

Reflections Landmark Periodic Reviews

Andy Williams

ESO Institutional Relations



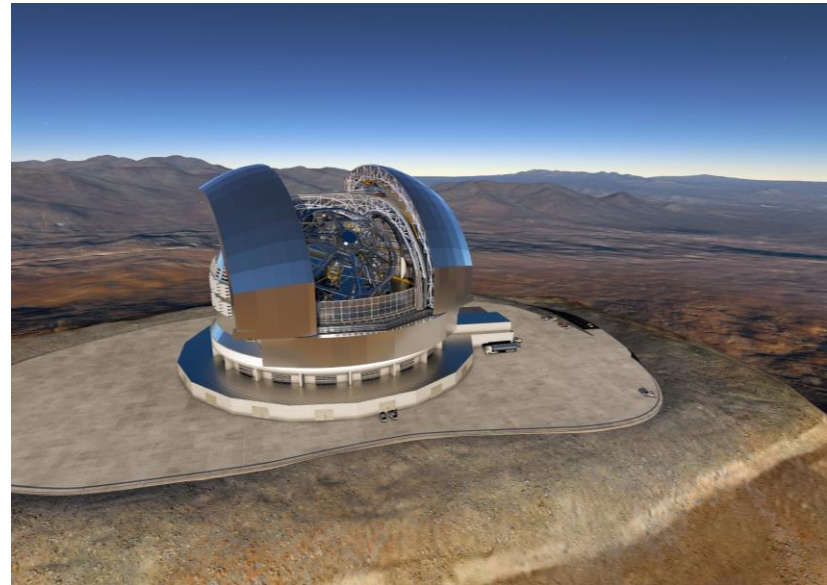
European Southern Observatory

- Intergovernmental organization for astronomy
 - Founded in 1962 by five countries with the goal to build a large telescope in the southern hemisphere
 - 16 Member States
- Mission
 - Develop and operate world-class observatories for astronomical research
 - Foster cooperation in astronomy
- All ESO Observatories are in Chile
 - Headquarters in Garching near Munich



Extremely Large Telescope (ELT)

- Largest optical/infrared telescope in the world
 - 39m segmented primary mirror & adaptive optics
 - Transformational science objectives
- Construction 2014-2024
- Fully integrated into La Silla / Paranal Observatory system and overall organisation of ESO
 - Operations costs secured in ESO's budget



Reflections on Periodic Review

- Decision environment?
 - What decisions will reviews support? Which stakeholders?
 - Must be defined and agreed upfront (but allow flexibility for change)

- Respecting contexts
 - Large variation in RI state, timeline, composition, mission
 - Landmarks as RI within established organisations?

- Take a system view / be cautious of “logical framework” way of evaluation
 - Logframe removed from planning / implementation
 - Differing interpretations of impacts
 - RI in ecosystem of RI: how can broader value be captured (e.g. multimessenger astronomy)
 - “Unit” of Impact

Thoughts on Way Forward

■ General

- Joint consultation with RI (not surveys) and consultation with funding agencies
- Emphasise learning aspect of reviews
- Synergy / complementarity with existing RI reviews
 - External advisory boards
 - Management reviews, project reviews, Council reporting etc...
- Awareness of science community needs and views
- Strategic impact of ESFRI roadmap for LTS

■ New Landmarks

- Emphasise development of “criteria fields”
 - Presence of key governance and organisational items
- Evaluate “potential for impact”

■ Established Landmarks

- Impact: Global scientific status
- Performance: improving efficiency of operations

Key strategic elements of a review system

- Global significance:
 - Accounted for in national / European level RI roadmap, referenced in national / international roadmaps outside Europe
 - Community science roadmaps
- Scientific excellence review
 - science case in comparison to global facilities
 - Oversubscription rate
- Progress towards stable legal entity
- Development of stable governance structures with strong link to funders
 - Scientific community governance inputs
 - Management review boards, internal and external
 - Independent advisory expert review boards
- Robustness towards broader economic or political conditions (strategic risk evaluation)
 - Funding security, continued access to key technologies or materials

- **Scientific Community mechanisms in place**
 - User strategy / Access policies
 - Process for seeking inputs of the User Community
- **Scientific operations / performance**
 - Publications
 - Facility usage
- **Industry**
 - Appropriate industry involvement
 - Industries available in partner MS?
- **Organisation / Governance**
 - Common processes across units
 - Stable organisational administrative policies and procedures
 - Existence of systems to track scientific and programme performance