



Why did we bid?



- The ATC will only undertake projects where we add real value and that help keep the UK at the forefront of world astronomy
- VISTA meets these requirements
- Bid a 2-phase project
- The spirit of Phase A was to develop a design concept that can meet the requirements
 - understand what can be achieved within the budget
 - all parties sign up to the above

What the ITT Required



- **Provision of Management Organisation**
- **To Provide VISTA**
 - 4m Class Telescope Optimised for imaging over wide fields
 - 2 Degree Visible
 - 1 Degree IR
 - Largest **dedicated** Visible Survey Telescope
 - Only **dedicated** IR Survey Telescope
 - only competition UKIRT WFCAM...
- **What was the Catch?**
 - Fixed budget
 - Fixed Time Frame (4.5 years)
 - Specification will be determined by these constraints
- **Could we sign up to this at the time of the tender?**

How we Envisaged VISTA



- The UK ATC Management Organisation Concept
 - Small Scale IGPO
 - Core Team
 - Tap into UK ATC Matrix Management Structure
 - Minimise overheads
 - Management through high level work packages
 - Maintain Systems Engineering responsibility throughout
- VISTA Part of the ATC
- The UK ATC VISTA Concept
 - The dedicated purpose of VISTA is to produce high quality, high volume survey data
 - Survey Speed is the prime metric of VISTA performance
 - Image quality determined in SRD
 - The telescope is the fore optics to the instrument channels
 - Optics optimised for uniform image quality
 - No envisaged development program

What does the UK ATC have to Offer?



- **The Desire**
 - Why Tender?
 - We are the best UK organisation to achieve the goals of the VISTA project
- **The Vision**
 - The telescope and instruments are integrated designs
- Telescope design tuned to Wide Field performance
- **The Personnel**
 - Telescope manufacturing experience through Gemini, UKIRT and WHT
 - IR instrumentation experience
 - systems engineering experience
 - matrix management structure



The Tender Response



- **Phase A proposal**
 - Can VISTA actually be achieved for the Money?
 - Develop designs to level to demonstrate compliance with Science Requirements
 - Determine the best strategy for maximising functionality within budget and timescales
 - Agree Strategy and Deliverables before starting Phase B
- **Phase B**
 - Follows successful Phase A
 - Same personnel
 - Procurement
 - Testing
 - Integration
 - Commissioning

The Outcome

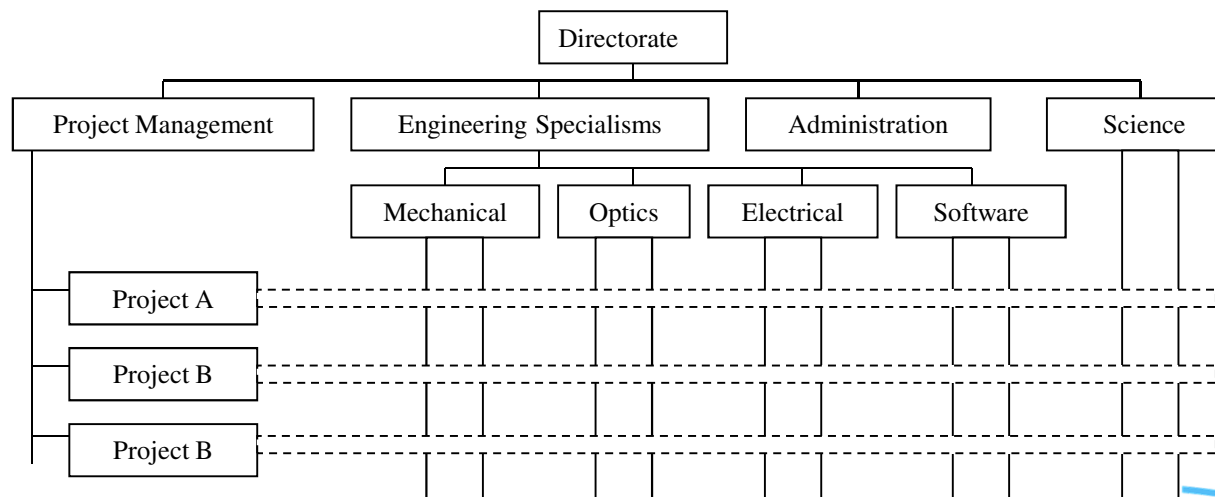
- Phase A worked well
 - A scientifically rewarding VISTA can be achieved for the Money
 - Designs have been developed to a level to demonstrate compliance with Science Requirements
 - The best strategy, to date, for maximising functionality within budget and timescales has been found
- 4m f/1 telescope at Paranal
- 4x4 IR Camera
 - Partnership with RAL/Durham for the Camera
- No Optical Camera
- £36M



UK ATC Structure



- Matrix Management
 - Experience in all aspects of Astronomical Engineering
 - Draw on Resources when needed
 - Minimise through project overheads
- Project Management
 - Emphasis on project management
 - Delivery to cost and time
- VISTA Project Structure
 - Project Managers normally report to Programme Manager
 - VISTA PM attends PM meetings but reports directly to the Director UK ATC
 - VISTA has a core team plus additional effort from the matrix



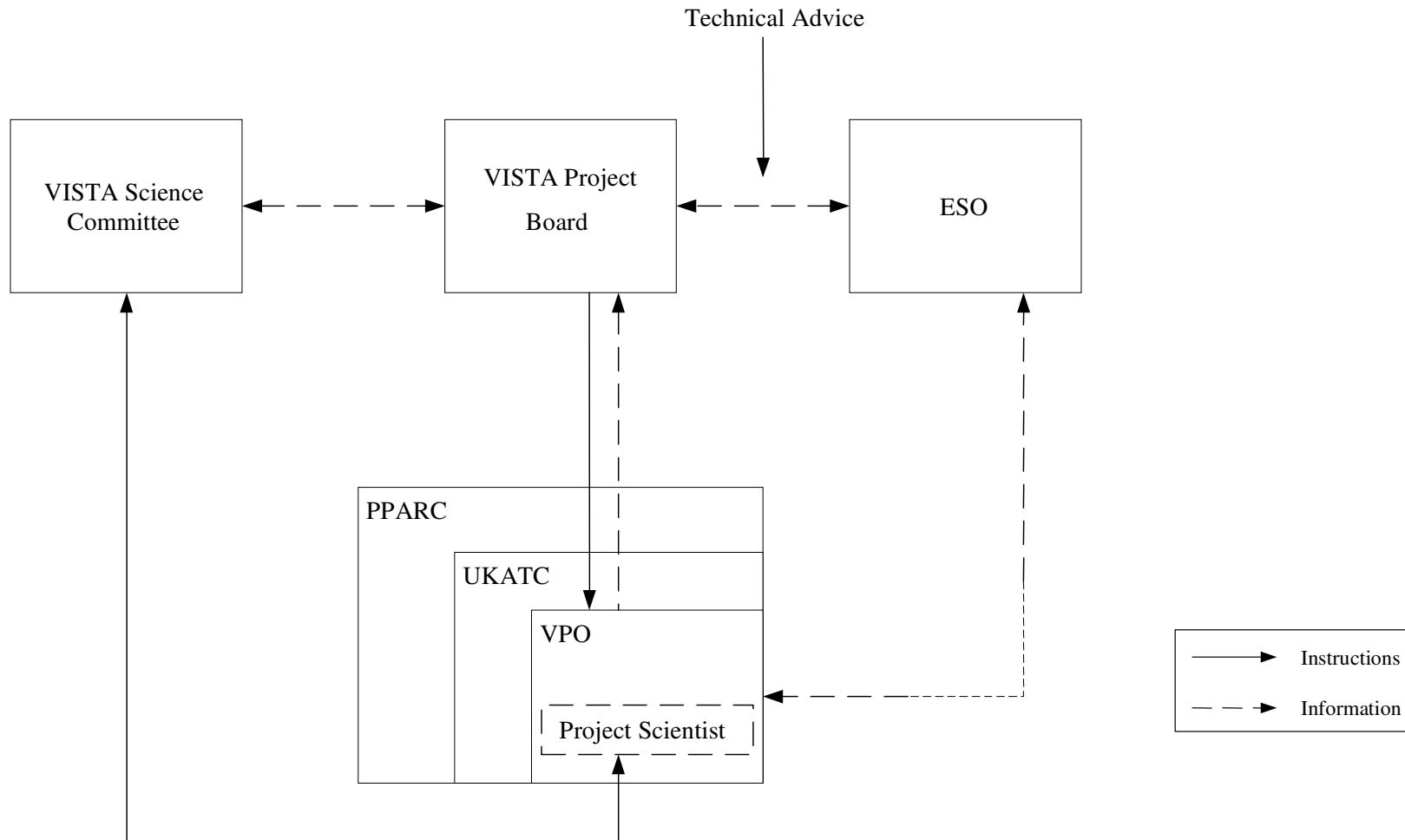
Working at a top-level



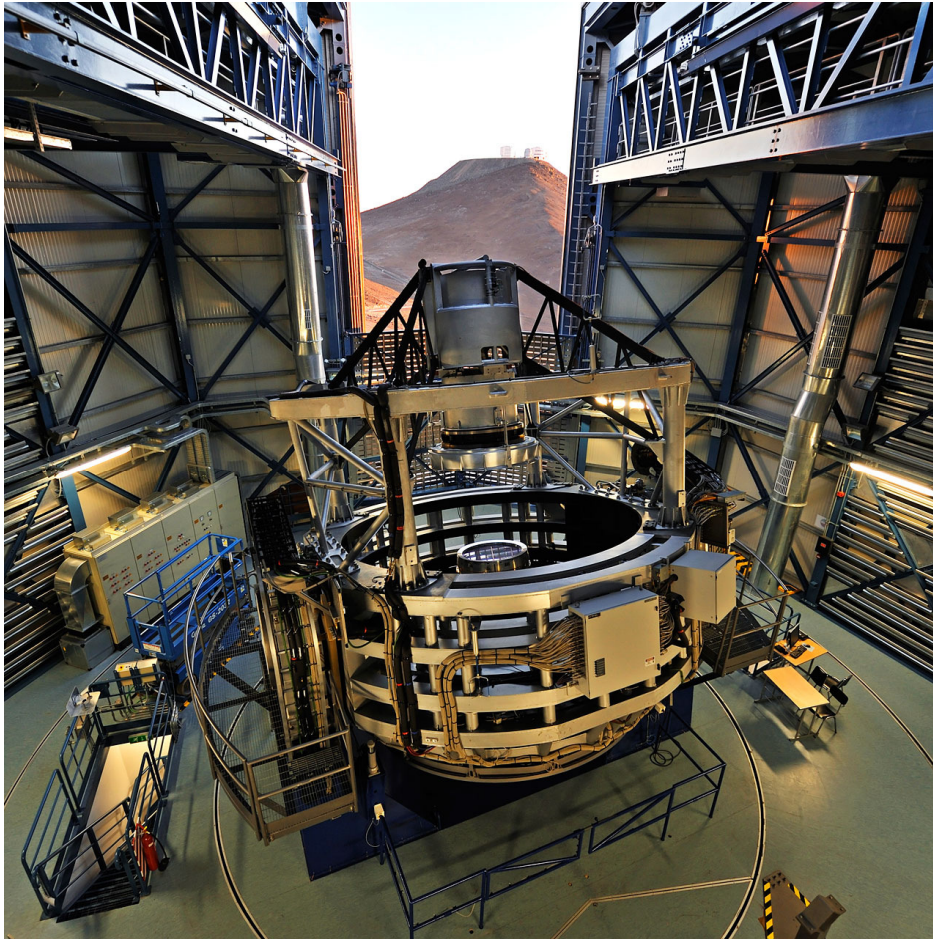
- **VISTA Project Board**
- For a project the size of VISTA, it was standard PPARC practice to have a Project Management Committee oversee the activities of the Project Team
- The VISTA Project Board (VPB) was chaired by the PPARC Director Programmes and had as its members
 - The Principle Investigator
 - the PPARC Budget Holder
 - the PPARC Finance Officer
 - the Director UK ATC and
 - two technical experts (one from ESO and one from the UK Community)
 - The Project Manager and the Project Scientist report to this Committee
- The VPB had, through its membership, executive authority to both manage all aspects of the project and to approve the placement of contracts



Communication Diagram



Lessons Learned



- Contingency Management
- Procurement