Summary of recommendations of the Parliamentary RDI Working Group, March 2023

Finland is on the path towards its ambitious goal of significantly increasing its investments in research and development and raising the ambition level of R&D activities. A parliamentary commitment to reaching a 4% investment level has been reached and significant concrete measures have been taken in order to reach the target. Laws have been adopted to increase public funding to R&D and on tax exemptions related to RDI-investments. Additionally, the new R&D funding law requires the government to prepare a multiannual plan for the use of public R&D funding for the following eight years once every electoral term.

Key recommendations for the development of the Finnish RDI system and R&D funding

Parliamentary Working Group on Research, Development and Innovation published its <u>final report</u> on March 1, 2023. The working group identified key areas for development in the Finnish RDI system and assessed the state of research and development funding.

The Act on Research and Development Funding, which entered into force on 1 January 2023, is aimed at ensuring that the Finnish public spending on R&D will be increased yearly until 2030 to correspond with the 4% GDP target. Central government's R&D funding will increase by 40% from the current level of approx. 2,5 billion euros in 2023 (Figure 1). This significant increase in Finland's R&D investments will require a comprehensive development of the Finnish RDI system and effective allocation of the funding.

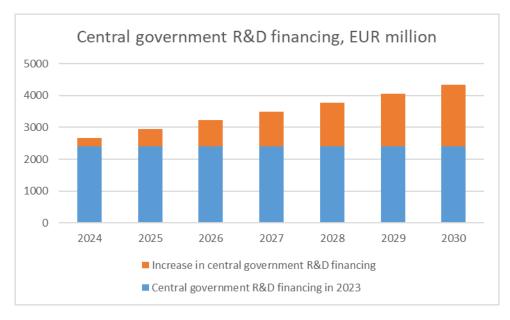


Figure 1. Development of government R&D funding between 2024-2030 according to the Act on Research and Development Funding (current estimation, m€)

The working group's main recommendations for guidelines are summarized below.

Management and steering of the RDI system: The role of the Prime Minister's Research and Innovation Council in the management and coordination of research and innovation policy will be strengthened and more effective overall communication about RDI policies will be provided.

Competence and availability of R&D workforce: Raising the population's level of competence and education is a necessary precondition for achieving the R&D objectives. Talented individuals will be supported throughout the education system to pursue research careers. Research career options in the public and private sectors will be made clearer. Increasing knowledge-based immigration and developing immigration services that support it are necessary to reach the aimed increase in the amount and level of ambition in RDI activities. Particular attention must be paid to the smooth entry of highly skilled experts and their families and to attracting international students.

Strengthened RDI cooperation: Cooperation between different RDI actors will be increased and strengthened throughout the Finnish RDI system. The consistency and complementarity of national and regional measures will be strengthened, and regional specialisation will be promoted to increase effectiveness and efficiency. Cooperation between RDI funders, especially Business Finland and the Academy of Finland, will be intensified and different types of public-private partnerships supporting long-term RDI cooperation will be supported through national and international funding instruments.

National priorities and strategic choices for R&D activities: The selection process of strategic priorities will be carried out under the revised Research and Innovation Council. The selection process will identify global trends, requirements for green transition, preconditions for growth, and define strategic choices and development needs for research and innovation policy, so that RDI policy can be directed in a manner that promotes a green transition. The choice of focus areas must be based on evidence-based knowledge.

R&D funding: Government funding for universities will be increased. Part of the funding will be earmarked for increasing the number of R&D workers who have a PhD. This will be done in accordance with the needs of the employer sector, while maintaining a high quality of researcher training. At the same time, the connection between education and research will be strengthened, long-term R&D work will be promoted, competitive funding sources will be better utilised and a broad-based competence base will be strengthened in order to ensure the security of supply of essential expertise. The prerequisites for basic research must also be ensured.

In order to further strengthen the quality of research and raise the national level of ambition, the Academy of Finland's grant authorisations and appropriations will be increased so that more projects receiving excellent evaluations can be funded.

Government funding for universities of applied sciences will be increased and funding will be allocated, for example, to the implementation of RDI-based continuous learning. At the same time, the R&D capabilities and RDI activities of universities of applied sciences will be reinforced on a long-term basis and especially in cooperation with SMEs. The connection between education and research will be promoted, and the strengthening of long-term R&D work will be enabled, competitive funding will be utilised and the broad-based competence base will be strengthened.

Funding granted by Business Finland and the Academy of Finland will be increased to encourage higher education institutions, research institutes, companies and public entities to engage in long-term R&D cooperation (partnerships). Funding will be allocated to cooperation that supports finding solutions to societal challenges and facilitating societal transitions (such as the green transition and digitalisation).

To ensure the long-term development and utilisation of their competences, funding will be allocated to research institutes to improve their ability to succeed in international competition for research funding. This

will enable the research institutes to participate more extensively in developing solutions to societal challenges. The ministries responsible for individual research institutes will set clear impact targets for their R&D activities.

Direct support for companies' R&D activities will be increased with the provision that the private sector's R&D investments will grow in proportion. Business Finland's funding for companies' R&D activities will be increased to support the green and digital transitions, solving societal challenges, the renewal and diversification of companies and sectors that promote the wellbeing of society, the creation of new companies and sustainable growth of high value-added business. Additional funding will be allocated to companies that have the most capability in RDI activities, risk-taking, investments in intangible assets and the utilisation of RDI activities in business. Funding will also be directed to ambitious R&D activities further away from the market, the export potential of which cannot yet be estimated. The funding encourages close cooperation with other companies and research organisations to support the development and expanding of ecosystems.

Increasing the core funding of research organisations will support their preconditions for applying for and receiving international R&D funding. Research funding organisations' abilities to participate in co-financed programmes will be ensured. The funding terms of domestic research projects will take into account their ability to create capacities for future successes in EU funding calls for similar topics. The possibilities for receiving funding will improve if better support for participants is made available nationally. The needs for matching funding by actors other than research organisations will also be investigated. A functional model will be created to secure national match funding for different RDI actors.

Funding for national research infrastructures will be increased and directed in a way that, in addition to serving the needs of excellent science, allows for competence development and cooperation between different sectors to be supported.

The focus of business subsidies will be shifted towards subsidies that encourage modernisation.

A research and innovation friendly operating environment: The operating environment must promote the development of R&D results and expertise into innovations. An attractive operating environment includes e.g. available environments for experimentation and development, innovation-friendly regulation, innovative public procurement, a high-quality system for protecting intellectual property rights, routes for utilising research results, a funding landscape that is supported by private equity and a start-up positive environment. The possibility of setting up of funds for promoting the introduction and scaling of innovations and combine private and public capital to enable greater risk-taking and to promote more radical innovations will be explored.

Background

While Finland's R&D expenditure (as a share of GDP) has remained well above both EU and OECD averages, it declined significantly in the 2010s. Labour productivity in Finland has grown slowly since the 2008 financial crisis, largely due to a reduction in R&D investments and other intangible investments. Finland's domestic product has also lagged behind of the development of other Nordic countries over the past ten years.

Following a 2017 recommendation from the Finnish Research and Innovation Council and the national RDI Roadmap, which was drawn up in close cooperation with stakeholders, a 4% GDP target for R&D investments was formally written into the new government's policy programme in 2019. The government's aim was to raise national R&D expenditure up to 4% of GDP in order to promote productivity growth and strengthen

Finland's international competitiveness in the future. Societal stakeholders were widely committed to the target. Therefore, the next natural step was for the process to move on to parliamentary work.

A parliamentary working group was set up in April 2021 to find ways for an all-party political commitment to increase public R&D funding until the end of 2030 in order to facilitate reaching the 4% overall goal. In December 2021, the working group published its final report where it recommended enacting an Act on R&D funding, including drawing up a statutory plan for R&D funding that extends beyond the spending limits period, and introducing a permanent and extensive tax incentive for R&D activities. The respective laws entered into force on January 2023.

The Finnish Government appointed a second Parliamentary Working Group on Research, Development and Innovation for on 7 April 2022. The task of the 2022 working group was to draw up a plan for R&D funding investments that extend beyond the spending limits period, to serve as a monitoring group for the preparation of the Act on Research and Development Funding and to monitor the implementation of the decisions and policy outlines made by the previous working group.

The Act on Research and Development Funding, which entered into force on 1 January 2023, is aimed at ensuring that Finnish public spending on R&D will be increased yearly until 2030 to correspond with the 4% target. Central government R&D funding will increase by 40% from the current level of approx. 2,5 billion euros in 2023. Starting from the 2024 budget, an estimated EUR 280 million increase will be budgeted for each year's budget compared to the previous year.

The process of reaching the 4% goal will require significant increase also in private R&D investments. This will in turn support long-term productivity growth in the entire economy. Growth solely in government R&D expenditure will not increase economic growth and tax revenue to such an extent that increasing government R&D funding would finance itself. Therefore, the increases in R&D funding should be targeted in a way that maximizes the overall benefits from societal investments and increases private sector investments to at minimum match their current share of 2/3 of R&D expenditure.

In the future, the government will prepare a plan for the use of public R&D funding for the next eight years once every electoral term. The plans will be given to the parliament as government reports. The Ministry of Economic Affairs and Employment and the Ministry of Education and Culture will be responsible for preparing the plans in cooperation with other relevant ministries and public authorities.

Webpages of parliamentary RDI working group: https://vnk.fi/parlamentaarinen-tki-tyoryhma