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I2019/01963/D

Ministry of Infrastructure

Swedish Higher Education Authority  
Box 7703  
103 95 Stockholm

## Assignment to collaborate on ensuring access to cutting-edge digital expertise

### The Government's decision

The Government has tasked the Swedish Higher Education Authority (UKÄ) and the Swedish Agency for Economic and Regional Growth (Tillväxtverket) to collaborate in analysing and proposing how access to cutting-edge digital expertise can be ensured both in the short term and long term. As part of the assignment, these governmental agencies are to start a dialogue on collaboration among stakeholders about the needs of their organisations for cutting-edge digital expertise, with the goal of increasing access to these and ensuring as far as possible improved access to statistics and forecasts about supply and demand to cutting-edge digital expertise on the Swedish labour market.

The Swedish Higher Education Authority and the Swedish Agency for Economic and Regional Growth are to implement the assignment in dialogue with relevant stakeholders, particularly representatives for higher education institutions, the labour market, organisations working with regional development and other public authorities.

To implement the assignment, the Swedish Higher Education Authority and the Swedish Agency for Economic and Regional Growth may requisition at most SEK 1 million each from the Legal, Financial and Administrative Services Agency (Kammarkollegiet) in 2019. The Government Offices of Sweden expects that SEK 4 million will be added to the current allocation in 2020 and SEK 6 million in 2021 and in 2022, respectively, for this purpose, to be divided equally between the two government agencies. Should funding also be earmarked for 2020–2022, the government agencies may requisition the above funds from the Legal, Financial and Administrative Services Agency. The requisitions are to be submitted to the Legal, Financial and Administrative Services Agency no later than 15 November of each year. Funds may be used for programme-related expenses. The expense is to be booked to allocation 2:4 Information technology and telecommunications with sub-allocation "4 – Information technology for use by the Legal, Financial and Administrative Services Agency" under expense area 22 Communications. The requisitions are to reference this decision's registration number. Unused funds are to be repaid to the Legal, Financial and Administrative Services Agency no later than 28 February 2020, 2021, 2022 and 2023, respectively.

By 31 October 2020, the Swedish Higher Education Authority and the Swedish Agency for Economic and Regional Growth are to submit an interim report on the assignment to the Government Offices (Ministry of Infrastructure and Ministry of Education and Research), where they present what measures have been taken and a plan for their continued work. By 31 October 2022, a final report is to be submitted to the Government Offices (Ministry of Infrastructure and Ministry of Education and Research). This report is to present their results, including an analysis of what form national collaboration can take from a long-term perspective and how funding has been used.

### **Reasons for the Government's decision**

The overall goal for digitalisation policy is for Sweden to become the international leader in capitalising on the opportunities offered by digitisation (Government Bill 2011/12:1, expense area 22, report 2011/12:TUI, Riksdag communication 2011/12:87). In the Government's digitalisation strategy (ref. no. N2017 /03643/D), the overall goal is broken down into five subgoals, of which one is digital expertise. The strategy emphasises the importance of promoting the matching of expertise and the central importance of meeting the growing needs of the private and public sectors for a digitally competent workforce.

The National Approach to Artificial Intelligence (AI), which the Government approved on 9 May 2018 (ref. no. N2018/03008/FÖF), defines the approach for the necessary common approach for Sweden to realise the potential of AI in both the private and public sectors. The Government's goal is for Sweden to be a leader in capitalising on the opportunities presented by AI, so as to strengthen both Swedish welfare and Swedish competitiveness. The approach states that enough people have to have the necessary knowledge and skills for developing and using the technology behind AI before all of Sweden can benefit from the technology.

In January 2016, the Government approved a new industrialisation strategy – Smarty Industry (ref. no. N2016/00496/FÖF). The strategy identifies four focus areas for continued efforts, including digitisation of industry and access to expertise to meet the needs of industry. The strategy notes that industry is facing significant new needs for skills related to the digital transition.

The Government's National Cyber Security Strategy (skr. 2016/17:213) points out that the extensive need for competent staff within cyber security and the lack of cutting-edge expertise is impacting both the private and public sectors. The information security and cyber security action plan for 2019–2022 tasks the Swedish Civil Contingencies Agency with conducting a pilot study during 2019–2020 to examine society's access to expertise within information security and cyber security.

The Government commissioned the OECD during 2017–2018 to review Sweden's digital transformation. The review resulted in a number of recommendations for how Sweden could achieve its ultimate goal of becoming the international leader in capitalising on the potential of digitisation. The recommendations were included in a report from the OECD submitted to the Government Offices in June 2018 (reg.no. N2017 /07509 /D). The OECD concludes that the shortage of digital specialists and cutting-edge digital expertise are bottlenecks for innovation and growth in Sweden. Demand is expected to increase in the coming years as digitalisation develops and new technologies like AI are adopted. The Swedish National Digitalisation Council (ref. no. 12019/00031/D) also points to how vital it is for stakeholders from the labour market, private sector and education to work together to increase matching between supply and demand for digital expertise. The Digitalisation Council also emphasises the importance of increasing the percentage of women within the IT sector, both from a gender equality perspective and an access to expertise perspective.

Based on the above, the relevant stakeholders need to take joint responsibility for identifying and implementing solutions that promote improved access to cutting-edge digital expertise. It is therefore important to ensure better access to statistics and forecasts on the full demand for expertise within the private and public sectors, so that higher education institutions can better provide relevant education and training that satisfy both short-term and long-term needs. It is also important to identify career and development possibilities for digital specialists and increase knowledge and opportunities for dealing with matching problems within the IT sector, particularly in terms of the low numbers of women.

On behalf of the Government

Anders Ygeman

Helen Hånell McKelvey

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Agency for Economic and Regional Growth

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The Cabinet Office / SAM

Ministry of Justice / SSK and PO

Ministry of Defence / MFI and SUND

Ministry of Finance / BA and ESA

Ministry of Education and Research / UH and GV

Ministry of Industry, Employment and Communication / BI, EIN, MK and RTL

Ministry of Employment / A

Ministry of Infrastructure

Civil Contingencies Agency

Legal, Financial and Administrative Services Agency

Statistics Sweden

Vinnova – Sweden's Innovation Agency

Agency for Growth Policy Analysis

Public Employment Service

Post and Telecom Authority

Agency for Digital Government

All county councils

Gotland municipality

Swedish Association of Local Authorities and Regions