Signature of four contracts for the ELT

Tim de Zeeuw
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Dear Mr Fark, Mr Rodriguez, Mr Mérida, Mr Cortes, Mr Rozière, Mr Sellen, other distinguished guests, members of the ESO ELT team, colleagues, it is a pleasure to welcome you to ESO Headquarters.

The Extremely Large Telescope will have a primary mirror of 39-metre diameter, and be the world's largest optical telescope, which will enable tremendous astronomical discoveries in the deep Universe, in nearby galaxies and in the study of the atmospheres of earth-like planets orbiting other stars. It will no doubt make other discoveries that we can hardly imagine today. One of these may be finding evidence of life elsewhere in the Universe. This would be a transformational development in the history of our civilisation. The ELT will surely inspire numerous people around the world to think about science, technology and our place in the Universe. We all are part of this journey!

The ESO Member States have committed significant funding to make this happen. The Chilean government is similarly supportive by protecting the night skies, by generously donating a significant tract of land to extend the Paranal property to include Cerro Armazones where the telescope will be built. The telescope platform and new access road are ready. The giant dome and main telescope structure, various long-lead optical components and the first three scientific instruments are already in development.

Today we are taking a major step forward by signing no fewer than four contracts for the opto-mechanics of the telescope. Two contracts are with SCHOTT, one each for the blanks of the M2 and M3 mirrors. SCHOTT is well-known worldwide, but in particular at ESO we remember how SCHOTT delivered the four beautiful 8.2-metre blanks for the Very Large Telescope, twenty years ago. The third contract is for the support cells of both M2 and M3, with the Spanish company SENER with a branch in Poland. It is very good to see further industrial involvement from our newest Member State, Poland, engaging with the ELT. And the fourth one is for the critical edge sensors of the segments of the main mirror, M1. This will have 798 hexagonal segments, which have to sense each others' edges extremely accurately, so that all the segments move perfectly together to form the giant 39-metre mirror. I am pleased that the two leading companies in this area, Fogale from France and Microepsilon from Germany, have teamed up in the FAMES consortium to take on this challenging task.

A large and motivated team of engineers, procurement officers and scientists at ESO prepared for these contracts for several years. This included proto-typing and working together with industry to establish the final design specifications and the statements of work. The team also oversaw the procurements, and it will of course continue to follow the development. It is a pleasure to thank the entire team for their efforts, and in particular Marc Cayrel, Alain Delorme, Philippe Dierickx, Lotti Jochum, Samuel Lévêque, Christian Lucuix, Alessandro Martis, Michael Mueller, Juan Carlos Gonzalez, Mauro Tuti, Johannes Schimpelsberger, Arnout Tromp, all under the inspired leadership of Roberto Tamai.

ESO is committed to deliver the ELT by 2024, which would not only make it the largest telescope in the world, but also the first of the giants, allowing many discoveries by astronomers in the ESO Member States. This exciting opportunity is also a challenge, and puts significant pressure on the industries to stay within specifications, deliver on schedule and stay within cost. I am confident that you will do so, and am sure the ELT team will work with you towards this common goal!