

Maintain the basics

Priorities for extra investments in research and innovation



December 2016



Summary

The time is ripe for substantial extra investments in research and innovation. Extra investments are essential for the future of the Netherlands and for its international position as a leader in innovation and a centre for top research. Reforms and spending cuts in recent years have forced a reduction in investments to a relatively meagre level. However, the Netherlands is now in danger of falling below the international average. Moreover, the plans for the years ahead include a further reduction in public investments in research and innovation.

At this point in time, a number of parties are arguing in favour of an extra investment of at least 1 billion euros in public funding, and the Advisory Council for science, technology and innovation (AWTI) agrees with these calls. In this report, the AWTI starts from the assumption that this additional government budget will be made available, and answers the following question:

How can the government best invest an extra 1 billion euros per year in research and innovation?

The AWTI considers the different options for additional investments, drawing on its own recent reports in doing so. The amounts involved are sometimes relatively small in an international perspective, but the Netherlands is a small country and the AWTI proposals are such that they would raise the amounts now available substantially. The effect will definitely be noticeable.

The AWTI believes that the government's main ambition in spending extra resources should be to strengthen the basis of the system. A strong basis is essential in order to maintain an attractive research climate, with top-class conditions and plenty of scope for talent. In a globalised society, a strong basic system is the starting point for further

development of the knowledge and innovation system. The AWTI's second ambition is to secure an increase in private investments in R&D. This can be achieved by using public expenditure to leverage more private investments. The report concludes with two related recommendations aimed at investing a total amount of 1 billion euros:

1. Prioritise strengthening the basis by raising the level of public research and innovation funding to match that of our neighbouring countries (600 million euros per annum). There are five priorities here (with suggested amounts for each):

- ▶ Fundamental, high-risk research with a long time horizon (200 million);
- ▶ Applied research (150 million);
- ▶ Practice-based research (130 million);
- ▶ Research facilities (100 million);
- ▶ Basic ICT infrastructure (20 million).

2. Increase the direct leverage effect of public expenditure on private investments by investing in public-private partnerships focusing on economic opportunities and societal challenges (400 million euros per annum). There are three priorities here (with suggested amounts for each):

- ▶ Higher grants for the Topconsortia for Knowledge and Innovation (TKI) (120 million);
- ▶ Higher budget for the MIT scheme to promote innovation in the SME sector (150 million);

Expanding the topsectors approach by including topthemes (130 million).