Key words: ESO, Director General, Xavier Barcons

00:00 **New ESOcast intro**	**00:00** ESOcast introduction
00:08 **ESOcast Episode 125 // Q&A with ESO's Incoming Director General Xavier Barcons — Taking up duty at ESO**	
00:15 1. So, when I got the phone call from the Council President offering me the position of Director General, I was in shock almost, I was very, very excited. I felt the challenge immediately. I was very honored, but at the same time I realized that this was a very important challenge in my life. So, this all happened in a split second and after that I think that, you know, my most important feeling is that of excitement right now. I'm really looking forward to do this job.	
00:52 2. ESO is a rather unique organisation in the astronomical world. We have truly amazing sites in Chile, where we have our telescopes, we have state-of-the-art facilities, we have very talented and highly skilled personnel. We're an intergovernmental organisation. That comes with an enormous responsibility because the governments and the parliaments of the member states have decided to support us, and we need to comply with our duties and deliver the best possible programme for the benefit of our member states. That helps a lot to us, because it allows ESO to plan into the future. We know that we will have continued support	

from our member states, but as I say, at the same time, it also brings to us an enormous responsibility because we are in a central and leadership role in Europe with regards to astronomy.	
01:55 3. For the next decade, we need to concentrate on building and delivering the ELT, the Extremely Large Telescope, which will be the largest optical-infrared telescope in the world, while we keep operational and updated the VLT and ALMA, which are our current workhorses and very much at the forefront of worldwide astronomical infrastructures. This is already a very big challenge for an organisation like ours and I believe we should concentrate on those. And I'm sure we will succeed in it.	
02:31 4. The objectives of astronomy are changing every day, because it is a very lively science and everyday we make progress with our observations. So, it's really very tough to predict what will be the hottest topics in a decade from now. As of today, of course we look forward to make significant progress in the discovery of habitable planets outside the solar system; in understanding how stars form, how planets form, how galaxies evolve, what's the interplay between stars, dust, gas, black holes; and, of course, in understanding what is the content of the Universe—what's dark matter, what's dark energy. All those questions will surely not be solved in a decade from now. But I can bet that, you know, by then there will be many others that today we cannot even imagine and that will be very much on the table.	

03:30 5. ESO is really very well equipped to meet those challenges of astronomy over the next decade. We have a very well prepared battery of equipment. We have a huge variety of instruments in our telescopes. If we just take the VLT as an example, we have four unit telescopes, each one equipped with three instruments, every night. So, that offers an immense facility for our astronomers and those of our member states.	
04:03 6. The ELT will be a revolutionary telescope, because on the one hand it will have an enormous collecting area, so it will be able to see very faint objects, but on the other hand, as it will be equipped with technology that is called adaptive optics, it will deliver the sharpest vision of the Universe of any telescope of its class.	
04:29 7. I'm really very excited about ESO making big discoveries over the coming years. In some of the research areas that today are in the hot seat, you know, this is about exoplanets, about atmospheres, about finding biotracers in those atmospheres, it's about star formation, it's about galaxy evolution. I think that we all look forward to discoveries in those fields. And this is really very exciting.	
04:59 8. ESO has some responsibility to convey to society what we do here, what is astronomy, what do we learn about the Universe. I regard the Supernova project as a very important resource for that purpose. Actually Supernova itself will be a major educational facility.	
05:24 9. **Asked on Social Media.**	

05:27 10. **What is the long term strategic plan regarding training and teaching, in particular the ESO Fellowship Programme?**	
05:34 11. The ESO Fellowship Programme has been enormously successful and of course, my intent is to keep it. You can see around the world many astronomers in leadership positions who have been ESO fellows before. So, we are really proud of the programme. Of course when one thinks about, well, we maybe expanding it a little bit or whatever, one needs to take into account the budgetary constraints. So, we will do what it's the best for the organization, but certainly this is one of the things that I would like to keep.	
06:09 12. **Both ALMA and ESO proposal rounds see more than 1000 proposals every semester, with some instruments seeing oversubscription rates of well above 5. What is your opinion on this matter?**	
06:22 13. ESO's telescopes and ALMA are very heavily subscribed. We have proposals from ours astronomers which bid for time, which exceeds by a factor of 5 or even 10, in some occasions, the available time. This produces a lot of frustration in astronomers who rightly believe that they have very good scientific proposals that cannot be executed. But, unfortunately we don't have the resources to clone our facilities and I would say that an oversubscription of a factor between 3 and 5— it's probably normal [with] most of the international facilities.	

07:03 14. **Is there a expiry date for smaller facilities like La Silla, especially in light of budget constraints set by the delivery of the ELT?**	
07:11 15. Even in the era of the extremely large telescopes, like our ELT, I believe there is a role for the smaller-sized telescopes of the three- to four-metre class like the ones that we have on La Silla. I mean, the proof today is that those telescopes are producing amazing science, that can only be done with telescopes equipped with very precise instrumentation and operated in a very specific manner.	
07:42 **[Outro]**	*Produced by ESO, the European Southern Observatory.* *Reaching new heights in Astronomy.*