

# A decade and a half of OECD action on data governance policy-making<sup>(1)</sup>

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The OECD has long recognized the need to better understand how to reconcile the risks and benefits of data access and sharing to help governments reap the benefits of data-driven innovation. To guide policy-making, the OECD has produced over the last decade and a half a significant body of analytical work and legal instruments setting out principles and best practices to address sector- or domain-specific challenges in the governance of data. These Recommendations include: the Recommendation concerning Access to Research Data from Public Funding<sup>(2)</sup>; the Recommendation for Enhanced Access and More Effective Use of Public Sector Information<sup>(3)</sup>; and the Recommendation on Health Data Governance<sup>(4)</sup>. In what appears to be the latest strong demonstration of its commitment to the issue, the OECD Council adopted in 2021, the Recommendation on Enhancing Access to and Sharing of Data (EASD Recommendation)<sup>(5)</sup>. Differently from the preceding ones, the EASD Recommendation provides an overarching set of principles and policy guidance to help governments reconcile potential risks and benefits and unlock the re-use of all types of data across and within sectors, jurisdictions, organisations, and communities. The aim of this paper is to put in context this significant body of work and set out the main policy issues addressed by these OECD Recommendations.

## Why Enhance Access and Sharing of Data?

In a world where the effective use of data can help boost productivity and improve or foster new products, processes, services and markets, the ability to access and share data, regardless of geography, has become crucial for securing economic growth and prosperity. Overall, the OECD has estimated that data sharing and re-use can "generate social and economic benefits worth between 0.1% and 1.5% of gross domestic product (GDP), in the case of public-sector data, and between 1% and 2.5% of GDP when also including private-sector data" (OECD, 2019a). Enhancing the

sharing of data can also contribute towards societal objectives, help advance the sustainable development goals agenda, transparency and accountability of governments and further democracy.

At the same time there are risks associated with data access and sharing. Data breaches, may violate the privacy of individuals when their personal data is involved and harm the commercial and noncommercial interests of organisations (e.g., through the infringement of intellectual property rights). These risks may make individuals, businesses, and governments reluctant to share data. For example, some individuals may object to their data being re-used due to confidentiality concerns, even if they are aware of the social benefits that such re-use could deliver.

The Covid-19 pandemic has underscored the importance of data sharing. It has also highlighted how trust or the lack thereof can play a significant role in people's willingness to provide their data especially when that data involves their health and other sensitive information as their whereabouts (OECD, 2020a; OECD, 2020b).

Smart, privacy-protective, re-use of health data can, however, improve the safety and quality of care, support better informed health system stewardship and policy making. It can also assist researchers to

<sup>(1)</sup> The opinions expressed and arguments employed in this article are those of the authors and should not be considered or reported as representing the official views of the OECD or of its member countries.

<sup>(2)</sup> See: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0347>

<sup>(3)</sup> See: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0362>

<sup>(4)</sup> See: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0433>

<sup>(5)</sup> See: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0463>

develop safer and better treatments, and enable more effective disease prevention and public health, resulting in healthier and more productive populations. Yet, health systems remain “data rich but information poor” (OECD, 2019b).

There is arguably no other sector that generates quite as much data and, at the same time, fails to re-use it in effective, useful ways.

There are a range of other factors that can contribute to data under-utilization. Recent OECD reports have highlighted how the legitimate concerns of individuals and organisations may be further compounded by uncertainty in the implementation of laws and policies to protect privacy and to reduce the potential misuse of personal information (OECD, 2019a; OECD, 2019b; OECD, 2021a). Moreover, ensuring that data are handled responsibly and ethically and beyond mere legal compliance is a new challenge for businesses, for the public sector, and society as a whole.

Other barriers may be related to skills. Lack of data-related skills and competences and poor access to computation and storage capacities, for instance, can become bottlenecks preventing the effective re-use of data, even where data are made available via open access (Johnson, 2017). The scale and urgency of the challenge of building digital capacity for data-intensive research appears to be widely under-estimated. Policy initiatives tend to be ad hoc and short-term, with few examples of thorough needs assessments and longer-term strategic initiatives or structural changes to address identified gaps (OECD, 2021b).

Investment can also play an important role. Substantial investments are often required for data cleaning and data curation and for information technology infrastructures to ensure secure data storage, processing, and access. The overall total up-front costs and spending for maintenance can also be very high. The inability to secure returns on these investments can therefore disincentive data sharing.

Finally, one of the most frequently cited barriers to data sharing and re-use is the lack of common standards, or the proliferation of incompatible standards. For example, inconsistent data formats are impediments to the creation of longitudinal data sets, as changes in measurement and collection practices make it hard to compare and aggregate data. This problem is often compounded by the lack of a shared understanding of what quality means in the context of data. Some authors have argued that data quality should be considered a key determinant of trust for data sharing (Sposito, 2017).

Although particularly acute in the health sector (OECD, 2019b), these challenges affect data re-use in all sectors of our economies. Despite the growing need for data and evidence of the economic and social benefits across sectors, including benefits for governments, data access and sharing remains below its potential. Notably, data sharing between companies and with the public sector has not taken off at sufficient scale.

In addition, policy action to promote access to and sharing of data has been uneven at best (OECD, 2019b).

## Establishing international consensus on data governance

The OECD has responded directly to these challenges. With its work the organization has influenced and even defined since 2006 data governance policies in OECD countries.

The OECD Recommendation on Access to Research Data from Public Funding (OECD, 2007) (Recommendation on Research Data) represented an important first step in multilateral efforts to create the conditions for opening up access to data in the field of science, technology and innovation (STI).

A review by the OECD in 2009 showed many positive impacts of this recommendation, notably the advancement of science through an accelerated research process, the emergence and development of new avenues of research beyond the initial context in which the data were collected and improved research quality (OECD, 2009). The review however also revealed the need to continue to monitor new developments in the field of STI, which led to the revision of the Recommendation in January 2021.

The Recommendation on Research Data served as inspiration for a host of subsequent multilateral and national policy instruments, including the 2012 European Commission’s Recommendation on access to and preservation of scientific information 2012/417/EU, replaced in 2018 by Recommendation (EU) 2018/790<sup>(6)</sup> and UNESCO’s Policy Guidelines for the Development and Promotion of Open Access (UNESCO, 2012), also issued in 2012.

Ten years later, work by the OECD on establishing international consensus about the framework conditions within which health data can be appropriately governed culminated with the 2016 Recommendation on Health Data Governance. OECD Health Ministers welcomed this Recommendation at their meeting in Paris on 17 January 2017<sup>(7)</sup>, along with a request that the OECD undertake further work to support OECD Member and non-Members to further build capacity in this important area. The Recommendation on Health Data Governance applies to the access to, and the processing of, personal health data for health-related public interest purposes, such as improving health care quality, managing health care resources efficiently, contributing to the progress of science and medicine.

The Recommendation on Health Data Governance has provided important guidance to governments during the global COVID-19 pandemic. At the same time the

<sup>(6)</sup> See: Commission Recommendation (EU) 2018/ 790 – Of 25 April 2018 – On access to and preservation of scientific information (europa.eu).

<sup>(7)</sup> See: <https://www.oecd.org/health/ministerial/ministerial-statement-2017.pdf>

pandemic shone a spotlight on the capacity of each countries' health information systems to provide critical information for the public welfare; as well as on aspects of data governance that created obstacles to responding to the pandemic in a timely way (OECD, 2020a).

It particularly underlined the significant need for cross-sectoral re-use of data giving new impetus and direction to OECD's work on the EASD Recommendation. A clear illustration is how during the pandemic digital solutions based on geolocation data emerged as critical tools to help authorities monitor and contain the spread of the virus. Anonymized mobile call data records (CDRs), which provide valuable insights into population movements and are gathered by telecommunications service providers, were shared with governments and re-used to monitor and control the spread of COVID-19 (OECD, 2020c).

## Principles and good practice for promoting cross-sectoral reuse of data

The ambitious objective that the OECD has set out to achieve with the EASD Recommendation [OECD/LEGAL/0463] is to facilitate collaboration and the harnessing of all types of new and existing data sources; and to foster innovation across the private and public sectors while protecting the legitimate rights of individuals and organisations. Its development therefore required a co-operative, interdisciplinary and inclusive process involving three OECD Committees: the Committee on Digital Economy Policy (CDEP), the Committee for Scientific and Technological Policy (CSTP), and the Public Governance Committee (PGC). A Joint Steering Group (JSG) of experts was formed to support the work comprising more than ninety experts, including representatives from over thirty OECD Member and partner economies as well as Business at OECD (Business and Industry Advisory Committee, BIAC), the Trade Union Advisory Committee (TUAC), the Civil Society Information Society Advisory Council (CSISAC), and the Internet Technical Advisory Committee (ITAC). In addition, a targeted stakeholder consultation on the Recommendation in draft form was undertaken in February 2021 to seek additional input from major stakeholders in the data ecosystem as well as from academics, whose participation in the JSG was relatively limited.

The Recommendation is divided into three overall sections, covering a total of seven themes:

Section 1 – On "Reinforcing Trust across the Data Ecosystem" deals with: empowering and pro-actively engaging all relevant stakeholders alongside broader efforts to increase the trustworthiness of the data ecosystem; adopting a strategic whole-of-government approach to data access and sharing; and maximising the benefits of data access and sharing, while protecting individuals' and organisations' rights and taking into account other legitimate interests and objectives alongside broader efforts to promote and enable a culture of responsibility for data governance.

Section 2 – On "Stimulating Investment in Data and Incentivising Data Access and Sharing" focusses on: providing coherent incentive mechanisms and promoting conditions for the development and adoption of sustainable business models and markets for data access and sharing;

Section 3 – On "Fostering Effective and Responsible Data Access, Sharing, and Use across Society" deals with: further improving conditions for cross-border data access and sharing with trust; fostering the findability, accessibility, interoperability and reusability of data across organisations, including within and across the public and private sectors; and enhancing the capacity of all stakeholders to effectively use data responsibly along the data value cycle.

In addition to governments, to whom the EASD Recommendation is addressed directly, the Recommendation also encourages data holders, data producers, data intermediaries, and other relevant stakeholders in the data ecosystem to implement or, as appropriate according to their role, support and promote the implementation of this Recommendation.

To help governments and stakeholders in their implementation efforts, the OECD is currently developing a Companion Document to the Recommendation, including guidance on responsible data governance for data access and sharing in the public and private sectors. The Companion Document will provide further clarity on the scope of the Recommendation and it will explain the key concepts that are fundamental for a deep understanding and the effective implementation of the EASD Recommendation. Most importantly, the Companion Document will present country examples on how specific provisions of the EASD Recommendation can be implemented.

A number of governments have already successfully used the EASD Recommendation for the development on their data governance policies. At the High-Level Launch of the Recommendation, held on 10 December 2021 in collaboration with the Danish Business Authority,<sup>(8)</sup> high-level representatives from the European Commission, Brazil, Norway and Sweden presented their recently adopted policy initiatives on data access and sharing, as a testimony on the role that the EASD Recommendation already had in their policy making. These included in particular the (proposed) EU Data Governance Act (DGA) approved on April 2022 by the European Parliament, which aims to expand the range of public sector data accessible for re-use and create a framework to facilitate data-sharing across the EU (European Commission, 2020); Norway's Data Policy Strategy which articulates national principles for sharing and (re)using data and introduces new approaches to facilitate data sharing such as data factories and regulatory sandboxes; (Norwegian Government, 2021) and Sweden's Data Strategy for Increased Access to Data for AI and Digital innovation, which aims to enhance access and reuse of public sector data, foster sharing and reuse

<sup>(8)</sup> See [www.oecd.org/digital/ieconomy/easd-recommendation-launch-agenda.pdf](http://www.oecd.org/digital/ieconomy/easd-recommendation-launch-agenda.pdf)



of data across the private sector, and businesses and across industries for a responsible, ethical and fair data economy (Swedish Government, 2021).

A clear trend can be observed towards National Data Strategies (NDaS) that help address data governance issues in a comprehensive manner that incorporate a whole-of-government perspective as called for by the Recommendation. NDaS can be instrumental in creating the conditions for effective data governance frameworks to better protect the rights of individuals and organisations, while providing the flexibility needed for all to benefit from data access and sharing. This is why the OECD is currently assessing the potential of NDaS in the context of Phase III of its Going Digital Horizontal Project on Data Governance for Growth and Well-Being, its flagship project that aims to support governments in their efforts to develop, revise or implement coherent data governance policies across sectors and jurisdictions.

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