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Patrick Nicolet, Founder and Managing Partner of Linebreak Ltd., former Group Chief Technology Officer of Capgemini

I think we have the ingredients for I hope a very interesting session and without further ado, I will hand over to my friend.

Amer Al Ghafri

Thank you, Patrick. First of all, welcome to the UAE. In general, the UAE looks at space as an important and critical sector driving the bigger goal, which is science and technology here in the UAE. We started back in 2006, so in a timeframe of maybe 16 or 17 years, the goal of the UAE in the space sector was always to make the UAE a leading nation when it comes to space and space projects. We started with earth observation satellites, moved into space exploration missions, then an astronaut program and now we have robotics systems that will go to the Moon. Tomorrow, we have a launch, that I hope people will be able to watch, for a very unique mission. It is called Rashid Rover, a very small rover that nonetheless has a lot of scientific implementation of instruments, which is flying tomorrow and hopefully reaching the surface of the Moon within four months. Looking at this specific mission and then going back to the sixties when the US decided to land a man on the Moon, that is how far space has gone and that is how fast the UAE has gone with its own projects. The direction from the UAE and the UAE government is to make sure that science and technology is the aim and strategy behind this project. Then we added another element to our strategy, which is economy, so we must have economic growth linked to space projects and space activities. Beyond that, we want to ensure that the private sector is involved in our projects so as we go ahead with them, we try to localize technologies. Typically, we would buy from other international partners, but we are trying to make sure that a local private sector is involved and investing in our projects, as well as making sure that the economic growth of the space sector will shift from fully dependent on government funding and backing towards self-dependent with the involvement of the private sector providing solutions that can find a partnership with the government.

That is the journey we have taken so far but, of course, from the beginning we wanted to focus on the human capital. We have to have engineers and scientists involved in these projects. It is easy to say that we are going to buy and launch a satellite and then we will have services or applications on the ground. However, this key focus on the capabilities to build the human capacity, engineering and science skills, this is the focus we wanted to make sure is implemented. That is how the number of engineers and scientists involved in our space sector

has grown rapidly in the past few years, moving from 15 to thousands. That is what we want to focus on as we go forward.

In general, you cannot do space projects alone, so as one of the main pillars of our strategies we also try to ensure that international cooperation is key. Within the different geopolitical alliances that are there, the turbulence happening globally in terms of policies, economies or international partners, we try to ensure that our focus is clearly on the science and space exploration. That is what we do with our projects, so we started back in 2006 working with South Korea and then Russia for the launch and then the US, and then we have had very strong partnerships with France in our existing projects. Then when we did our human space flight we extended to Japan, Australia, Canada and many other international partners who are now involved in our projects. We are not doing that just because we want partnerships. First, we do not want to reinvent the wheel, so we can benefit from whatever has already been achieved by others. Second, sometimes international cooperation is essential for successful space programs globally, and we want to emphasize that. If we have an instrument that we can put on another mission that is launched by the US or Europe, or vice versa, that is what we need in our global space community and sector, I would say.

Maybe I can conclude by saying that one of the directions we want to take next is making sure that the UAE is the hub where international and global partners can come in and take a chance on the fact that the UAE has diverse, accepting as well as very strategic thinking towards the future of space. We have a program called Mars 2117, where we hope in the year 2117 there will be a city on Mars and that cannot be achieved without international cooperation, enabling youth, and making sure that, whatever we do, we do it in a very transparent and clear manner. For example, in the UAE we have a very clear project for space focused on the military and military applications, which is what our armed forces have done on previous projects. We also have a very clear, transparent civil program, in which MBRSC and many other entities are involved. We have a very clear commercial space sector, where Yahsat and many other players are also involved. Transparency and clarity are what we believe enables the UAE to have that very good relationship with all international powers around the world.

Patrick Nicolet

First of all, thank you for the words of welcome, and for setting the scene very clearly. Notably, the tensions between the public and the private agendas.