37TH CONFERENCE OF RECTORS AND PRESIDENTS OF EUROPEAN UNIVERSITIES OF TECHNOLOGY

UNIVERSITY OF STRATHCLYDE, GLASGOW, 14 SEPTEMBER 2018

Cabinet Secretary, Ladies and Gentlemen,

I have several reasons to thank Manfred Horvat and Jim McDonald for inviting me to speak to your distinguished audience.

The first is that Glasgow is the city of my birth. I am ashamed to say however that this is the first time I have been back since I was a child. I am delighted therefore to be here and see the city in its best light: at the forefront of technology, bustling with innovative ideas and at the heart of Europe's best networks of research and innovation.

A second reason is that the European innovation landscape is evolving fast. The European Commission is proposing to scale up its support in ways that I think important to share and discuss with you. Not just because European Technology Universities will benefit. But also because we want to draw on your experience and vision to shape the future directions of our programmes.

I will highlight three points:

- Firstly, with Horizon Europe we are proposing a powerful programme to make Europe the best place for knowledge creation, technological progress and breakthrough innovation. We want to do this together with you right from the design stage;
- Second, I want to address the new opportunities in Horizon Europe: namely Missions and the European Innovation Council, and their potential benefits for Universities of Technology and your partners.

 And finally, being here in Glasgow, a few words on the challenges facing us in the context of the future relationship of Scotland and the UK with EU research and innovation.

The Commission presented its proposals for Horizon Europe on 7 June, in the broader context of negotiations for the future budget of the European Union from 2021 to 2027. Our proposals have been generally well received and are now under discussion with the European Parliament and Member States.

Building on the success of our existing Horizon 2020 programme we propose a three-pillar structure in line with the "evolution, not revolution" logic put forward by our Commissioner Carlos Moedas:

- An "Excellent Science" pillar, which maintains the successful activities of the European Research Council, Marie Skłodowska-Curie Actions and support to research infrastructures;
- A second pillar devoted to "Global Challenges and Industrial Competitiveness", with five thematic clusters and a small number of cross-cutting Missions that will be specified in the coming months:
- And a third pillar on "Open Innovation", featuring the new European Innovation Council, as well as support to European innovation ecosystems and the European Institute of Innovation and Technology.

Importantly, both Council and Parliament welcomed not only the structure of Horizon Europe but also its increased budget. I am well aware that many in the science and innovation community, including people in this room, have been pushing for even higher figures. Nevertheless, our proposal to devote 100bn€ to research and innovation from 2021 to 2027 is an unprecedented boost. This represents a 50%

nominal increase for beneficiaries (EU27) while the global budget of the Union will be shrinking for the first time in history.

Moreover, "nobody loses", which means that no budget has been decreased in our proposal for Horizon Europe compared to Horizon 2020. Important, well-proven elements of the programme such as the European Research Council get the larger share of funding. Marie Skłodowska-Curie Actions are also increased. At the same time, we have made room for important novelties, which strengthen the focus of Horizon Europe towards technology and innovation. I will come to this in a minute.

Time-wise, the Austrian presidency of the Council aims to reach a political agreement between Member States this Autumn. And in the European Parliament both the Rapporteurs MEP Dan Nica and MEP Christian Ehler already presented their reports. Adoption of reports at Committee level is foreseen for 21 November and the Plenary vote is scheduled later that month. Of course, conciliation between the Council and Parliament will follow, but there is clear commitment from all sides to conclude quickly.

If we can meet this ambitious timetable, it will provide stakeholders such as yourselves with a clear view of our future programme, with ample time to prepare and to engage in our process of strategic planning for the future work programme and calls.

We want more effective strategic planning to be an important feature of Horizon Europe. The idea is to set up an inclusive process where we determine the priorities of work-programmes and calls together, with a strong involvement of stakeholders and civil society. We even call it "cocreation". This will make sure that our programme responds to your

priorities and to wider economic and social needs in a truly relevant and timely manner.

Of course, this new way of working is subject to discussion with Member States, who are and will remain our main interlocutors for programming. We strongly believe, however, that stakeholders and civil society must also have their say as we shape Horizon Europe's specific priorities. I hope that you will support this change and I look forward to your input in our future strategic planning.

This brings me to my second point on the novelties, which we hope will make Horizon Europe even more relevant to innovation-focused institutions such as Universities of Technology. One very visible new aspect will be the definition of a handful of high-priority Missions for Horizon Europe.

We are talking about setting a measurable goal within a set timeframe, with impact for society and citizens. Which goals it is too early to say, precisely because we want to define them together with stakeholders and civil society. But we expect Member States and the European Parliament to assign broad areas for the missions by the end of 2018. Then we will work inclusively with interested parties to specify the goals and timeframe together.

Meanwhile, to illustrate the possible scale and scope of Missions, it may help to mention some examples that Professor Mazzucato suggested in her report to Commissioner Moedas on "Mission-Oriented Research and Innovation" last February. These included reaching "100 carbon neutral cities by 2030", "plastic-free oceans within 10 years", or "halving the human burden of dementia" by a set deadline.

The intention is to have a limited number of highly visible missions, where science, technology and innovation can make a clear difference for society in ways that can be readily understood by Europe's citizens.

We will implement the Missions through dedicated calls in the work programmes, cutting across the clusters of Horizon Europe's second pillar and drawing on the other pillars where necessary. This crosscutting "portfolio approach" will be key to the operational success of the Missions.

Obviously, as we are talking about operational goals to achieve in a relatively short time span, Missions are likely to focus on actionable technologies and innovation – which are of core interest to your Universities.

To deliver on Missions and more widely on our programme objectives, we will make full use of the new synergies that we are building with other EU programmes and policies. Indeed, we have worked with the Commission's Competition department to open new possibilities for cooperation between Horizon Europe and other programmes and policies dealing, for example, with regional development and social cohesion, digital Europe, health, environment and climate action.

The other major new feature of Horizon Europe is the European Innovation Council, which has been endorsed by Europe's leaders at the European Council of June 2018.

Commissioner Carlos Moedas has championed the creation of the European Innovation Council (EIC) to make Europe a frontrunner in truly ground-breaking, market-creating innovation. By funding Europe's very best innovators at a stage where other funders do not, the EIC will have

unique added value. It will create new markets and with them growth, jobs and benefits for society that could not exist otherwise.

The EIC will offer a mainly bottom-up one-stop shop for high potential, high-risk innovators. It will help bring the most promising ideas from the lab to real-world applications. The EIC will work through two main funding instruments:

The Pathfinder for Advanced Research will fund high-risk projects with a potential to develop into radical innovative technologies and new market opportunities. This builds upon our experience with the Future and Emerging Technology schemes already well proven under FP7 and Horizon 2020.

The second main instrument, called the Accelerator, will provide financial support for the scale-up of breakthrough innovations and companies with a market-creating potential. This builds on what we have achieved with the Horizon 2020 SME Instrument and with InnovFin. The objective is to crowd in private investment by de-risking selected operations down to a level where investors will be confident enough to join.

I hope that these instruments will provide effective support to take to the market and scale-up the most promising breakthrough technologies developed by your Universities.

Many such technologies are developed here in Strathclyde University and more widely in Scotland. Commissioner Moedas acknowledged this when he visited Edinburgh in October last year. I personally was pleased to participate in a debate organised by Scotland House in Brussels in March on Scotland's strong contribution to European research and innovation. Our European Innovation Scoreboard ranks Scotland as a very strong ("strong +") innovator.

I should like to say a few words, therefore, on the subject of the UK's future relationship with the EU. It is well above my pay grade to anticipate the outcome of the negotiations. And it is fair to say that research and innovation has not been a major element in the political debate so far. I will simply make four points:

- First, we welcome the continued very active engagement and input from the UK authorities, universities and the research sector in Horizon 2020 and preparations for Horizon Europe;
- Second, there is robust agreement on the benefits of the UK's participation in EU research and innovation programmes across Europe in the UK, but importantly also in other Member States. And there is strong mobilisation in the research community to get this message heard at the political level in the negotiations;
- Third, we have a long tradition and a variety of different successful models for co-operation in research and innovation with third countries: for example Switzerland, Norway and Israel are more heavily present in Horizon 2020 than many EU Member States. Our legislative proposals for Horizon Europe maintain and even extend openness to association of third countries in a spirit of mutual interest;
- Fourth, and perhaps most significantly the UK government has been consistent and clear in its interest in remaining closely associated with EU research and education programmes and its willingness to pay its way.

All in all, while nothing is agreed until everything is agreed and it is difficult to predict the outcome of the ongoing political debate in the UK and the EU, I nevertheless believe we have an optimistic basis for a

continued close and mutually beneficial engagement of the UK in future EU research and innovation activities.

To conclude: Horizon Europe will bring strong opportunities for European innovation in general and for the involvement of Universities of Technology in particular, including at the early stage of planning strategic priorities together – a process in which you will be most welcome to engage. Horizon Europe's Missions and the European Innovation Council are particularly promising new features within our proposals, which I hope you will support. Finally, Scotland and the UK remain extremely valued partners in European research and innovation, and I am optimistic that our longstanding history of successful cooperation will continue in one way or another.

Thank you for your attention.