

Visions, Ambitions and Reality

Dirk Jan van den Berg
Chair of the 3TU.Federation
3TU. Innovation & Technology Conference
6th of December 2013
TU Eindhoven

L&G, it is a great pleasure to talk to you about the achievements and the future of the 3TU.Federation. I hope you had a productive day so far and that you enjoyed today's display of produce of the 3 Universities of Technology in the Netherlands. The 3TU.Federation took off about 6.5 year ago and is well on course flying at cruising speed. All 3 members are comfortable with the choices made, the competitor / colleague dilemma has lost prominence and the advantages of a strong bond between the 3 Universities of Technology are increasingly appreciated. Gradually the 3TU-cooperation developed into a sectorplan like approach. It is important to note that, when viewed as a sectorplan, the 3TU-cooperation is in fact the most far reaching one. There is no other grouping of universities in the Netherlands that have a comparable level of cooperation yet, maybe with the upcoming creation of the Amsterdam Faculty of Science as an exception.

In fact the whole exercise of creating the 3TU.Federation is an interesting case study on how universities are best governed. Being effective as an executive in an academic environment heavily relies upon the support you can generate. 3TU does not escape this very fundamental rule. Therefore the initiatives and projects within 3TU that are really successful are characterised by a strong bottom-up commitment. A particular good example is the creation of NIRICT in Twente where coordination in the ICT research domain successfully takes place. This resulted in a smooth well prepared participation in the KIC on ICT. Design United is a second example of a potentially very forceful cooperation; complementarity in approach and concept in design is the key driver. Another example is the start of the Applied Mathematics Institute to promote math-education and to explain the importance of applied mathematics to stakeholders outside the university. Math is undervalued as a key science in good engineering, while, today, entering the era of big data, it is of fundamental importance.

Another off spring of 3TU-cooperation is the creation of the 3TU.Datacentrum. This has proven to be a very valuable asset. Especially in times where a fierce debate is running on the integrity of Science and the reliability of research outcomes the Datacentrum is a beacon of transparency. This afternoon we have embedded the important work of the 3TU.Datacentrum in a consortium agreement, thus allowing other universities to join this important transparency and confidence building mechanism.

A lot of effort has been invested on the education side of the cooperation as well. The 5 3TU-master have come into being. We aligned programs in a such a way to make it feasible for students to take courses at one of the 3TU-partners. This is not yet a widely utilised opportunity. One would also expect students to consider enrolment in another university then where they have completed their bachelors degree. However Dutch students are really glued to their alma mater of origin and do not switch easily between universities; they don't want to give up their social investment in friends, student clubs or sports. We should implement programs to encourage students to explore the full scope of opportunities offered by the 3TU.

Check against delivery

A recent achievement in education is the Center of Engineering Education. This is the joining of forces to fundamentally think through the methodology of engineering education, including blended learning and other uses of IC-technology. In the current 2011-2013-strategy cycle all 3 universities re-ordered and restructured their bachelor programs.

So, in all primary university tasks, education, research and valorisation, the 3TU-Federation has performed well in aligning actions and bringing our researchers and students together. However, this is no time for complacency. The dynamics are high. The change in the global landscape of Science is accelerating and the EU Commission's role in research funding and innovation is further expanded. Against this background all 3 universities are focusing on European and global opportunities. It's here where we should further explore advantages 3TU-cooperation could bring, through mutually opening up our international contacts and presences.

Some might argue 3TU could better weather the storm by not simply joining forces but by merging. One could debate the merits of such a thought at great length, but the fact of the matter is that there is no time to engage in such an undertaking. A merger would imply a wide ranging administrative exercise that would set us back at least 3-4 years. Europe and the world will not wait for us to complete this task, so valuable time will be lost. And will a merger really create a true added value, since it is important to understand the 3TU cooperation as a network university consisting of three independently functioning hubs connected through close research and educational cooperation and common opportunities.

When it comes to innovation the 3 universities of technology are very well positioned to produce results. I want to share with you an interesting info graph, drawn from the Innovation Union Scoreboard 2013. It clearly shows that we find ourselves in an interesting sphere of innovation leaders, starting out at the London Area, running through 3TU-territory, Belgium, Germany and ending at the Grenoble/Lyon-area in France. The issue I would like to raise here is whether our regional leaders sufficiently integrate this in their policies. Can they fight off the "village syndrome", we all know from the Asterix and Obelix Comics: the world out there is full of evil Romans. There is a looming tendency here that investments made from a regional perspective can be sub-optimal at a national scale. Some decisions made by regional authorities simply derail the profiling efforts of the Dutch university sector. I really advocate a regional policy focused on connecting rather than competing. Only then can we be open to the massive opportunities which lie at our doorstep, as the slide shows.

In the financial domain we are sailing into dire straights. The next slide tells it all. It shows the new acquisitions in 2nd and 3rd stream research funding. This is not what you will see reflected in our annual accounts, since contracts cover more years. It tells you the underlying trend in our research funding and as you can see there is reason to be worried. The abolition of the so called FES-funds and the decreasing investment of the company sector in our research work really kick in. We are now processing the 2013 data and unfortunately the preliminary outcomes confirm these negative trends. This will have immediate repercussions on the number of PhD-candidates we can accept. A continued lower level of say somewhere between 80-100 mln. euro's substantiate our earlier claim that the shift towards a fiscal based support scheme for R&D activities in firms would decrease the number of PhD-students with about a thousand! As a result we will witness a sharp drop in scientific output in the Netherlands. This is a pity because the open and transparent research system in the Netherlands is rated first in its class within the European Union. The top-sector policy will not make up for this loss. With the economy somewhat improving and with a strong fiscal support package, which we support, we hope that the company sector will come back at higher levels.

Check against delivery

The only ray of hope is the European Union. We have been extremely successful in attracting funds from the European Union, we really can say we are punching above our weight. We are optimistic about the opportunities we see in the Horizon 2020 program, though we are disappointed that the full cost principle has been abandoned. This implies that the cost coverage in European projects will be 15%-20% less compared to the FP7 programs. We therefore very much welcome proposals developed by the Ministry of Education, Culture and Science to at least partly fill this gap. Keep it clean and simple by applying a x% add up on every acquired European project.

In this highly volatile research funding climate, it would be utterly unwise to fiddle with the 1st funding stream. The 1st funding stream basically sets the conditions right in order to be successful in attracting research funds by hiring excellent researchers and teachers and by investing in state of the art facilities. People familiar with the workings of a university know very well that investments in research groups easily span timeframes of years and are in no way aligned with the current political cycle of about 2 years. So we make a strong appeal to stabilise the 1st funding stream, to take out the distribution based on market shares in education and to explore the opportunities of a capacity budgeting model.

L&G, I spoke a lot about international opportunities and our European profile. But here comes the paradox of internationalisation. The tree of internationalisation can only grow as high as its roots are embedded in a local science-ecosystem. With all our successes in international programs and cooperation we should never neglect our local eco-system. Nor should our partners in the public and the private sector neglect the importance of the local science-ecosystem. In order to make that work we need companies that invest in our research and we need local authorities focusing on connecting and not on competing. The 3TU.Federation is a proud signatory of the Techniek Pact and we are ready to engage with partners in the regions we cover, like we did today. A strong science eco-system is not only of importance to us. A flourishing region with a strong interaction between the different stakeholders constitutes a value proposition for investors from outside the Netherlands and is inspiring for young people to consider a professional future in the interaction of research and economic activity.

The agenda of the 3TU.Federation will be a straight forward one. We will continue governing what we have achieved so far. We will further focus on the Federation as a network university and see whether we can make progress in sharing access in our international endeavours, in sharing our experiences in on line education, in taking common positions on topics we deem important for universities of technology, in interacting with the private sector, including our approach towards intellectual property, and in encouraging our students to explore the full breath of our offerings.

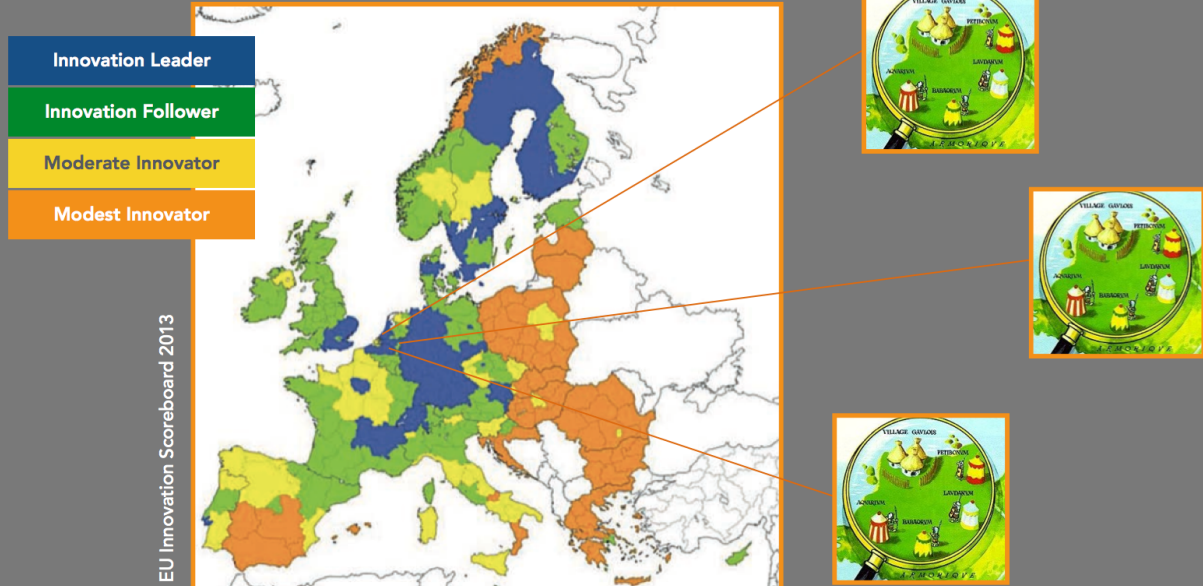
Let me conclude by saying that wherever you travel in the world the reputation of the Dutch universities of technology, and let me include Wageningen University in this somewhat self-congratulatory statement, is well known and highly appreciated. In this rapidly changing world it is our solemn duty that this will still be the case in twenty years from now and beyond.

Thank you for your attention

Slide 1

3TU and its very innovation prone environment

3



Slide 2

Acquired Research Funding in the 2nd and 3rd Funding Streams

4

