

DUSEL

S1 Management Subgroup Report University of Minnesota DUSEL Workshop

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July 23, 2005

S1 Consensus

- The laboratory program should be managed by scientists and engineers
- The managing organization should have strong links to the science and engineering community
- The laboratory facilities should be open
 - accessible by all those authorized by laboratory
- A single laboratory should
 - coordinate the R&D and science & engineering programs
 - oversee all the sites (if more than one)

Functions of the Laboratory

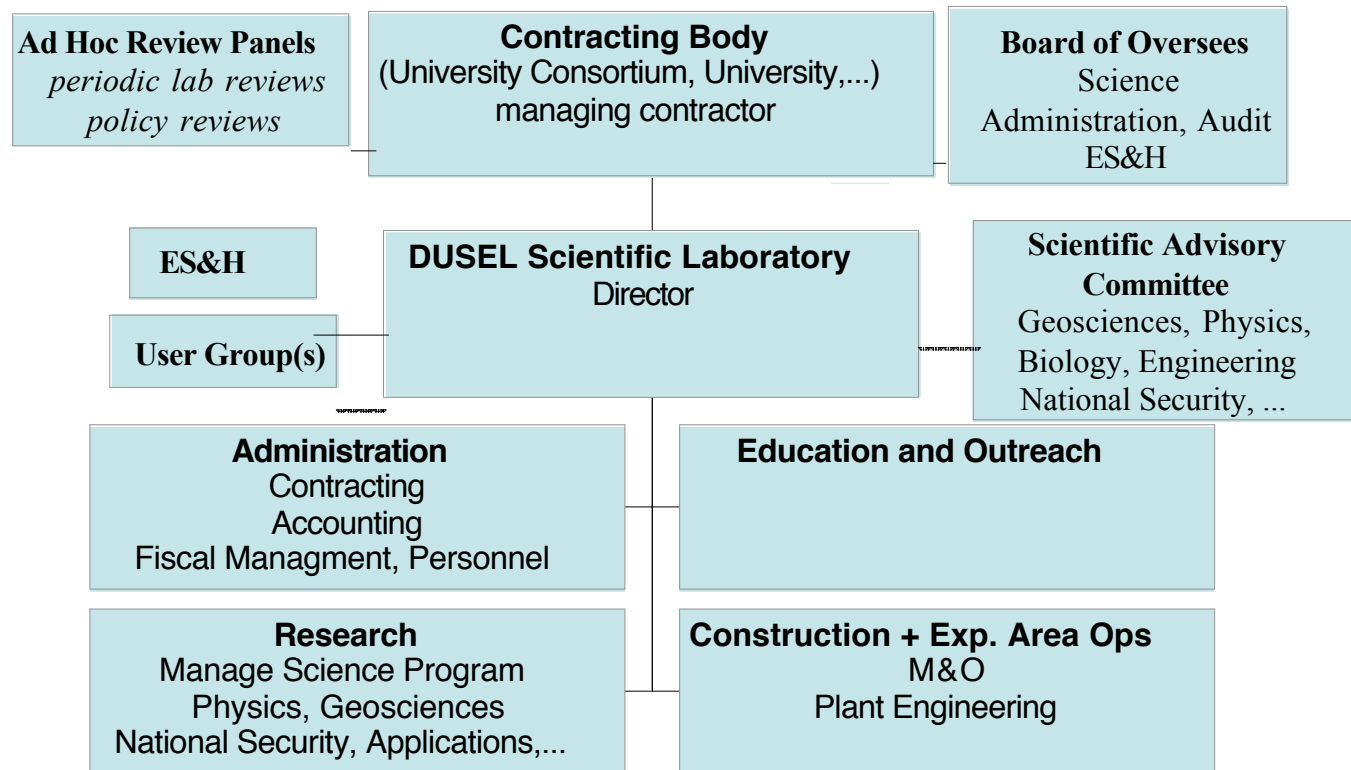
- Build, equip and operate the underground facilities.
- Employ an in-house staff
 - participate in experiments
 - be a resource to the Laboratory.
- Conduct an R&D program of technology development
- Sponsor a program of outreach and education.
- Be a technical, communication and outreach center for underground science and engineering in the US and internationally
 - organize conferences and workshops
 - operate a low background counting facility as a service to the international community.

Management Structure

- The interdisciplinary science and engineering elements must be incorporated
- The management structure will depend upon whether
 - Investigations are carried out at a single site or multiple sites
 - The Laboratory is the sole custodian of a site or whether the owner of the site also has responsibilities for part of the operations such as for safety or the operation of the lifts
 - Mining or other activities are concurrent with the science and engineering program

Single Laboratory Organization

Deep Underground Science and Engineering Laboratory Management

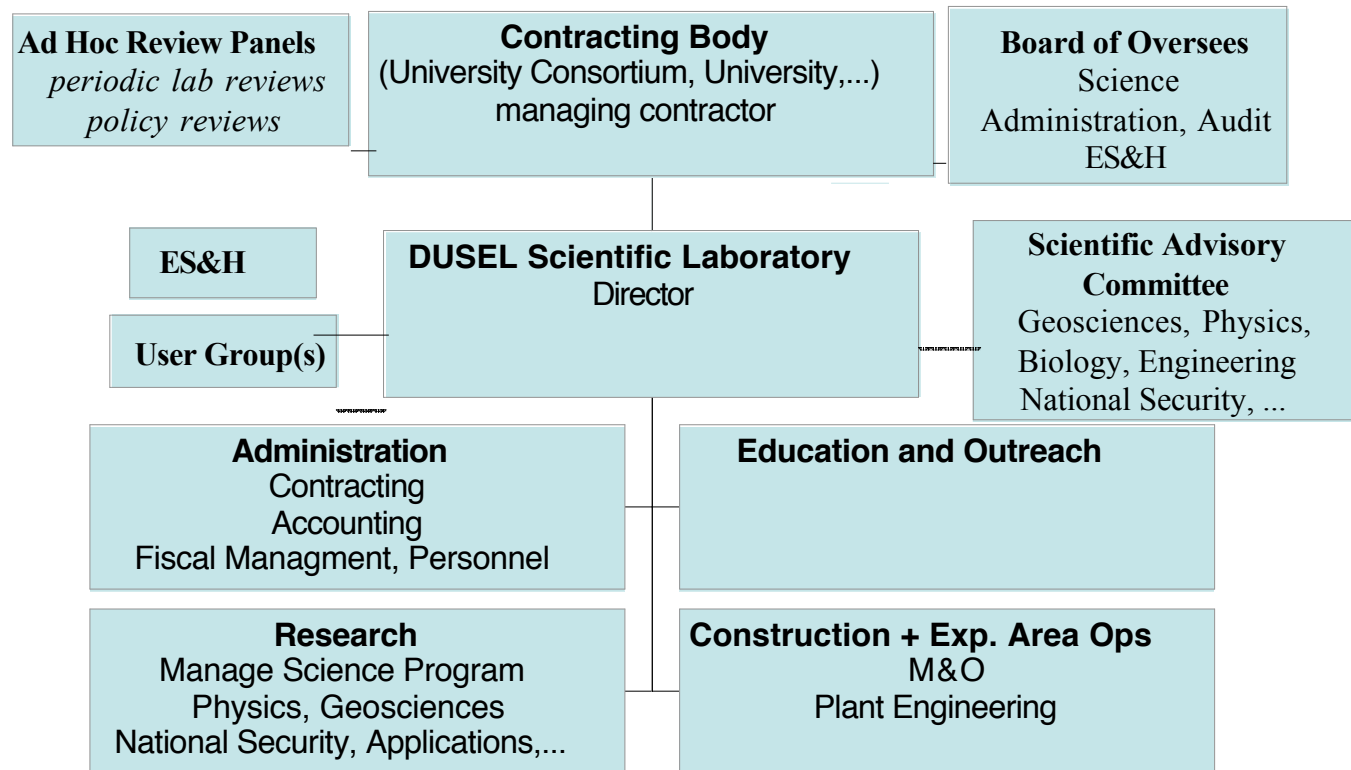


Organizational Elements

- Contractor
 - The legal and financial fiduciary entity
 - Executes agreements with funding organizations
- Board of Overseers
 - Sets policy for the contractor
 - Reviews research, administration, safety, finance
 - ...
 - Makes major appointments – Director ...
- Director
 - Responsible for the activities of the Laboratory
 - Appoints advisory committees for advice

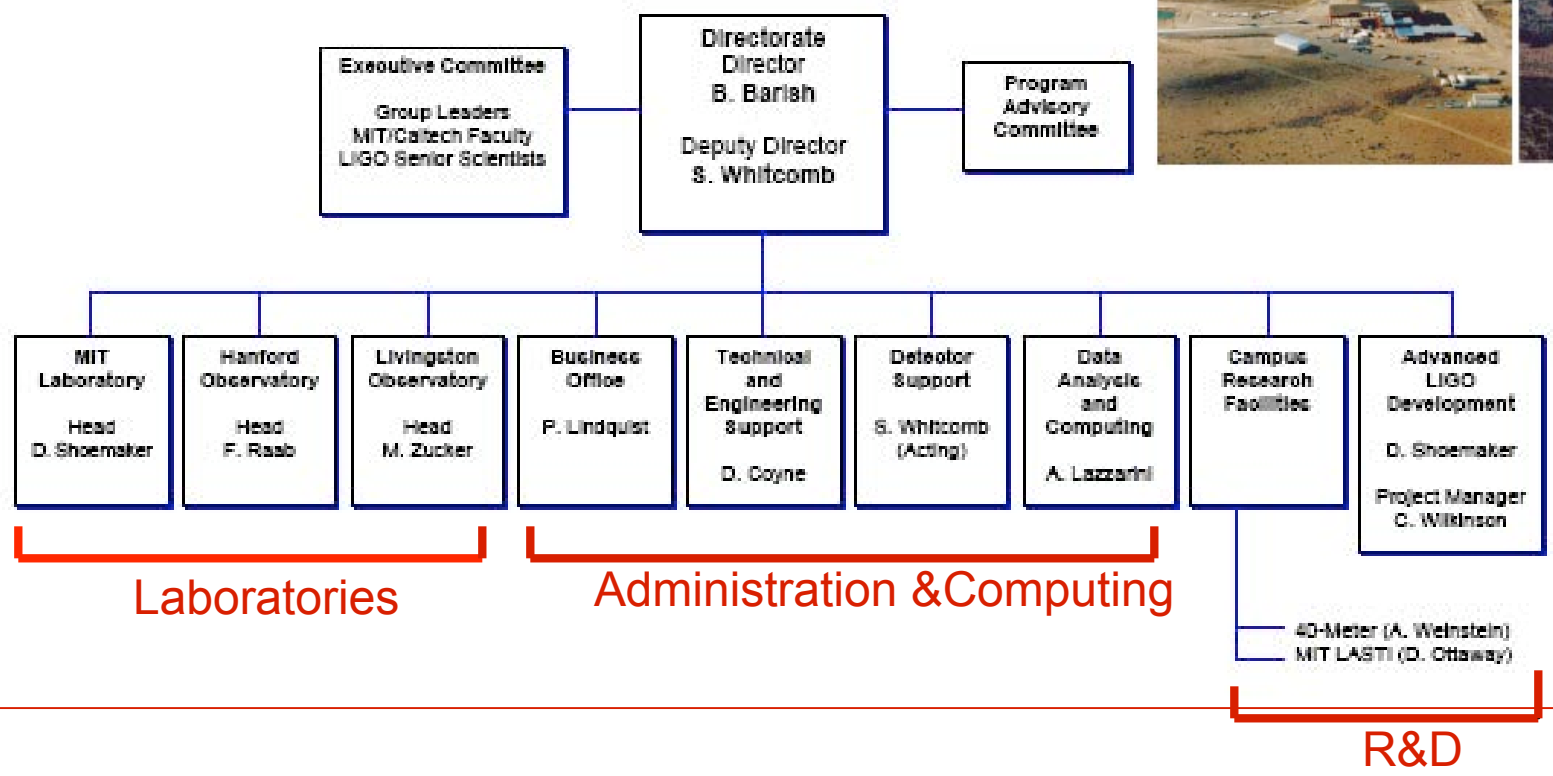
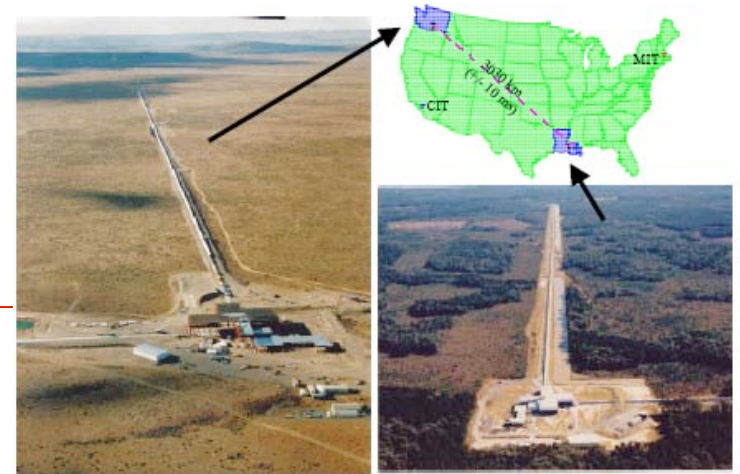
Single Laboratory Organization

Deep Underground Science and Engineering Laboratory Management



Multiple Site Laboratory Example I

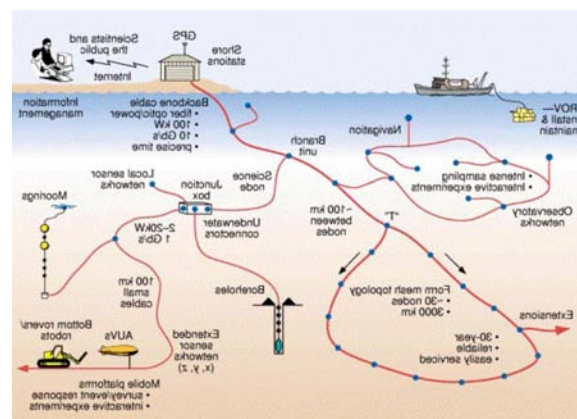
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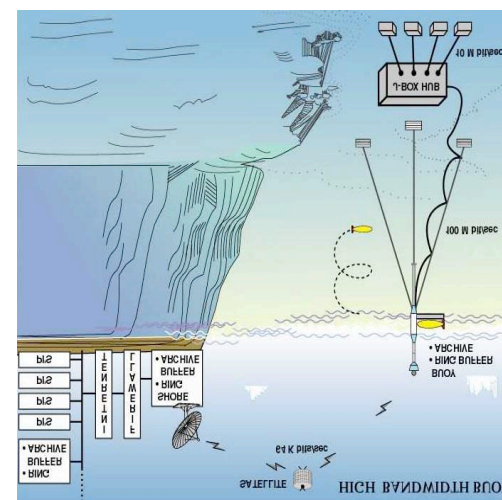
Multiple Site Laboratory Example II

Ocean Observatories Initiative

- Regional Cabled Observatory on the Sea Floor
- Re-locatable Deep Sea Moored Buoys
- Network of Coastal Observatories

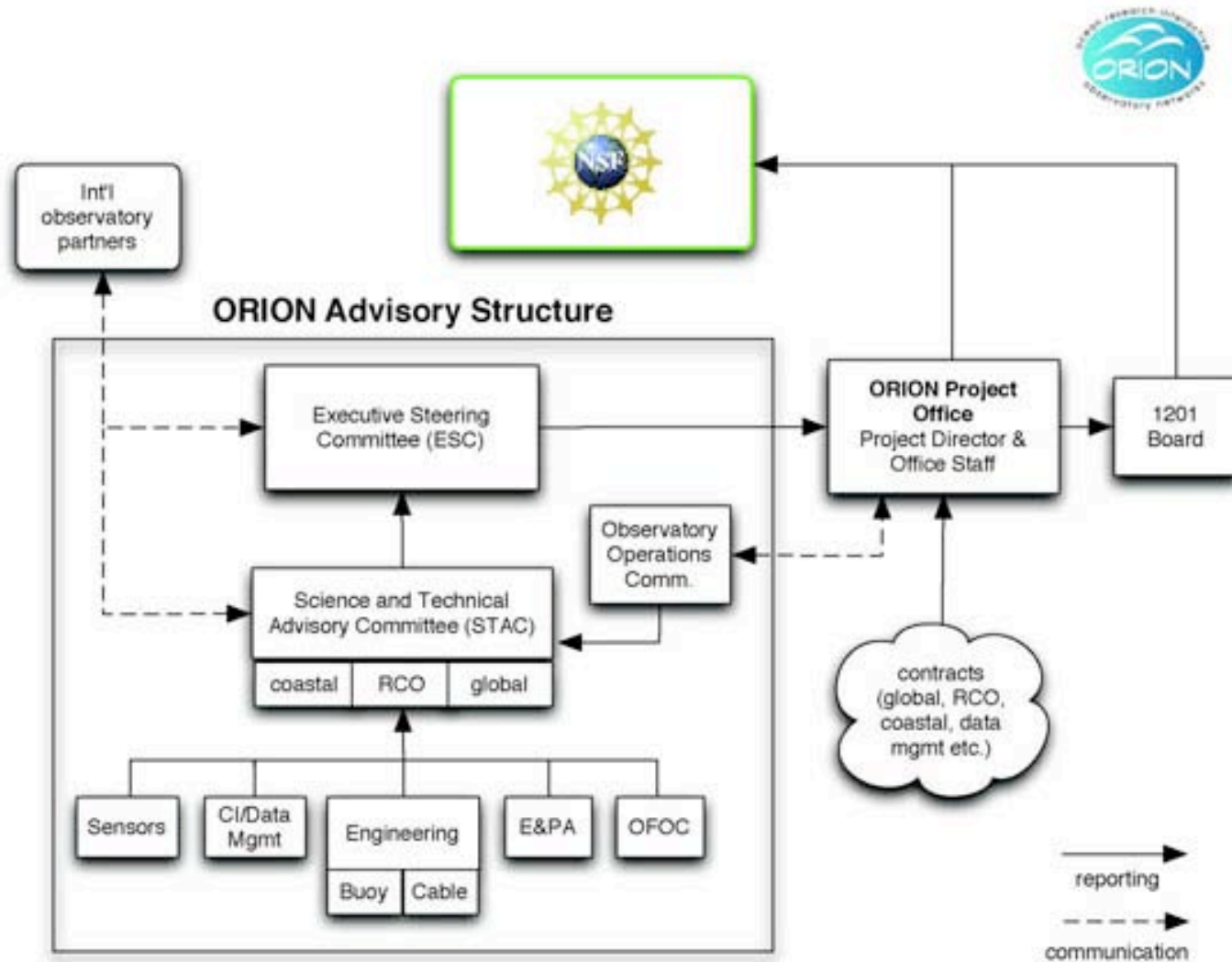


Management



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Ocean Observatories Initiative



Interface between Site Owner and Laboratory

- Safety
- Liability
- EH&S
- Excavation of caves and drifts
- Common Services and Infrastructure
 - Operation and maintenance of the access
 - Electricity, Water, Ventilation, Communications ...
 - Surface and Underground Space

Shared Responsibilities

- Negotiated Agreements
 - During Solicitations 2 and 3
 - Access, use of cryogenics, protection of owner's proprietary information, open access for E&O
- Impact on cost and efficiency
 - Use of existing infrastructure
 - Use of available expertise
 - Engineering, mining, safety
 - Payment of only the incremental cost for the scientific and engineering use of an active mine

Conclusion

- **Central Laboratory**
 - Managed by scientists and engineers
 - Provide open access
 - Coordinate R&D and experiments
- **Laboratory Functions**
 - Build, equip and operate the underground facilities.
 - Employ an in-house staff
 - Conduct an R&D program
 - Conduct an outreach and education program
 - Be a center for underground science and engineering
- **Several Management structures are viable**
 - NSF will likely have final word on management structure