Geneva 2011-09-30

Project Status

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NEXT-GENERATION TRANSIT SURVEY

Outline

- Project Technical Status
- Project Financial Status
- Schedule

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Project Definition

- 12 Telescopes, 12 mounts, 12 CCDs
- An automatic building
- Installed in Paranal

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Subsystems

- Telescopes :
  - 12 Telescope ordered from ASA company
  - Interfaces :
    - CCD : Done
    - Telescope : 90% Done
  - Design not fully finished. Need for counteweight
  - Action : Finalize independently from the mount
  - Expected in spring 2012

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Subsystems

- Mounts
  - Design ongoing
  - Need to finalize counterweight design
  - Need to check load capacity
  - Need details on the encoders
  - Need to get an offer :
    - For base-plates ASAP (geneva)
    - For the rest once ready (warwick)

Subsystems

- CCDs
  - Design finalized
  - Order nearly finalized
  - Expected end of november 2011
  - Some question about grounding

Control hardware

- To be defined precisely and ordered
  - Mainly comodity PCs
  - USB devices (Camera/Focuser)
  - Special electronics for the mount
  - Fiber / USB link to deal with USB length (TBC)
  - Need for Switch, Gateway and data storage
  - Need for disks for data shipping

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Data processing Hardware

- Already ordered and installed in Leicester

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Building

- First Design Done
  - Need for contract to go further
  - Contract should be maid ASAP
- Need for detailed drawings
- Need for structural calculations
  - In particular to check earthquake resistance

Site

- After visit to Chile and ESO internal review
- Site = reserved
- ESO will deal with local chilean companies
    - Consortium to reimburse
- ESO need specs for civil works, cabling, Network etc
- ESO need agreement with consortium
    - Precisely with one institution + MOU between project members

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Site

- Running costs :
  - Electricity : 30 cent / kWhr
  - ESO maintenance : ~ 4 hours a week

    ~ 40 €/h
  - Data shipping (Fedex/...)

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Data Flow Control / Scientific Pipeline

- Architecture already partially designed
- Some code for the architecture can be reused
- Most of the pipeline to be rewritten from scratch
    - Architecture : Richard
    - Pipeline : Pete
- Need for manpower from everybody
- Tests in Europe could give first set of data to debug. Quality not scientific

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MAIV

- Main idea :
  - Test of one system in Europe
  - Integration of all other systems in Chile
- Main Steps :
  - Test of CCD in Europe
  - Alignment CCD / Telescope (Europe)
  - Pouring the concrete
  - Installing the Building
  - Test of one complete telescope in Geneva
  - Installation of other systems in Chile

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MAIV

- Plans Needed for European Work
    - Bruno
- Plans Needed for Chile Work
    - Don : Installation
    - Pete : commissioning

Finances

Schedule

- Spec for building to ESO end of October 2011
- Start of the civil works :
    - February March 2012
    - Building installation afterward 2012
- Telescopes :
    - arrival May 2012
- Mounts : idem
- Test in Europe
    - summer 2012
- Installation commissioning :
    - Autumn -winter 2012

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