – Hosting
  – Computer Use Agreements
  – Remote Access
  – Badges, Photos, etc

• Collectively champion changes at our laboratories, with our contractors (Battelle, UC, etc), with DOE – addendum to order for user facilities?
Discussion and Actions