

# **The COVID-19 crisis creates an opportunity to step up digitalisation among subnational governments**

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Recent decades have seen rapid growth of advanced digital technologies, including high-speed computing, big data, artificial intelligence, the internet-of-things and blockchain. This “digital revolution” creates significant opportunities for all levels of government to improve the delivery of public goods and services, and to raise more and better revenue.

This is particularly important in the context of the COVID-19 crisis. Fighting a pandemic while minimising the associated economic costs calls for appropriate digital infrastructure for the design and enforcement of containment measures, as well as to ensure access by the population and enterprises to critical government services. After all, subnational governments (SNGs) account for about 40% of government spending on average in OECD countries; they also play an important role in the delivery of key services that are at the heart of the policy actions being taken to slow the spread of the pandemic, including on health care and social protection.

Much of the literature has focused so far on the scope for advanced digitalisation at the central/federal level of

government. In a recent OECD paper, de Mello and Ter-Minassian (2020) focus on the opportunities and challenges that digitalisation creates for SNGs.

Advanced digital technologies can help improve the quality and efficiency of subnational programmes. Geographic information systems (GIS) are being used to identify potential environmental and health risks, which is important when it comes to controlling the spread of a pandemic and avoiding its recurrence. Of particular interest is the use of sensors, to control road and railway traffic, maintain regional or local infrastructure, and monitor water and sanitation usage, just to cite a few. Digital portals facilitate SNGs' communication with their populations and the delivery of certain public services, and well-designed information systems can strengthen all aspects of subnational public financial management, and facilitate subnational transparency and accountability.

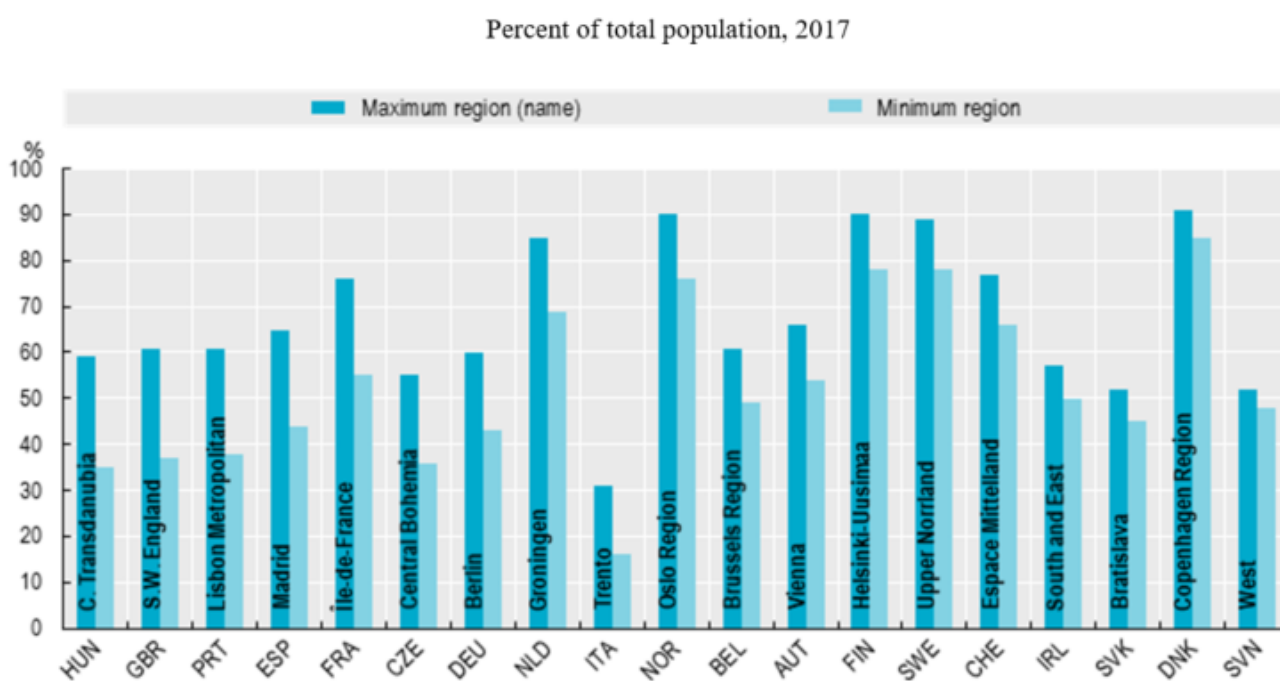
At the same time, regional and local governments are having to operate digitally in periods of confinement and to broaden the range of services provided on-line to the population, including in some cases in the area of e-health. The case of testing, tracing and tracking through digital devices to contain the spread of COVID-19 is a case in point, where the local governments are in many cases actively involved in these efforts, and privacy/confidentiality concerns are prompting important debates among policymakers.

Digitalisation can also help to improve both shared and own subnational revenues. This is particularly important to prepare governments to restore the sustainability of the public finances, once the post-COVID-19 recovery has been firmly established. Especially promising are possibilities to introduce, or strengthen, the enforcement of consumption

taxes, regional personal income taxes (PITs), or regional surcharges on national PITs; make more efficient and equitable the administration of local property taxes; and better utilise user fees for local services.

Digitalisation, however, also poses significant challenges for SNGs, whose capacities to deal with such challenges vary widely both across and within countries (see Figure). The most important constraint in many SNGs is likely to be the scarcity of requisite skills, not only in government leadership and bureaucracy, but also across the population at large. Lack of skills breeds, in turn, distrust and resistance to digitalisation.

**Figure. Regional variation in population using the Internet for public services**



Source: OECD (2018), *Regions at a Glance*.

Other significant constraints can be posed by inadequate physical infrastructure and financial resources to improve it. Less recognized, but also important, can be legal or

regulatory constraints. Tackling cyber security risks, and adequately addressing citizen's privacy concerns constitute further significant challenges.

These challenges in SNG digitalisation highlight the need for a well-structured overall strategy beginning with a stocktaking of the initial state of, and main obstacles to, digitalisation. Within these constraints, SNGs need to define priorities (e.g. which public services should be digitalised first); identify needs for legal and organisational supporting changes; define responsibilities for different tasks; set up realistic timetables for implementation; appropriate the necessary budgetary resources, and procure any needed skills and materials; and closely monitor the implementation of the strategy.

Early involvement of main stakeholders and clear communication to the public at large of expected results, are essential for securing citizens' support for the digitalisation effort.

Moreover, co-operation among and within different levels of government can play a significant role in supporting effective and efficient digitalisation of SNGs. The case for support by national government is made more compelling by the fact that different SNGs are differently equipped to meet the challenges of digitalisation. Smaller and poorer urban, and especially remote, rural communities are more likely to suffer from skill shortages, limited connectivity and scarcity of budgetary resources.

Policy innovation is another important area for inter-governmental co-operation in the digital sphere, with considerable potential for SNGs to launch pilot programmes

that can be tested and subsequently taken up by other same-level jurisdictions and/or up-scaled to other levels of administration through gradual experimentation. The pandemic is actually triggering a lot of promising innovation by SNGs that can do much to improve their preparedness to deal with future crises.

National governments can support subnational digitalisation efforts. This can be achieved in particular through appropriate reforms to intergovernmental fiscal relation systems, including the assignment of own tax bases to SNGs; greater clarity in the assignment of expenditure responsibilities, and the implementation of equalization transfers; by giving adequate weight to regional digital inclusion in public investment choices; by defining appropriate nation-wide standards to facilitate seamless interfaces among the national and subnational digital systems; and through technical assistance and training of subnational officials.

There is also significant scope for horizontal co-operation among SNGs. Peer support can include demonstration effects, technical assistance and joint training of officials, as well as effective interfaces among subnational digital systems in areas of common interest. Dedicated forums for inter-regional and inter-municipal dialogue on digitalisation issues, possibly under the umbrella of broader horizontal co-operation forums, can be instrumental in facilitating both the exchange of experiences and consensus building on common digitalisation issues.

The COVID-19 crisis provides an opportunity to step up the digital transformation of SNGs given the need to act steadfastly during the ongoing containment phase but also in

preparation for the post-crisis recovery. The lessons that are emerging from the current experience, if put to good use, can do much to make SNGs better equipped to cope with future crises.

## **Reference**

de Mello, L. and T. Ter-Minassian (2020), "[Digitalisation Challenges and Opportunities for Subnational Governments](#)", OECD Working Papers on Fiscal Federalism, No. 31, OECD, Paris.