

Chapter 6.

Policy recommendations

This chapter presents the policy framework being developed by the OECD project Going Digital: Making the Transformation Work for Growth and Well-being, reviews policy recommendations in specific policy areas and addresses the issue of policy coherence in the implementation of the Digital Strategy in Sweden.

This review has examined recent developments in the digital economy in Sweden and has reviewed policy measures to further foster digital transformation. Sweden has been among the best performing economies in the OECD in recent years and is a leading country for the diffusion and use of digital technologies. The information and communications technology (ICT) sector and ICT investments have been the main drivers of labour productivity growth. Through digitalisation, the economy has been able to maintain its international competitiveness in manufacturing while moving up along the value chain towards high value-added services.

As the digital transformation opens up new opportunities and international competition becomes stronger, partially as a result of digitalisation, some changes in policies seem appropriate to maintain Sweden's high performance in the future. Some policy changes are specific to certain areas, as illustrated in the previous chapters of this review. Yet, the most challenging policy issue, for Sweden as for many other countries, is the development of a coherent policy framework for digital transformation, both among ministries and agencies (horizontal co-ordination) as well as across levels of government (vertical co-ordination).

As digitalisation cuts across different policy domains and government levels, further seizing its potential benefits may increasingly depend on Sweden's capability to strengthen a whole-of-government policy approach. This requires overcoming organisational barriers to integration, sharing and horizontal decision making, a greater emphasis on anticipating potential changes and impacts, and greater use of data and digital technologies in policy making.

To address these policy issues, the OECD has launched "Going Digital: Making the Transformation Work for Growth and Well-being". The project aims to help policy makers better understand the digital transformation that is taking place and create a policy environment that enables their economies and societies to prosper in a world that is increasingly digital and data-driven.

This chapter will present the policy framework being developed by the OECD Going Digital project, review the recommendations specific to each policy area, develop recommendations for Sweden's Digital Strategy and finally, address the issue of policy coherence.

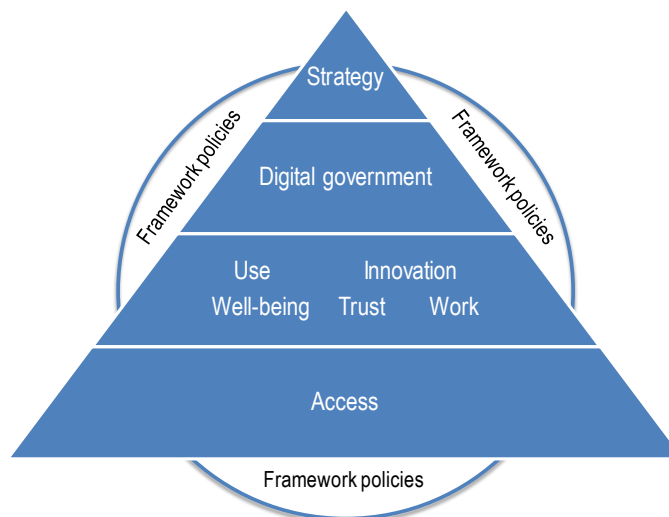
Going Digital: An integrated policy approach in the digital age

Digital transformation is challenging almost every aspect of the economy and society, and a wide range of policy areas need to be considered as much as all actors (individuals, firms, governments and other stakeholders) need to be involved in the policy-making process. Individuals must be engaged and firms need to continue to act as a catalyst of transformative change. At the same time, governments need to reach across traditional policy silos and across different levels of government to develop a whole-of-government approach to policy making using the multi-stakeholder model that has underpinned the development of the Internet so well.

One aim of the Going Digital integrated policy framework is to help change the way policy makers think about digital transformation and in doing so change the way policies are developed in the digital age. Rather than considering narrow policy silos, the framework aims to support an integrated approach because policy changes in one domain may have implications in another domain. It is essential to be aware of interconnections and relationships across policy domains and to develop digital policy making with them in mind.

Figure 6.1 shows a preliminary integrated policy framework¹ for making the digital transformation work for growth and well-being (OECD, 2018). This section will briefly discuss its key components and what they mean for policy making.

Figure 6.1. **An integrated policy framework for making the digital transformation work**



Source: OECD (2018), “Going digital in a multilateral world: An interim report to ministers”, www.oecd.org/mcm/documents/C-MIN-2018-6-EN.pdf.

Framework policies

Digital transformation does not occur in isolation; it is shaped by (and helps shape) the broader economy and society as a whole. Framework policies play an important role in ensuring that the right conditions exist for digital transformation to flourish. Open trade and investment regimes can create new avenues for rapidly upgrading technologies and skills, and increasing specialisation. Efficient, open financial markets help to allocate financial resources to firms investing in the digital transformation, while competitive product markets foster consumer welfare, allow new firms to challenge incumbents, efficient firms to grow, and inefficient ones to exit. Well-functioning labour markets can support the inevitable structural change. Sound policies for intellectual property can help foster value creation from digital transformation and support innovation and diffusion. More broadly, sound macroeconomic policies can help reduce uncertainty and create an enabling environment for the digital transformation to thrive. In some cases, framework policies will need to be reviewed to ensure they are suited for the digital age.

Access

Digital infrastructures, including efficient, reliable and widely accessible broadband communication networks and services, data, software, and hardware, are the foundations on which the digital transformation is based. It is essential that governments promote investment in digital infrastructures and competition in the provision of high-speed networks and services, ensuring that key complementary enablers are in place and cover a maximum of territory (e.g. fibre optic backhaul, sufficient spectrum and increasing uptake of IPv6 Internet addresses), and that critical network infrastructures are resilient. Individuals, businesses (including small and medium-sized enterprises [SMEs]) and

governments need reliable, affordable, and widespread access to digital technologies and services to benefit from digital opportunities and enable an inclusive digital transformation. Indeed, much of the future growth in demand for devices connected to digital infrastructures is expected to come from the Internet of Things (IoT).

Use

Access to digital technologies provides the technical foundation for the digital transformation of the economy and society, but does not necessarily ensure effective use by itself. Other factors also need to be addressed concomitantly, notably education and skills. Effective use also requires firms to take into account in their decision making and operational processes the management of the risks related to the use of digital technologies, particularly with respect to digital security and privacy.

Moreover, it is crucial that governments enable the diffusion and adoption of digital technologies in fostering complementary investments in data, research and development (R&D), management skills, and other knowledge-based capital such as organisational change. This is especially important for SMEs, many of which lack the know-how but whose participation in the digital transformation is essential in ensuring an inclusive digital transformation. Effective use of digital technologies in an economy can also be affected by a lack of firm dynamics, which can lead to the coexistence of poorly performing firms, with very low levels of ICT use, with star performers.

Innovation

Science and innovation are the source for the digital technologies that are driving the digital transformation, with all of them, and notably the Internet, drawing on a long history of public investment in fundamental research. Continued investment in public and private research and innovation is needed to drive the digital transformation further and develop new technologies and applications. In turn, the adoption and use of digital technologies, including data analytics, are associated with higher innovation performance across the economy.

Technologies, smart applications (including data analytics) and other innovations can also improve services and help address policy challenges in a wide range of areas, including education, finance, health, transportation, energy, agriculture and fisheries, between and within countries. Digital technologies contribute not only to innovation in goods and services, but also to innovation in processes, business models and organisational arrangements, as well as the process of science and innovation itself.

Trust

Trust is fundamental to the digital transformation; without it, individuals, firms and governments won't fully use digital technologies, and an important source of potential growth and social progress will be left unexploited. Countries may benefit from greater cross-border co-operation if they develop comprehensive and coherent national strategies for digital security and privacy to address issues such as the protection of personal data, resilience of essential services (e.g. water, energy, finance, public health and safety), creation of incentives (e.g. cyber insurance, public procurement), support to SMEs, and related skills development, in consultation with all relevant stakeholders. At the same time, it is important to continue promoting effective protection to consumers engaged in e-commerce and other online activities, as this will help the digital economy flourish as well as be inclusive.

Jobs

Digital transformation has already begun to change the nature and structure of organisations and markets, raising important questions about which jobs might disappear and where new ones will come from, what they will look like and which skills will be required, who might be most affected, and what can be done to foster new job creation. Going forward, low-skilled jobs are likely to be the most at risk of being displaced.

At the same time, technological advances are facilitating the expansion of new forms of work such as “crowd work”, “gig work” and other forms of on-demand labour. Digital transformation may increase the already sizeable number of workers (one-third of the OECD labour force) in non-standard forms of employment that are in many cases a poor fit with traditional social protection systems predicated on the archetype of full-time, permanent work for a single employer. As these changes take place, it is important to ensure that effective adjustment mechanisms are in place to help individuals navigate the transition from one job to the next. It is also essential to ensure that complementary policies – in the form of a social safety net, social dialogue between employers and workers, employment regulation and skills policies – are in place to support those people for whom the transition is lengthy, or who are ultimately unable to transition effectively to new skills and jobs.

Well-being

Digital transformation changes how people from different cultures access information and interact with one another and with society more broadly. For example, digital technologies can promote social inclusion by enabling better access to healthcare through online services, as well as new opportunities for skills development by offering access to education, as well as flexible working arrangements for families. They can also help disadvantaged groups connect. On the other hand, the increasing spread and use of some technologies has the potential to reduce face-to-face interactions, thus further isolating some individuals, and in some cases digital services can lead to the creation of like-minded groups that do not interact with others. Security and privacy also become more urgent issues to address as the IoT and intelligent connected objects, such as self-driving cars, become deployed.

Digital government

Digital transformation of governments and public services requires new forms of partnerships and engagement, new skills and accountability models for the public sector. Digital technologies offer opportunities to increase the access to, reach and quality of public services, and to improve policy making itself. In addition, digital technologies and the use of large datasets across the public sector are also raising issues around how to leverage these new digital opportunities to rethink how the public sector functions, including the governance of ICT use in government and the regulatory environment concerning these new (potentially disruptive) areas. This requires overcoming organisational and regulatory barriers to integration, sharing and horizontal decision making, and use of data and digital technologies across the public sector.

Strategy

Digital transformation affects all corners of the economy, society and government activities. As mentioned above, to realise its full benefits, governments need to reach across traditional policy silos and across different levels of government and develop a whole-of-government approach to policy making. This means more co-ordination when taking decisions and implementing policy measures across ministries and levels of

government, as well as more active involvement of all key stakeholders, including the business community, trade unions, civil society and the Internet technical community, in the policy-making process as well as in implementation and monitoring. By identifying the inter-dependencies among the policy areas affected by digital transformation, it will be easier to link up the relevant ministries and government bodies that need to be co-ordinated to ensure that policies are mutually reinforcing. At the same time, it is important to assess how the digital transformation is affecting international regulatory co-operation.

National digital strategies (NDS) are a key component of ensuring a whole-of-government approach. Current approaches to governing NDS vary across countries. Information from 35 countries provides an overview of the responsibilities allocated for the development, co-ordination, implementation and monitoring of NDS (Table 6.1). The lead on strategy development is often taken by a ministry or body that is not dedicated to digital affairs, while only a minority of countries so far charge a ministry or body that is dedicated to digital affairs. Almost all countries engage multiple private stakeholders and public bodies to contribute input to developing their NDS.

Table 6.1. **National digital strategy governance**

Number of countries that have allocated respective responsibilities to the bodies and institutions

	Lead the development	Contribute input	Co-ordinate	Implement	Monitor
Government, e.g. prime minister, presidency, etc.	4	0	5	1	6
Digital affairs minister or body	8	1	10	3	8
Minister or body not dedicated to digital affairs	15	2	13	1	11
Several ministries, bodies or institutions	6	14	5	26	7
Multiple public and private stakeholders	1	17	0	3	0

Source: OECD (2017b), *OECD Digital Economy Outlook 2017*, <http://dx.doi.org/10.1787/9789264276284-en>.

Strikingly, only a few countries (Austria, Luxembourg, Mexico and the Slovak Republic) have a single high-level government official, e.g. in the prime minister's office, presidency or chancellery, or a ministry or body dedicated to digital affairs to co-ordinate their NDS. However, effective co-ordination is essential for developing and implementing a whole-of-government approach with an NDS. The implementation of the NDS is the responsibility of several ministries, bodies or institutions in the majority of countries, and in some, multiple stakeholders are involved in implementing it. Bodies responsible for monitoring the implementation of the NDS tend to be the same as those who lead the development and the co-ordination of the NDS.

Designing better policies for a digital economy and society not only requires better knowledge about the technological changes underway and a holistic strategy, but also further efforts to improve measurement, evidence and analysis. All countries need to work together to fill the data gaps and in doing so enable better benchmarking, evidence building, policy development, and the identification and prioritisation of policy review and action. At the same time, new opportunities are emerging thanks to digital technologies, e.g. through the use of big data analytics and non-official data sources.

Policy recommendations

The previous chapters of this review have analysed recent developments in several policy fields in relation to digitalisation in Sweden. The analysis had led to an assessment of the performances and a set of policy recommendations for each field. These recommendations

are discussed below and mapped against the Going Digital integrated policy framework. The components of the framework considered are those requested by Sweden.

Framework policies

The OECD carries out a regular assessment on framework policies in areas that have been identified as priorities to boost incomes in OECD countries. The last assessment for Sweden (OECD, 2017a) recommends reducing housing market distortions and improving the efficiency of the tax structure in order to ease labour mobility and increase productivity.

Strengthening policy labs and regulatory sandboxes

Digitalisation is opening up great opportunities for the economy and society, but seizing these opportunities requires innovative ways to design and implement policies and regulations. Several policy labs have been established in Sweden in recent years, as in a number of many other countries. While these initiatives are interesting and potentially useful, their effects seem limited by a number of factors, including insufficient political commitment in the long run. The government should take a clear stance in favour of policy labs and include them among its policy tools, particularly in relation to digitalisation.

Regulatory sandboxes provide another useful instrument to ensure co-operation between all stakeholders in the development of new regulations better suited to the digital economy. The successful example of the Innovation Centre launched by Finansinspektionen (FI), Sweden's Financial Supervisory Authority, points out the opportunity to broaden the traditional mandate of regulatory agencies (supervision, authorisation and regulations) to include support to innovation.

Through regulatory sandboxes, agencies should engage in a closer dialogue with companies that intend to develop new business models based on innovation. This requires a profound change in the culture and the practice of regulatory agencies, as well as a clearer mandate by the Swedish government, which issues instructions to those agencies.

Access

Expanding connectivity

Connectivity is a building block of the digital economy. In this regard, Sweden exhibits an impressive performance in terms of broadband availability, quality and affordability among OECD countries. Sweden is an historical leader in the OECD in mobile broadband penetration and mobile data usage; it is also one of the most developed countries in terms of next-generation access.

Overall, Sweden is on a solid path to achieve its broadband connectivity targets for 2020. However, some issues still remain. Addressing these issues would further foster the robust deployment of ultra-fast networks in both rural and urban areas. In this way, Sweden would be able to reach its ambitious target of 98% of households and firms with access to 1 gigabit per second broadband connections by 2025.

Enhancing co-ordination among national, regional and local strategies for broadband (fibre) deployment

The broadband market in Sweden is characterised by more than 500 stakeholders and thousands of fibre associations. A plethora of municipal networks exist, using different models in terms of the roles adopted by infrastructure providers, network operations and

service providers. The multiplicity of players in the fibre market is a main reason why Sweden has reached the levels of fibre deployment it has today. However, going forward, potential co-ordination issues among different connectivity stakeholders may become a challenge.

The Broadband Forum, which has a steering committee headed by the Ministry of Enterprise and Innovation, has served as an important form of co-operation contributing positively to fibre expansion in Sweden. There is room to enhance the role of this forum in promoting a more co-ordinated approach among several levels of government and the multiplicity of players in the broadband market.

Increasing the robustness of fibre networks

The Swedish National Audit Office (NAO, 2017) pointed out an uneven distribution of “robust” fibre networks due to a diversity of players and municipal networks, also engaging in operating active parts of the network (i.e. bitstream access).

Although there is no harmonised definition or measures of “robust fibre networks”, as stated in the ministry’s reply to the NAO’s report, there seems to be room for improvement. One way to increase the “robustness” of fibre networks is by strengthening the role of the Broadband Forum and the Swedish Post and Telecom Authority (PTS) in this area. The PTS already has taken a number of initiatives in this regard, such as the “Robust Fibre Instructions” and the “PTS Operational Safety Regulations”, which are steps in the right direction.

Promoting the deployment of high-speed broadband networks in sparsely populated areas

The Broadband Strategy in Sweden is striving for ubiquitous ultra-fast connectivity. At present, however, access to broadband of at least 100 megabits per second is uneven across the country. In addition, Sweden is facing a technology shift, where the incumbent has announced the replacement of copper networks in rural areas with mobile technologies.

The PTS should remain vigilant as to ensure that all households that will no longer have a digital subscriber line (DSL) connection receive a similar or better technological alternative. This is especially important given the current connectivity targets for 2025 in Sweden.

The government should continue its effort to enhance co-ordination among stakeholders in the administering of the regional funds for rural deployment of broadband (i.e. the European Agricultural Funds for Rural Development and the European Regional Development Fund). The establishment of the Broadband Forum is a move in the right direction. There may also be room for the newly created Digitalisation Council to enhance co-ordination.

Fostering competition in infrastructure provision by private players and municipalities

Low adoption rates of IPv6 in Sweden can be regarded as a symptom of larger issues related to the interoperability of fixed networks stemming from the diversity of municipal network models in place. In addition, incentives to IPv6 adoption may be lower in cases where municipal networks offer bitstream access, i.e. active infrastructure.

Sweden should generalise the model where only passive infrastructure is leased, at least for very small municipal networks. It should also evaluate the incentives that result from the retail and wholesale split of some of the municipal networks providing active infrastructure access as well as those that are vertically integrated providing services to end users.

The PTS, in co-ordination with the Swedish Competition Authority, should assess the geographical definition of broadband markets in order to continue ensuring sufficient competition in infrastructure provision by private players and municipalities.

The Swedish government could also work as an enabler of the IPv6 transition by establishing government promotion programmes to adjust Internet services for which it has responsibility, adapting government purchasing and ensuring multi-stakeholder task forces to foster IPv6 deployment.

Measuring the implications of autonomous vehicles for communication infrastructure

Sweden is a leader in machine-to-machine (M2M) penetration, and is one of the few OECD countries capturing more detailed statistics on M2M, such as revenue and traffic generated by M2M. Many Swedish companies are engaging in the future of the IoT and fifth generation (5G) mobile networks and leading the way forward for the rest of the world. The IoT application that is expected to have the most implications in terms of data traffic, and hence, infrastructure requirements, are autonomous vehicles.

Given its position of leadership in the IoT, Sweden may be the best placed to improve measurement of M2M as to single out the SIM cards related to connected and automated vehicles. This will help policy makers to start measuring an application that may have important implications to communications infrastructure in the near future.

Use

Increase digital inclusion through policies targeted to groups with lower usage levels of digital technologies

Most Swedes are familiar with basic digital tools and, in comparison to other OECD countries, many individuals also engage in more sophisticated online activities. Yet, use of digital technologies is far from being universal. Policies should foster usage among individuals with a lower education and low income and promote the uptake of online activities in remote areas.

An important condition for higher sophistication in online activities is a simple and secure digital identity (e-ID). Government should work to improve interoperability between different e-IDs. It should also ensure that newcomers in Sweden have access to a trustworthy and secure e-ID.

Promote the diffusion of advanced digital technologies in firms, in particular among small and medium-sized enterprises

Swedish firms are ahead of many other countries in the use of basic digital technologies and more advanced digital tools. Yet, there is room to improve the use of digital tools in firm operations, in particular supply chain and customer relationship management. The “digital lift” programme implemented by Sweden’s Agency for Economic and Regional Growth could be re-enforced with a focus on digital business processes.

Swedish firms also seem to be late in the adoption of big data analytics and data-driven innovation (DDI). Sweden should develop a strategic approach and effective actions to increase the use of big data analytics in Swedish firms, in particular in SMEs. It should also improve conditions to attract foreign talent, e.g. through centres of excellence and by building on existing efforts to integrate newcomers.

Upgrading skills for the digital transformation

Several reforms of the education system have been carried out over the past decade to address Sweden's declining school performance, including reforms aimed at improving digital skills. Reform efforts should be continued to improve school performance in mathematics and science and to support effective use of digital tools in schools. The focus of the reforms should be on information-processing skills, in particular writing, numeracy and ICT skills, to enable more sophisticated digital activities in life and at work.

It is important to ensure that vocational, high school, college and university educations provide sufficient training in advanced digital skills and are co-ordinated with industry, for example, by building on the “knowledge lift” programme. Policy efforts to develop lifelong learning should be continued, including through support to municipal learning centres. Incentives for firms, particularly SMEs, to invest in training their employees should be strengthened.

The evidence of a shortage of ICT specialists in Sweden calls for decisive action at several levels: foster more interest in science-related careers, in particular in ICTs, mathematics and technology-related teaching; increase the number of training places with a digital focus or component at universities and polytechnic schools as well as in adult education; strengthen incentives for firms, particularly SMEs, to provide ICT specialist training to their employees; increase the responsiveness of higher education institutions to the evolving skills needs of industry.

Current policies do not address the demand for complementary skills to thrive in a digital economy, e.g. problem solving, self-direction, interaction, co-operation, management and leadership skills. Education reforms should include such skills more firmly in curricula and syllabuses.

Policy actions are needed to reduce the gender gap in digital skills, for example among ICT specialists, but also in relation to numeracy and generic ICT skills.

Innovation

Set clearer priorities for digital innovation

Sweden is an international hub of scientific excellence and technological leadership. A large number of initiatives, publicly funded and in co-operation with business, exist to foster research in ICT technologies and promote the adoption and development of advanced digital tools for businesses.

While this high dynamism combined with a bottom-up approach are very valuable for research and innovation, it would be useful for the government, through its innovation and research agencies, to provide stronger guidance about innovation priorities in the field of digitalisation.

The establishment of the Innovation Council and the innovation partnership programmes are a useful step towards setting strategic priorities, streamlining activities and fostering synergies of innovation programmes. There is, however, room for further improvement in this direction.

Scale up the size of programmes for digital innovation

Public funds to research activities related to digitalisation seem to be scattered among a plethora of programmes. Reaching a critical mass is particularly important for innovations

related to digitalisation, as challenges and solutions are common to many sectors and industries. Also, digital solutions often require large investments and it is less costly to develop common test environments that can be shared for different technologies.

Too many projects may result in too little funding for at least some of the projects. As available resources are limited, it is critical to focus on areas with high importance to Sweden and where Swedish firms can gain or sustain a leading position.

Improve the assessment of innovation policies

The Research and Innovation Bill 2017 points to the need for a closer and more systematic evaluation of the variety of projects and initiatives supported by Swedish innovation policies. Indeed, evaluation studies of the effects of innovation policies provide a mixed picture of their results, with self-assessment based studies resulting in a positive evaluation more often than quantitative studies.

While assessing innovation policies is a complex task, it is essential that the large number of programmes active in Sweden are systematically analysed, as they may not only be ineffective, but may also lead to undesired outcomes, e.g. rent-seeking, distortion of competition, excessive administrative costs, etc.

Trust

Sweden should promote a clear vision of digital security risk management

The general digital security risk management approach in Sweden focuses on systems and networks rather than economic and social activities. Despite its early awareness of digital security, Sweden has been slow to recognise digital security as a strategic policy issue. In this regard, the adoption of the first National Cybersecurity Strategy and the inclusion of digital security in the 2017 Digital Strategy mark a turning point.

To become a world leader in harnessing the opportunities of the digital transformation, Sweden needs to devise and promote a clear vision of digital security risk management as an economic and social responsibility for public and private organisations' leaders and decision makers. They should approach digital security risk management as an essential tool to increase the likelihood of success, make informed economic and social choices, prioritise actions, and distinguish among alternative courses of action.

Policy leadership on the economic aspects of digital security requires stronger ministerial co-ordination

There is lack of clear policy leadership with respect to the economic aspects of digital security in Sweden. This probably explains why strategic policy documents do not yet reflect a vision in this area and why other economically oriented digital security policy initiatives seem uncoordinated (e.g. research and innovation) or limited (e.g. towards SMEs or in relation to education).

Currently, digital security is primarily about crisis management preparedness, an area led by the Ministry of Justice (MoJ). The MoJ also co-ordinates digital security policy making more broadly. Constitutionally, however, the MoJ has a duty to address digital security in areas falling under the mandate of other ministries, such as economic prosperity. Stronger ministerial co-ordination on the economic aspects of digital security is essential to promote a clear vision and strong policy leadership.

The Digitalisation Council could become a hub for co-operation on digital security

The policy leadership on digital security for prosperity should be clear. As all facets are interrelated, it is important that the vision is developed jointly by all ministries and agencies with a mandate and expertise on digital security. Strong co-operation between ministries and agencies with mutually reinforcing and complementary mandates is essential to foster a holistic approach to digital security policy.

The Digitalisation Council might be a useful platform to foster such co-operation, bringing together the stakeholders involved in digital security to promote a common vision and more co-ordinated agenda.

Sweden should develop adequate mechanisms for policy co-ordination around digital security

There is no one-size-fits-all model to digital security governance. Governance arrangements vary and reflect cultures and styles of government. Governments have taken different approaches to establish a policy co-ordination mechanism. Over time, there has been a trend towards bringing together scattered operational bodies and resources to achieve critical mass and generate synergies, and to foster public-private partnerships with businesses across all sectors for information sharing and better situational awareness. Sweden could build on the experience of other OECD countries to develop better co-ordination mechanisms.

Jobs*Strengthening labour market institutions*

Effective labour market policies and institutions are essential to accompany workers during the digital transformation. The Swedish model, based on the strong dialogue between the social partners and the active role of job security councils (JSCs), seems well-equipped to facilitate a smooth transition for workers affected by this transformation. However, there is room to improve the coverage and the quality of the JSCs' and the Public Employment Services' (PES) services.

Social partners may want to:

- extend the provision of JSCs' services to all displaced workers, including blue-collar, youth and other vulnerable groups
- promote successful job-transition services, e.g. the Early Risk Service offered by the TRR, among all the JSCs
- improve co-ordination between the JSCs and the PES at an early stage of the dismissal procedure, in co-ordination with the government.

In an increasingly integrated global economy, digital technologies are enabling firms to segment work in new ways and to increase the use of temporary labour. Platform-based workers are likely to face some of the same problems as those in non-standard work, such as temporary, part-time or short-term jobs, i.e. lower wages, greater job insecurity and fewer work-related benefits. In Sweden, employment protection legislation (EPL) is well developed but the gap in EPL between permanent and temporary workers is among the highest in the OECD.

To meet these challenges, governments and social partners should improve their ability to detect emerging labour market trends and explore ways of developing existing labour market programmes and safety nets, in which eligibility is tied to standard employment models, so as to ensure inclusive growth and job quality in the new work organisation enabled by the digital economy:

- Social partners may want to take initiatives to promote the establishment of a negotiation council where job platforms and trade unions may negotiate collective agreements fit to the new forms of work enabled by digitalisation.

The government may want promote a regulatory sandbox on the labour market, based on the model of the Innovation Centre established by the FI. To this purpose, the Ministry of Labour may consider issuing instructions for the National Mediation Office (Medlingsinstitutet) to map innovations in the labour markets and review issues that platforms and trade unions may have in relation to the agency’s core activities.

Digital government

Enhance digital government

Sweden’s policy to improve digital government and manage the digital transformation of the public sector is bearing fruit. However, progress is not equally distributed. Policies should enhance digital public services in remote areas, in particular by strengthening capacity at the local level. Efforts should be focused on making online interactions with the public sector more user-friendly, by building on existing initiatives under Digital First and implementing the “once only” principle. It is crucial to agree on common standards across level of government and agencies and to increase interoperability between different systems, in particular for essential services such as healthcare.

While policies are strongly committed to opening up public sector information and open government data to citizens, as confirmed by several new initiatives in the 2018 budget, Sweden seems to lagging behind many OECD countries. Policies to promote access to public sector information and open government data should focus on increasing the interoperability of data resources; improving the use of data within the public sector; and enhancing the integration of data from regions and municipalities, including through capacity building at the local level.

Strategy

In June 2017, the Swedish government launched its Digital Strategy (Government Offices of Sweden, 2017a). The strategy’s overall goal is for Sweden to be the best in the world in the use of digitalisation opportunities. In order to achieve this overall goal, the strategy sets five targets: digital literacy, digital security, digital innovation, digital leadership and digital infrastructure (Table 6.2). A few key policy areas are identified under each target.

The Digital Strategy provides an ambitious goal for the Swedish economy and society. Its approach is very close to the rationale underlying the OECD Going Digital policy framework while its targets focus on the policy areas that are crucial for the potential benefits from digitalisation to unfold. The strategy, however, needs to be made more operational by linking its targets to concrete policy instruments, assigning institutional responsibilities for them, providing for an appropriate budget appropriation and, most crucially, setting up stronger co-ordination mechanisms.

Table 6.2. For a Sustainable Digital Sweden: Five targets

Targets	Description
Digital competence	In Sweden, everyone will be able to develop and use their digital skills.
	The ability and opportunity to contribute and participate in the digital society
	Modernisation of the education system
	Matching skills
Digital security	Digital literacy in the public sector and state-owned companies
	Sweden will provide the best conditions for everyone to safely participate, take responsibility and have confidence in the digital society.
	A digital identity
	Strict security requirements
	Privacy in the digital society
Digital innovation	Democracy is preserved in digital environments
	A safe and mobile labour
	Well-functioning digital markets and confident consumers
	In Sweden, the best conditions exist for digitally driven innovations to be developed, disseminated and used.
	An increased focus on data-driven and digitally driven innovation and research
	A stronger innovation environment for data-driven and digitally driven innovation
Digital leadership	Effective intellectual property
	Strengthening national and international competitiveness through digitalisation
	A modern social structure
	In Sweden, improvements in efficiency and quality through digitalisation should be relevant, purposeful and lawful.
	A clearer state leadership for change
Digital infrastructure	Simplification by digitalisation
	A continuous analysis of digital maturity and need for action
	Leading towards a resource-efficient society through digitalisation
	Strengthening local and regional engagement
Digital infrastructure	The whole of Sweden should have access to infrastructure allowing for fast broadband, stable mobile services and supporting digitalisation.
	Improved access to hard infrastructure
	Development of soft infrastructure

Source: Government Offices of Sweden (2017a), “For a sustainable digital transformation in Sweden: A digital strategy”, www.government.se/49c292/contentassets/117aec2b9bf44d758564506c2d99e825/2017_digitaliseringsstrategin_faktablad_eng_webb-2.pdf.

Link the Digital Strategy targets to concrete policy instruments

All five targets and most policy areas in the Digital Strategy are defined at a fairly high level. In fact, the targets propose a vision For a Sustainable Digital Sweden rather than a set of policy objectives. For instance, the target “digital skills” is “In Sweden, everyone will be able to develop and use his/her digital skills”.

The key areas under each target highlight specific features of the target but provide little guidance on the policies that will be implemented to achieve it. For instance, the key areas identified under the target “digital skills” (ability and possibility of contributing to and participating in the digital society; modernisation of the education system; skills matching; and digital skills in the public sector and state-owned companies) help to characterise the target but leave open the issue of what policies should be pursued in these areas.

By its very nature, a strategy is not an action plan with quantified objectives and budget appropriations. However, both its political strength as a societal vision and its

effectiveness as a policy agenda would be strengthened by a clearer identification of its high-level targets and of the policy instruments to achieve them. These targets are already identified in areas where the Digital Strategy refers to policies currently in place, such as the Smart Industry (Government Offices of Sweden, 2016) for the target “digital innovation” or the Agenda 2030 for the target “digital infrastructure”.

It seems urgent that the Digital Strategy be translated into an action plan, with well-defined and quantifiable objectives under each of the strategy’s targets. The action plan should also establish monitoring mechanisms to assess progress towards the objectives and trigger policy responses when appropriate.

Assign institutional responsibilities for the Digital Strategy’s targets

As any other policy in Sweden, digital policies are a shared responsibility of the Government Offices, which forms a single, integrated public authority comprising the prime minister’s office, the government ministries and the Office for Administrative Affairs. Within this “collective government decision making”, three ministers have the main responsibility for digital policies: the Minister for Housing and Digital Development, the Minister for Enterprise and Innovation, and the Minister for Public Administration. The first two ministers sit in the Ministry of Enterprise and Innovation while the third is in the Ministry of Finance.

The Minister for Enterprise and Innovation leads policies to promote the uptake of digital technologies by businesses and to foster innovation in the digital field. The Minister for Public Administration leads policies to enhance digital government as well as to promote innovation, collaboration and the uptake of digital technologies by the public administration. He/she is also responsible for general governance of the public sector (public administration policy), public procurement (strategy for public procurement), municipalities (Law of Municipalities) and human resources (skills and competencies). Finally, the Minister for Housing and Digital Development leads policies to enhance access to, and the quality and use of broadband and telecommunications infrastructures. He/she also has the overall responsibility for digital policies that are not explicitly addressed by other ministers.

The current allocation of responsibilities for digital policies within the Government Offices seems to map fairly well into some of the Digital Strategy’s targets, notably innovation, infrastructure and leadership. However, the responsibilities for the other two targets – competence and security – are less clearly defined.

The definition of the Digital Strategy’s targets in more operational terms should be accompanied by the identification of the institutions – ministries, agencies and levels of government – responsible for the implementation of the strategy in relation to each target. The assignment of institutional responsibilities within the Digital Strategy does not require the definition of a specific set of actions to be undertaken by each institution. It simply needs to indicate which institutions bear a shared responsibility in relation to each target.

A clearer assignment of institutional responsibilities would have three main benefits. First, the process would help to identify areas where the implementation of the Digital Strategy requires co-ordination among ministries and agencies and between the central and local governments. This would set the basis for improved co-ordination in the actual implementation of these policies.

Second, the assignment of institutional responsibilities requires consultation with and the agreement of all institutional stakeholders. This process, therefore, would strengthen their political commitment to the Digital Strategy.

Finally, clear responsibilities in the implementation of the Digital Strategy would also increase the political accountability of each institutional stakeholder and increase their incentives to play their role according to the strategy.

Provide for clear budgetary appropriations for the Digital Strategy

Allocating a budgetary appropriation to each target goes beyond the scope of the Digital Strategy. However, not providing an adequate level of resources would weaken its political credibility in the short run and delay its implementation in the long run.

The Digital Strategy should indicate an overall budgetary appropriation, with a breakdown for the five targets. Central government expenditure in Sweden is divided into 27 areas known as expenditure areas. Each area shows the amount of resources allocated to state-controlled activities. The Digital Strategy's budget, therefore, should be linked to the relevant expenditure areas of the state budget.

At present, it is difficult to identify the resources devoted to policies contributing to the achievement of the Digital Strategy's targets. These targets do not appear among the policy reforms of the 2018 Budget Bill (Table 6.3). Similarly, the press release and the statement accompanying the 2018 Budget Bill 2018 do not make an explicit reference to digitalisation (Government Offices of Sweden, 2017f).

Table 6.3. Reforms and financing in the Budget Bill 2018

	SEK million		
	2018	2019	2020
More people in work	7.3	10.1	11.4
Sweden will have equitable knowledge-based education	2.4	4.6	7.0
Sweden will be a fossil-free welfare nation	5.0	7.9	10.0
The welfare system must be strengthened	7.8	13.6	18.9
Sweden's economic strength to benefit everyone	11.9	18.5	22.9
Sweden must be secure	6.7	8.3	9.7
Other reforms	2.7	1.9	2.0
Total reforms	43.8	64.8	81.7
Total financing	3.4	4.9	8.8

Source: Government Offices of Sweden (2017e), "Budget Bill for 2018: Building our society – investing for the future", www.government.se/press-releases/2017/09/budget-bill-for-2018-building-our-society--investing-for-the-future.

The Budget Bill 2018 itself (Government Offices of Sweden, 2017b) provides more details on the policies related to the Digital Strategy's targets. However, the resources allocated these policies are singled out only in a few areas, particularly those where a minister has clear responsibility for digitalisation: the Minister for Housing and Digital Development, the Minister for Enterprise and Innovation, and the Minister for Public Administration (Box 6.1).

Digital skills have a prominent place in the budget area "Education and university research", although the allocation of resources for these policies is not detailed in the budget. Despite the attention devoted to these issues in the Digital Strategy, the budget area "Labour market and working life" does not make any mention of digitalisation and does not provide any explicit allocation for policies in this field.

The strategy's overall goal is for Sweden to be the best in the world in the use of digitalisation opportunities. The ambition of this goal is such that it may justify considering

the creation of a new expenditure area “Digitalisation”. This would imply that some of the resources allocated to the existing 27 expenditure areas should be transferred to the newly created one. Such a transfer would increase transparency about the targets of the Digital Strategy, signal the government’s commitment to it and strengthen the political credibility of the strategy. More transparency would also help with implementing the strategy.

Box 6.1. Selected budget expenditures for the Digital Strategy

The Budget Bill establishes a budget for the “information society policies” (Budget area 22.4), as shown in Table 6.4. These cover general issues of digitalisation and use of information technology; electronic communication, mail and basic payment services. It also includes the PTS, which is the regulatory authority in the field of electronic communications and postal services; the Broadband Forum; and the Digitalisation Council.

The appropriation for information society policy, net of the resources reallocated to the “Agency for Digital Government” (see below in this chapter) is expected to increase significantly, from SEK 351 million (EUR 34 million) in 2017 to SEK 437 million (EUR 43 million) in 2018 and 2019. The increase is mainly due to higher expenditure for “data and communications”, which will increase from SEK 19 million to SEK 73 million (EUR 1.85 million to EUR 7.10 million). This budget line, which may be used for the implementation of digitalisation policies as well as for analysis and policy evaluations, is expected to finance the activities of the Broadband Forum and the Digitalisation Council.

The resources of the PTS have also considerably increased, from SEK 29 million to SEK 4 million (EUR 2.8 million to EUR 4.1 million) to enhance digital security in communication infrastructure.

Table 6.4. Budget expenditures for information society policy, 2016-20

SEK million

	Outcome 2016	Budget 2017	Forecast 2017	Budget 2018	Forecast 2019	Forecast 2020
2:1 Swedish Post and Telecom Authority	28	29	29	42	43	43
2:2 Special services for people with disabilities	133	140	139	140	140	140
2:3 Basic payment services	20	34	33	36	36	36
2:4 Data and telecommunication	11	23	19	73	73	73
2:5 Reliable and available communications	115	126	131	146	146	140
2:6 Common e-government project ¹	54	75	65	x	x	x
Total Information society policy	361	427	416	437	437	432

1. Allocation transferred to the “Agency for Digital Government” from 2018 onwards.

Note: x = not applicable.

Source: Government Offices of Sweden (2017b), *Budgetpropositionen för 2018*, www.regeringen.se/rattsdokument/proposition/2017/09/prop.-2017181.

The Budget Bill 2018 also sets up a budget for the digitalisation of the public administration (Budget area 2.6), in line with the targets of the Digital Strategy. The appropriation for this area includes the transfer of resources allocated to “information society policy” until 2017 and additional allocations for national digital infrastructures, open data and the “Agency for Digital Government” to be established in September 2018.

The total budget for the digitalisation of the public administration is forecast to increase from SEK 75 million (EUR 7.3 million) in 2017 to SEK 177 million (EUR 17 million) in 2018.

Setting up stronger co-ordination mechanisms within government

Fostering digitalisation requires a coherent policy framework both among ministries and agencies (horizontal co-ordination) as well as across levels of government (vertical co-ordination). Developing a whole-of-the government policy approach to digitalisation is a challenge for all countries and the appropriate mechanisms to ensure co-ordination depend on the institutional settings specific to each of them.

As discussed in Chapter 1, the Swedish government system is characterised by two features. The first is administrative dualism: a clear division of roles between ministries in charge of strategic policy development and oversight, on the one hand, and autonomous agencies tasked with policy implementation, on the other. The second feature means a high degree of decentralisation for largely autonomous county councils and municipals governments, which are responsible for key components of the Swedish welfare system.

Sweden's political and societal culture towards co-operation is crucial to ensure a smooth policy-making process in such an institutional setting. Yet, the speed and the scope of the economic and societal transformations driven by digitalisation seem to be challenging the responsiveness of this institutional setting. Changes triggered by digitalisation are rapid and pervasive while policy co-ordination in a largely decentralised decision-making system takes time. The gap between the speed of the digital transformation and the pace of the policy response calls for more formal co-ordination mechanisms.

The implementation of the Digital Strategy

In recent years, three of the Swedish government's policy initiatives have tried to set up more formal co-ordination mechanisms. The first initiative is the creation of a Digitalisation Council in the first half of 2017 (www.digitaliseringsradet.se/en).

The council consists of ten people under the leadership of the Minister for Housing and Digital Development. Its undertaking is to promote the implementation of the government's digitalisation policy while enhancing co-ordination between different governmental and public organisations and subject areas, as well as between public and private actors.

Several governmental councils and fora related to digitalisation already exist in Sweden, in areas such as e-health, digital government, broadband, smart grids, digital security and innovation. In order to avoid duplications, the Digitalisation Council must consult with these councils and fora.

The Digitalisation Council is mandated to support the government in the implementation of its Digital Strategy. This involves setting the basis for the Digital Strategy, identifying key initiatives for the five strategic targets, and monitoring and analysing the implementation. In particular, the council will:

- evaluate the effects of the government's initiatives
- monitor and analyse digitalisation in Sweden
- compare Sweden's performance in the area of digitalisation
- produce data to support the implementation of the government's initiatives
- propose new initiatives as required
- consult with other councils and similar bodies set up by the government in order to promote, implement or develop digitalisation in other areas.

A group of secretaries of state in the Cabinet Office will contribute to the horizontal organisation necessary for the implementation of a policy when several policy areas are concerned. The Secretary of State Group is responsible for co-ordinating the work of the digitalisation policy.

The mandate of the Digitalisation Council is clearly meant to improve the evidence base for policies and to increase exchanges among different institutions with a mandate related to digitalisation. This is a useful step to increase the effectiveness of digitalisation policies by sharing good practices and reducing duplications. However, the council comes short of addressing the issue of co-ordination. Lack of co-ordination is not only due to limited information about the measures taken by other institutions and their outcomes, it is mainly the result of two other features.

The first is a different appreciation of the opportunities created by digitalisation and the appropriate policies to seize them. The appreciation is largely dependent on the specific position of each agency and each local government. As digitalisation is not a purpose in itself for these institutions but a means to achieve economic and societal objectives, agencies and local governments may take different approaches to digitalisation policies to the extent their position and their objectives are different.

The second feature that may hamper co-ordination is the opportunity cost of policies related to digitalisation. As the opportunity cost of a given measure tends to vary among policy fields and across levels of government, the scope for co-ordinated policies will be narrowed.

Both of the above features – different policy objectives and different opportunity costs – provide the main rationale for the autonomy of agencies and local governments. Therefore, in order to be effective, co-ordination mechanisms should be designed as to address these two issues.

The second initiative taken by the Swedish government to increase co-ordination is the establishment of an “Agency for Digital Government” on 1 September 2018. This initiative follows the report of an independent investigation released in March 2017 (Government Offices of Sweden, 2017c). The report notes that Sweden is lagging behind comparable countries in terms of digitisation of the public sector and ascribes this outcome to two circumstances. The first is the government’s choice to delegate responsibility for the digitalisation of public administration to several agencies. The second is the lack of clear instructions from the government to the agencies with regard to digitalisation. As a result, the report argues, agencies have approached digitalisation mainly as a tool to improve their internal efficiency rather than as an opportunity to provide new and better services to final users. Based on this assessment, the government has decided to establish an agency with the overall responsibility for the digitalisation of the public sector.

The agency will consist of 50-70 staff and will receive directives from the Ministry of Finance. It shall be responsible for supporting the government in developing, co-ordinating and promoting the digitalisation of the government agencies, municipalities and county councils, with the exception of the defence authorities.

In particular, the agency will assist the government to promote greater digitalisation of the public sector, including through the analysis and monitoring of developments in this field. It will also co-ordinate, develop, manage and provide a national digital infrastructure for the public sector, as well as promote its use; for example, by increasing the standardisation of public sector information exchanges and developing simple and secure e-credentials.

The agency will promote open government that supports innovation and participation by, for instance, promoting the availability of open data and DDI in the public sector. It will also co-ordinate and support public sector work with user-driven business developments, including support to digital investments.

The agency is also taking full responsibility for the e-Identification Board, as well as for certain tasks and assignments that have been carried out by the Swedish Tax Agency, the Swedish Financial Supervisory Authority, the Expert Group on Digital Investments, the National Archives of Sweden, the Swedish Agency for Growth, and the National Post and Telecom Agency.

The establishment of an agency is a positive step towards better co-ordination of digitalisation policies within the public sector. In particular, gathering in one institution tasks previously scattered among several agencies and bodies is welcome. Also, the positive reactions by the Swedish Association of Local Authorities and Regions (SKL in Swedish) to the creation of the agency and the SKL's close involvement in the preparatory work are essential to its success.

By putting forward a more compelling vision and a stronger political commitment, the agency is likely to help improve co-ordination. However, according to the current proposal, it has the power to “issue regulations on the national digital infrastructure, such as the use of standards, formats and specifications for information, information technology systems and basic data, *insofar as this does not infringe on other agencies' regulatory powers*” (Government Offices of Sweden, 2017d). The agency, therefore, will enhance coherence in the design of digitalisation policies for the public sector but its capability to implement such policies will depend on the willingness and the capability of all other institutions to adopt them. There may even be the risk that the creation of yet another agency may result in an additional silo. As will be discussed in the next section, a more direct approach, possibly based on incentives for all public sector institutions to adhere to the regulations issued by the agency, may prove more effective.

Finally, at the beginning of 2018 the Swedish government appointed a Chief Digital Officer (CDO) responsible for promoting the implementation of its digital strategy and strengthen its overall ability to lead the digitalisation process. The CDO's main task is to co-ordinate and communicate the government's work on digitalisation; create synergies between different initiatives and areas; identify the need for further initiatives; and be a catalyst for action.

While both the Digitalisation Council and the Agency for Digital Government are positive initiatives to increase policy co-ordination in the field of digitalisation, further steps appear necessary to build a whole-of-government approach. The agency's mandate is limited to the public sector and this is entirely coherent to it receiving directives from the Minister of Public Administration, within the Ministry of Finance. No other institution in the Swedish policy-making machinery has a mandate to enhance co-ordination among agencies and across levels of government in relation to digitalisation policies. Complementarities and trade-offs between labour and taxation, employment and education, innovation and technological diffusion, competition and jobs should be addressed in a more co-ordinated manner. This may be the natural role of a multi-stakeholder body like the Digitalisation Council. However, as discussed above, the Digitalisation Council has the mandate to consult stakeholders, advise the government and propose policies, but it does not have the power or the resources to design and implement them. The same limitations are likely to apply to the newly appointed CDO, although this position was created too recently to allow any assessment.

Political leverage vs. incentives: A typology of co-operation arrangements

In general, there are two, non-exclusive mechanisms for policy co-ordination. The first is based on “political leverage”: the implementation of co-ordination is devoted to an institution with *de facto* sufficient political power to command other institutions to co-ordinate their actions towards a well-defined outcome. In a presidential regime, for instance, the president is typically empowered with such a degree of power: he/she can command several ministers to take a certain course of action, even if each minister has discretion about the definition of policies in his/her own area. In a parliamentary regime, this level of policy leverage may pertain to the prime minister alone and/or to some council composed of a small number of ministers.

The second co-ordination mechanism is based on “incentives”: the implementation of co-ordination is devoted to an institution that can set incentives for other institutions to co-ordinate their actions towards a well-defined outcome. Often incentives take the form of budgetary allocations. For instance, the central government may set a matching grant, i.e. a grant for a specific use conditional upon additional resources by the recipient, as an incentive for subnational governments to implement certain policies. Similarly, the president or the prime minister may allocate an additional budget, i.e. a kind of co-ordination premium, for policies that are implemented through co-ordination between several ministries.

These two mechanisms – political leverage and incentives – can be used as a grid to analyse co-ordination arrangements, as shown in Table 6.5.

Table 6.5. A typology of co-ordination arrangements

		Budget	
		High	Low
Political leverage	High	Plenipotentiary Digitalisation Minister	President/prime minister-led council
	Low	Digitalisation Co-ordinator	Digitalisation Advisory Group

Source: OECD (2018), “Going digital in a multilateral world: An interim report to ministers”, www.oecd.org/mcm/documents/C-MIN-2018-6-EN.pdf.

In the bottom-right quadrant (low budget/low political leverage), the “Digitalisation Advisory Group” has the mandate to promote greater co-ordination between different governmental and public organisations and subject areas, as well as between public and private actors. While it may be led by a minister, it does not have sufficient policy leverage to affect the policies implemented by the central government, independent agencies and the local governments. It cannot set incentives, in particular budgetary incentives, to affect policies carried out by other institutions. It can be regarded as the weakest co-ordination arrangement.

In the top-left quadrant (high budget/high political leverage), the plenipotentiary Digitalisation Minister appears as the strongest form of co-ordination. The minister concentrates the policy authority and the budget to implement all policy measures related to digitalisation, across the policy fields of all other ministers, agencies and local governments. This arrangement should be considered as a purely theoretical case as it seems unlikely that any political system may be willing to concentrate so much power over such a large range of policy domains to a single institution or person.

The other two co-ordination arrangements provide intermediate cases. Low budgetary discretion but strong policy leverage is typical of a council led by the president or the prime minister (top-right quadrant). The council does not have a dedicated budget to

implement a coherent set of digitalisation policies across different policy areas but has sufficient policy leverage to command ministers, agencies and local governments to implement certain policies. This co-ordination arrangement is suited for policy regimes where the president or prime minister has strong political authority but it is less appropriate for political regimes with stronger local governments.

The final arrangement is the one exemplified by a “Digitalisation Co-ordinator” (bottom-left quadrant). Unlike a minister, the co-ordinator does not have the political authority to implement any policy. However, she/he has a discretionary budget that can be used to co-finance policies, according to the targets set by the government, implemented in co-ordination among two or more institutions: ministries, agencies or local governments. Budgetary allocation by the co-ordinator would typically take the form of a matching grant, i.e. a grant that has to be used for a specific purpose and is conditional to additional resources by the receiving institution. This arrangement seems best suited for political systems where power is diluted among a variety of institutions and across levels of government.

A “Digitalisation Co-ordinator” appears to be a promising mechanism in an institutional setting like Sweden’s, characterised by administrative dualism and a high degree of decentralisation. A “Digitalisation Co-ordinator” would guarantee the autonomy of agencies and local governments, while, at the same time, provide monetary incentives to co-operate. The co-ordinator may be a single person, with a small office, or a small agency, receiving instructions and appropriations by the government or the prime minister but autonomous from them in the implementation of these instructions. The co-ordinator’s budget would not require additional resources, but a reallocation of the appropriations currently allocated to digitalisation policies under different lines of the state budget. A clearer budgetary allocation, as discussed above, is therefore a prerequisite for the establishment of this co-ordination arrangement.

Note

1. While still work in progress, this framework is based on input from the 14 core OECD committees involved in the Going Digital project and a group of leading experts (Steering Group).

References

- Government Offices of Sweden (2017a), “For a sustainable digital transformation in Sweden: A Digital Strategy”, Factsheet, N2017/03643/D, Ministry of Innovation and Enterprise, June, www.government.se/49c292/contentassets/117aec2b9bf44d758564506c2d99e825/2017_digitaliseringsstrategin_faktablad_eng_webb-2.pdf (accessed 22 April 2018).
- Government Offices of Sweden (2017b), *Budgetpropositionen för 2018* (in Swedish), Prop. 2017/18:1, Government Offices of Sweden, Stockholm, www.regeringen.se/rattsdokument/proposition/2017/09/prop.-2017181 (accessed 22 April 2018).
- Government Offices of Sweden (2017c), *Digitalforvaltning.nu* (in Swedish), SOU 2017:23, Government Offices of Sweden, Stockholm, www.regeringen.se/4948a6/contentassets/b1285825f50548eb83e23667b5130bc2/digitalforvaltning.nu-sou-201723 (accessed 22 April 2018).
- Government Offices of Sweden (2017d), “Inrättande av en myndighet för digitalisering av den offentliga sektorn” (in Swedish), Dir. 2017:117, Government Offices of Sweden, Stockholm, www.regeringen.se/4ae5ed/contentassets/ca8f6b4f3d5d4e09a518430b7e988ae8/inrattande-av-en-myndighet-for-digitalisering-av-den-offentliga-sektorn-dir.-2017117-.pdf (accessed 22 April 2018).
- Government Offices of Sweden (2017e), “Budget Bill for 2018: Building our society – investing for the future”, Government Offices of Sweden, www.government.se/press-releases/2017/09/budget-bill-for-2018-building-our-society--investing-for-the-future (accessed 23 March 2018).
- Government Offices of Sweden (2017f), “From the Budget Bill for 2018: Budget statement”, Government Offices of Sweden, <https://www.government.se/information-material/2017/09/from-the-budget-bill-for-2018-budget-statement>.
- Government Offices of Sweden (2016), “Smart industry: A strategy for new industrialisation for Sweden”, N2016.06, Ministry of Enterprise and Innovation, www.government.se/498615/contentassets/3be3b6421c034b038dae4a7ad75f2f54/nist_statsformat_160420_eng_webb.pdf (accessed 22 April 2018).
- NAO (2017), “World class broadband? The government’s measures to achieve the broadband policy objective”, Swedish National Audit Office, Stockholm, <https://www.riksrevisionen.se/en/Start/publications/Reports/EFF/2017/World-class-broadband---The-Governments-measures-to-achieve-the-broadband-policy-objective/> (accessed 20 November 2017).
- OECD (2018), “Going digital in a multilateral world: An interim report to ministers”, OECD, Paris, www.oecd.org/mcm/documents/C-MIN-2018-6-EN.pdf.
- OECD (2017a), *Economic Policy Reforms 2017: Going for Growth*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/growth-2017-en>.
- OECD (2017b), *OECD Digital Economy Outlook 2017*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264276284-en>.



From:
OECD Reviews of Digital Transformation: Going Digital in Sweden

Access the complete publication at:
<https://doi.org/10.1787/9789264302259-en>

Please cite this chapter as:

OECD (2018), "Policy recommendations", in *OECD Reviews of Digital Transformation: Going Digital in Sweden*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264302259-8-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.