

# European collaboration around ESO

**Public** 





#### **ESO Sites**



Chajnantor - ALMA and APEX 5.100m

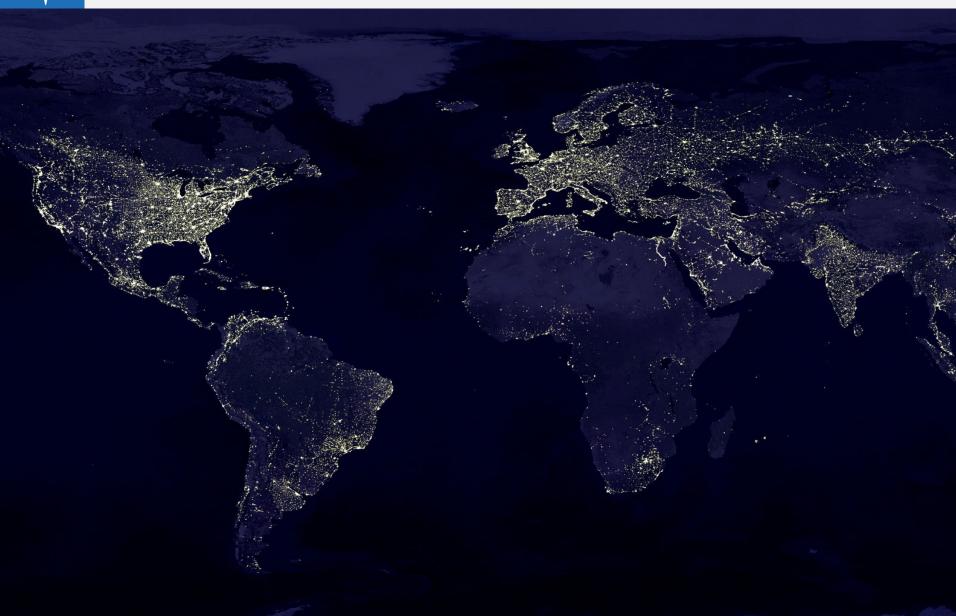
Paranal – VLT/ VLTI, ELT and CTA 2.640m and 3.046m

<u>La Silla – 3.6m, NTT and hosted telescopes</u> 2.400m

Santiago ESO offices and JAO



# Why Chile?





#### **Excellent climatic conditions**





# **ESO** procurements

#### https://www.eso.org/public/industry/cp.html







### Why European partnering is important

No specialist telescope builder, or instrument builder

Scale of projects

Complexity

State of the art technology

Best of class



#### **ESO** and consortia

#### ■ Telescopes:

- ESO system integrator
- Elements designed and produced by industry
- Often in the form of industry consortia

#### Instrumentation

- ESO system integrator
- Each instrument designed and constructed by an instrument consortium
- Renumeration of consortia partly in guaranteed time of observation



# **Industry consortia**

- 1 representative vs ESO
- Horizontal or vertical consortium allowed
- Consortium members jointly and severally liable for fulfillment of contract
- Share of a partner in consortium limited to 60% of the annual turnover of the partner
- Examples:
  - > Adoptica (Microgate and ADS): ELT M4 unit
  - > Fames (Fogale and Micro-Epsilon): ELT edge sensors



#### **Instrument Consortia**

- Consortia existing of institutes only
- One lead institute which is representative vs ESO
- Consortium members jointly and severally liable for fulfillment of contract
- Examples:
  - > METIS
  - > MAORY
  - > HARMONY
  - > MICADO



# Questions

