Dutch endeavours

Jasper Wesseling, Director of Innovation and Knowledge at Ministry Of Economic Affairs, gives Pan European Networks an insight into the Dutch RD&I landscape

The Netherlands has put a far greater focus on research, development, and innovation in recent years. It made it a very competitive country in terms of innovation and entrepreneurship, and many innovative SMEs are based in the country. Ahead of the Digital Innovation Forum being held in Amsterdam on 10 and 11 May, Pan European Networks talked to Jasper Wesseling, Director of Innovation and Knowledge at the Dutch Ministry of Economic Affairs and plenary speaker during the event, co-organised by the ARTEMIS Industry Association and the EUREKA Cluster ITEA.
Here he discusses the RD&I landscape in the Netherlands, the country's future goals and what knowledge his country can impart to the rest of Europe and beyond.

**How would you characterise the RD&I landscape in the Netherlands today? How does it fit into the wider EU context?**

The RD&I landscape in The Netherlands is rich in its diversity. The Netherlands has a lot of multinationals within its borders, but also innovative SMEs and knowledge institutions. The quality of our knowledge institutes is on a very high level in the Netherlands, and our public private co-operation is very well developed. All these companies, institutions, and collaborations form an ecosystem of innovation on a European scale, in which the Netherlands holds a strong position. This is going the right way. The Netherlands is strongly positioned, with a highly educated workforce, a sound and reliable, physical, and knowledge infrastructure and good digital connections.

This leading position shows itself in many ways. According to the World Economic Forum’s Global Competitiveness Report, the Netherlands is the world’s fourth-most competitive economy, and the most competitive economy in the European Union.

On the European Innovation Scoreboard, the Netherlands has progressed from innovation follower to innovation leader. Together with (1) Sweden, (2) Denmark, (3) Finland and (4) Germany, the Netherlands (5) is one of the core group of countries that scores at least 20% above the European average on 25 indicators of innovative strength.

**Do you feel that the Netherlands is on track to achieve the goal of being one of the top five knowledge economies by 2020? What do you feel the biggest challenges are here?**

As mentioned above: according to the World Economic Forum’s Global Competitiveness Report, the Netherlands is the world’s fourth-most competitive economy. But it would be a mistake to think that we do not have to invest in R&D anymore. It takes more to stay ahead of the game.

That is why the Dutch government has set itself three objectives for its enterprise policy:

- The Netherlands is to be among the world’s top-five most enterprising and competitive economies;
- Top consortia for knowledge and innovation (TKIs) in which public and private parties (PPPs) participate for in excess of €800 million, of which at least 40% is from private financing; and
- Growth in Dutch R&D activities to 2.5% of the Netherlands’ gross domestic product (GDP).

The first objective is directly linked to the other two. Actually I consider the 2.5% GDP objective our greatest challenge in the years to come.

With regard to the TKIs: because our initial objective of €500m in PPPs has already been well surpassed, the government raised the 2020 objective from €500m to €800m, of which at least 40% is to be sourced from private funding. This investment will particularly benefit the Netherlands’ public knowledge infrastructure. Public and private resources amounted to €1,020m in 2015, with the private share averaging 48%.

With regard to the growth of our R&D budget: The Netherlands has set a target of 2.5% of our Dutch GDP as a minimum for R&D expenditures. This target is to be achieved in 2020. The last few years we achieved an increase of the R&D intensity: from 1.90% of GDP in 2011 to 2.01% in 2015. Even though our public R&D expenditures remain high compared to other EU and OECD averages, our private R&D expenditures are lower. Despite these positive signs we still have to work hard to achieve the 2.5% target. But, The Netherlands performs better than the EU average and we have done better than most EU and OECD countries.

So, in short, you could say that we are on track. We are aware of the challenges we face, and believe we have the resources to meet our objectives by 2020.

**How would you like to see both basic and applied research being used to better inform industrial strategies? What can other countries – and perhaps the EU as a whole – learn from the Dutch approach?**
In the Netherlands we have a special policy for so-called ‘top sectors’: nine sectors in which we excel worldwide, such as health, water, logistics, creative design and high tech systems and materials. One of the goals of this policy is to ensure that universities, knowledge institutions, companies, and government co-operate very closely on innovation, trade, export, and human capital. In this, the government has a clear facilitating role: to make it easier for knowledge to find its way to concrete services and products. In short, the policy is about having the right people with the right skills in the right places. It is a very successful example of basic and applied research being used by industry.

The focus that we have on nine top sectors pays off: the private R&D expenditures increased strongly in our Dutch top sectors. Between 2011 and 2014 they increased from 4.1% to 4.6% of value added in the top sectors. The level and growth of R&D intensity in the top sectors is higher than in the private sector as a whole. This indicates the importance of the top sectors for investments in R&D in the Netherlands.

When it comes to the specific subject of innovation, the top sector policy has common research agendas, which are similar to the ECSEL research agendas and ITEA roadmaps. In addition, the policy has set very clear targets – for example, we want to get total corporate R&D investment up to €5bn by 2025 for the top sector ‘High Tech Systems and Materials’.

We believe that this top sector policy could function as an example. Its close collaboration between industry, knowledge institutes and the government, has proved to be a successful way of boosting innovation and making its results tangible.

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