2023

RESPONSIBLY UNLOCKING THE VALUE OF DATA IN EUROPE

TRENDS AND INSIGHTS

DATASPHERE GLOBAL DIALOGUES
ABOUT THE DATASPHERE INITIATIVE

The Datasphere Initiative is a not-for-profit fostering a holistic and innovative approach to data governance. By cultivating dialogue and connecting communities, the Datasphere Initiative connects sectoral silos and people to build a collaboratively governed Datasphere and responsibly unlock the value of data for all.

For more information, visit www.thedatasphere.org or contact info@thedatasphere.org.

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EXECUTIVE SUMMARY

As part of the DataspHERE Initiative's European Dialogues' project, this report lays out some of the main trends, priorities, challenges, emerging barriers, good practices and recommendations to responsibly unlock the value of data for all in Europe.

Based on a desk research and semi-structured interviews with key stakeholders in Europe, the report analyzes regulatory efforts led by the European Commission, selected European Union (EU) member states, the UK and Switzerland.

As European efforts to design data policies are ongoing and evolving, this report offers a snapshot of some key reflections on how the European Union and non-EU member states are approaching data governance. While non-exhaustive, the report attempts to analyze some key trends and offer insights on how approaches to data are having an extraterritorial impact and contributing to the region's ability to responsibly unlock the value of data for all.

The report's key findings and trends can be synthesized into three headings:

1. Data and responsibility
   A European rights-based approach seeks to enhance citizen trust

   Europe's priorities for data governance have revolved around protecting constitutional rights and freedoms, promoting human-centricity and sovereignty, and the use of data for public good. In order to build trustworthy spaces, new normative trends in Europe place more emphasis on bottom-up approaches and the importance of collective rights and impacts. Positive or negative impacts of certain data uses might not be easily detected at an individual level, but might become evident at the collective level, which means that collective identities and societal dynamics are fundamental for data analysis and governance efforts. The collective approach is an upcoming challenge for the region.

   Unlike other countries and regions where human rights' debates have focused on freedom of expression, Europe and particularly the EU is known for pushing for a regional legislative agenda mainly focused on a human rights-approach that highlights privacy.

   A human-centric view centered on fairness, democracy, greenness and inclusivity provides the foundation for Europe's regulation efforts in this space.

   In general, European data governance efforts have sought to enhance trust by supporting new institutions such as stewards and data spaces where data can be collectively governed and shared.

   The normative instruments that are being issued to protect personal and non-personal data have raised the standards when it comes to privacy protection and the sharing and use of data across borders.
Another challenge for Europe is the need to create new incentives to encourage innovation, supporting digital transformation and competitiveness goals. Europe – as the rest of the world – needs to find a balance and avoid over-regulation in order for the data governance frameworks not to stop innovation or discourage cooperation and data flows. By leveraging data for digital transformation and creating incentives for data sharing, industries can create new products and services. Future initiatives (e.g. norms, technology, model contracts, procurement, self-regulation and voluntary frameworks etc.) should create the appropriate incentives and thus contribute to responsibly unlocking the value of data for all.

Europe needs to create frameworks and infrastructures for data spaces to be connected and compatible to enable cross-border and cross-sectoral data flows.

In its effort to enable economic competitiveness, Europe has also favored data localization requirements and other means to ensure that the economic value of data remains within Europe.

Led by countries in the EU, the narrative in Europe is considerably focused on privacy, data protection and confidentiality, and less so on data sharing, opportunities for innovation or the potential to provide new services for society.

While facilitating data sharing within the EU, some frameworks – such as the DGA – will potentially increase transaction costs for organizations outside the EU, and not only for personal data.

European (and global) data governance efforts have developed in a fragmented and siloed manner. The increasing number of sector-specific norms contribute to that. Overcoming this fragmentation and mapping existing platforms, overlaps and gaps is necessary to build a common framework that ensures data interoperability and sharing. Additionally, multistakeholder engagement, especially engaging practitioners and innovators, and international cooperation are key to create a common language around data governance, protect human rights and also promote global competitiveness and data usage for innovation. International cooperation and dialogue should seek to find convergence between actors’ priorities and values, and develop models that work for different contexts and needs.
The challenge for Europe is to dialogue with other international players and find convergences between each country's/region's values and priorities.

Europe – as other regions of the world – faces the challenge to strengthen the regional and national governance mechanisms to ensure trust, while allowing for experimentation and cross- and multi-sector data sharing and use by both public and private players.

The fundamental challenge for Europe is hence to fully engage at the global level to ensure that the European model is indeed replicable and scalable.

A global vision and strategy is needed to make sure that European data governance frameworks unlock the value of data for all.

Overall, this report ventures into the ongoing European data governance efforts. As a trailblazer of human rights and data protection, Europe has done a good job at marketing its approach to data governance. Nonetheless, the task is still unfinished, and the report's findings hint to the difficulties of implementing governance frameworks. Now that there is more awareness about the societal harms and challenges of governing data in the region, the challenge now is to translate risks into opportunity by designing governance models that can effectively target these issues and responsibly unlock the value of data for all.
Balancing the opportunities and challenges of leveraging data for society

Data is transversal to all economic and social sectors, underpinning practically all activities. Most importantly, data is paramount both to inform decisions – be them individual decisions and the ones relevant to address major global challenges –, and also to generate socio-economic wealth. While the centrality of data in decision-making processes and for value creation has been increasingly recognized, different actors across the globe are still grappling with a common challenge: how do we govern data in a way that responsibly unlocks its value for all. How we answer this question will not only impact if we manage to build more equitable and inclusive digital societies, but also how we do it.

It is clear that the novelty and importance of data and its governance calls for a more sophisticated conceptual framing, since none of the existing terms to refer to the digital world – e.g., the cyberspace¹ or the metaverse – properly addresses the complexity surrounding data on multiple levels. The concept of datasphere helps approach digital data in a more holistic manner, defining it as the complex system encompassing all types of data and their dynamic interactions with human groups and norms.² In the paper “Hello Datasphere”, the Datasphere Initiative explores different concepts and policy and institutional arrangements that are formative to this new all encompassing narrative proposal.³

The concept of the datasphere proposes to adopt a systemic approach to understand the interacting subsystems at different levels of complexity.⁴ This approach allows the examination of the complex interdependencies between different stakeholders, technologies, norms, events, incentives and factors. The datasphere systems approach puts forward the idea that policies and positions developed – particularly with regards to data governance – need to assess their impacts when considering scalability to avoid various potential chilling effects to others and themselves. In addition to a lack of conceptual and operational framings to capture the complexity of data governance, the question of how to unlock the value of data is currently being asked in a rather tense geopolitical setting. Underlying this debate is the tension between free flow of data – the technical default of the Internet – and data sovereignty – a concept still loosely defined and used to achieve different socioeconomic objectives.⁵

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As a reaction to this pull in opposing directions, countries are thus adopting different approaches. Some, adopting legislations that enable free flow of data; others putting more emphasis on the protection of privacy and other fundamental rights; while others are furthering localization measures and bustling market protectionism strategies. Furthermore, multilateral organizations (e.g. UN agencies, OECD, WTO) and other economic blocks (e.g. G7 and G20) or multilateral arrangements via trade agreements (e.g. African Regional Trade Agreement and ASEAN) are pushing for sets of values and narratives that are supportive to their views and needs to foster regional data economies.

The result is a proliferation of policies, frameworks, standards, tools and methods, deepening a patchwork of community and normative silos that only increase barriers for cooperation that unlocks the value of data for all. The lack of awareness of such complexity and perhaps of a systematic alignment of solutions – be them materialized through legislations, frameworks, standards or tools – is a detriment not only to all economic sectors, but to our capacity as humankind to address the most pressing cross-border challenges of our times (from climate change to epidemics).

It is clear that most countries are not only facing this rising tension, but also struggling to define their paths and approaches to reach the global common goal of unlocking the value of data for all. That is why, in an effort to catalyze knowledge and collaboration, the DataspHERE Initiative is organizing a set of regional research efforts and consultations to uncover and connect data narratives, innovations, and expertise across countries and sectors.

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This report – part of the Datasphere Regional Dialogues in Europe – briefly analyzes recent and upcoming policies of select countries across the continent and, in particular, trends from the European Union, to contribute to the understanding of the complexities we now face. It is based on desk-research as well as inputs from interviews conducted with stakeholders in mid-2022 working on and impacted by data policy and practices across the region.

It explores the newest – and still under consolidation – European approaches to data governance (especially around non-personal data),¹⁴ the existing tensions and some potential impacts that such approaches may have in Europe and across the globe. It approaches Europe not only from a European Union perspective, but also by venturing into specific cases of study and highlighting insights and trends from the United Kingdom and Switzerland. The report also considers the potential extra-territorial impacts of European policymaking and provides an analysis of the approach policymakers in Europe are taking to unlock the value of data while responsibly managing the risks.

The report is structured in four main parts. The first three, which derive from the Datasphere Initiative’s mission to responsibly unlock the value of data for all, and a final concluding part:

1. **Data and Responsibility**
   - The first part dives deeper into data and responsibility, and the different rights that the European approaches have strived to protect.

2. **Data and Value**
   - The second part ventures into the socio-economic value that can be derived from data, and its potential to drive innovation and enable economic competitiveness.

3. **Data for All**
   - The third part reflects on the extent to which Europe is unlocking the value of data for all. It addresses the tensions existing within Europe and outside of the region, as well as its potential to become a global norm-setter and support data governance convergence internationally.

4. **The Road Ahead**
   - The final section concludes by sharing additional questions and posing some reflections for the future.

¹⁴We purposefully do not go deep into GDPR analysis, but interested parties should consider such a norm as one of the elements that make the complexity of the data governance field.
1
DATA AND RESPONSIBILITY
THE EUROPEAN RIGHTS-BASED APPROACH: THE QUEST TO ENHANCE CITIZEN TRUST

Europe has put human rights and values at the center of its governance efforts

Nowadays, more and more individuals in Europe are aware of their rights and are concerned about how their data is being processed and used. In fact, concerns around human rights violations, especially discrimination, and surveillance through contact tracing, facial recognition and other digital identity tools are among the data uses that European citizens are particularly vulnerable to.¹⁵ For instance, all European countries – except Bosnia and Herzegovina – implemented contact tracing apps during the covid-19 pandemic,¹⁶ which raised citizens' awareness and concerns around their privacy and data protection.¹⁷ Regulatory efforts in the region have hence started placing more emphasis on ensuring the protection of constitutional rights and freedoms, and privacy in particular.

Unlike other countries and regions where human rights’ debates have focused on freedom of expression,¹⁸ Europe is known for pushing for a regional legislative agenda mainly focused on a human rights-approach that highlights privacy. Since the 80s, the European Union¹⁹ has put forward regional legal instruments that sought to protect fundamental rights, concretely privacy by protecting personal data. More recently, regulations have ranged from the EU Charter of Fundamental Rights to the European Union General Data Protection Regulation (GDPR),²⁰ the Digital Content Directive (DCD),²¹ and the Digital Service Act Package²² on platform regulation.


¹⁶By August 26, 2020, all European countries, except Bosnia and Herzegovina had implemented limited or comprehensive contact tracing in their territories. Our World in Data (2023). Which countries do COVID-19 contact-tracing? https://ourworldindata.org/grapher/covid-contact-tracing?time=2021-11-06&region=Europe

¹⁷Andrin Eichin, Senior Policy Advisor, International Relations, at the Swiss Federal Office of Communication (OFCOM).


¹⁹Individual countries have had privacy legislation before the 80s, but the focus here is in the actions of the EU as a block. Shaw, T. (2013). Privacy Law and History: WWII-Forward. The Privacy Advisor. https://iapp.org/news/a/2013-03-01-privacy-law-and-history-wwii-forward/


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For instance, European developments have pushed forward the *right to be forgotten* or the right to erasure, as the right to have data removed from the Internet under some circumstances. In sum, these frameworks have aimed to protect privacy as a fundamental right based on the protection of personal data and privacy protecting mechanisms.

Germany was the first EU country to issue a national law implementing the GDPR: the 2017 Federal Data Protection Act (“BDSG”). It later issued modifications and complementary regulations to support this law's implementation and enforcement. Germany pioneered the model of “data protection officers”, which are private bodies that employ around 20 people to deal with the “automated processing of personal data”. Likewise, the German Data Protection Conference (“DSK”) is a working group that represents the Federal Commissioner for Data Protection and Freedom of Information (“BfDI”) as well as Germany before the European Data Protection Board (“EDPB”). On an ongoing basis, the BfDI publishes recommendations and guidelines on how to implement the GDPR and national German laws to enhance privacy and data protection.

In furthering their normative actions in regard to data, the European Commission launched the 2020 European Strategy for Data, and soon after to promote in practice the concept of Common European Data Spaces, in November 2021, it adopted two supporting documents: the Recommendation on a Common European Data Space for Cultural Heritage and the Digital Europe Work Programme 2021-2022, and more recently proposed the European Health Data Space (EHDS), which promotes secondary uses of health data.

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²³ https://gdpr.eu/
²⁶ https://www.datenschutzkonferenz-online.de/
²⁷ https://www.bfdi.bund.de/DE/Home/home_node.html
²⁸ https://edpb.europa.eu/
Other relevant initiatives that complement the European rights-based approach include: Regulation on the free flow of non-personal data (FFD),³³ the Cybersecurity Act (CSA),³⁴ and the Open Data Directive.³⁵ Additionally, sector-specific legislation on data governance have also been adopted in some fields such as automotive, payment service providers, smart metering information, electricity network data, and intelligent transport systems.³⁶

Europe has thus played a central role in promoting the human rights’ agenda and narrative at various levels and sectors of the European economy. From the perspective of responsibility, it has first and foremost adopted a rights-based approach centered in the protection of privacy as a core human right.

The main European data governance efforts revolve around the protection of privacy, the person, security and other individual rights. In fact, all interviewees consulted in this research underlined the sustained relevance of the GDPR in framing the European approach to data governance beyond personal data and thus the region’s values and priorities.

"The EU has a role to play when it comes to bringing forward European values and therefore human rights. There is a lot of potential and it’s interesting to see what Europe is doing in that field (leading the field in that sense: digital rights and data governance issues that are not corporate or state-led, but informed by European values, human rights, and base level of governance and governments)."

Paola Pierri, Senior Research Associate at Luzern University of Applied Science (Germany).

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Europe has pushed for human-centricity and sovereignty while regulating data

To further advance the European Data Strategy, two core Acts were proposed and consulted on: the Data Governance Act (DGA)³⁷ and the Data Act (DA).³⁸ Both the DGA and the DA materialize the European human-centric perspective. The Data Governance Act,³⁹ adopted on May 30, 2022 (and expected to come into effect at the end of 2023), is a horizontal framework for data sharing that covers both personal and non-personal data. Both proposals received large multi-stakeholder input via official open consultations, with the most recent being launched on the Data Act from 14 March to 11 May 2022.⁴⁰ The purpose of the consultations was to support a better understanding of the actors involved in and impacted by the data economy, and fine tune the proposed regulations based on the realities of how various sectors of the economy create, interact, impact and are impacted by data and its management and governance processes.

A human-centric view centered on fairness, democracy, greenness and inclusivity provides the foundation for Europe’s regulation efforts in this space. This human-centered approach implies that digital transformation is not seen as an end in itself, but rather as a means for individual and collective development, and for those to draw benefits from the data economy. It also demands that a people-first and rights-first approach are employed in developing technology, as well as in how organizations design, make and deploy technology in the real economy. Digital inclusion and digital skills development have been promoted as part of this human-centric approach.

For instance, the European Commission has proposed a Digital Europe Programme.⁴¹ While the Commission has not provided details, a portion of this initiative will fund specialized programs for advanced digital skills and traineeships in data, AI, cybersecurity, quantum, and supercomputing. Countries such as France promoted the adoption of a human-centric plan for digital inclusion⁴² in its national plan for digital inclusion, which aims to support the digital transformation of businesses, while developing a “safe and human-centric” digital society in France.

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The plan focuses on achieving digital inclusion in France, and enabling citizens with basic digital skills. Other initiatives have promoted similar goals, such as the national cloud strategy⁴³ and the French Artificial Intelligence (AI) strategy.⁴⁴

In addition to human-centricity, sovereignty is also a central lens to Europe's narrative on data governance.

Sovereignty⁴⁵ in this context is related to strengthening independence and resilience in digital infrastructures and services. However, extensive debates and discussions whirl around this concept: while some advocate for greater data sharing and/or access, others believe that Europe's strive for sovereignty, especially materialized in some of the recent judicial decisions, has accelerated the region's slide towards a “de facto data localization regime”.⁴⁶ Both the DGA and the DA received inputs from consultations with stakeholders across the region, materializing the importance that the EU has given to human-centricity and sovereignty.

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⁴⁵Proposed definitions of sovereignty – which is also related to concepts such as data sovereignty, digital sovereignty and even territorial-based sovereignty – are as numerous as the objectives the term is supposed to achieve. For some, the term represents “a dangerous justification for increased (state) surveillance or protectionism and even bringing a risk of fragmentation of the internet itself.” Others see sovereignty as “a positive step toward individual self-determination and the empowerment of users in the digital realm”, where bottom-up and participatory approaches are usually perceived as key. Read more on: De La Chapelle, B. & Porciuncula, L. (2021). We Need to Talk About Data: Framing the Debate Around Free Flow of Data and Data Sovereignty. Internet and Jurisdiction Policy Network. https://www.thedatasphere.org/datasphere-publish/we-need-to-talk-about-data/


Europe strategy fosters new institutional arrangements

One interesting development in the DGA is its recognition of “data cooperatives” as intermediary services, albeit with a definition limited to membership structures for “data subjects, one-person undertakings, or small and medium-sized enterprises (SMEs)”, for the purpose of managing their rights regarding the processing of their personal or non-personal data by third parties. This can empower individuals and SMEs to better negotiate terms before consenting that large corporations access and use their data. The DGA thus paves the way for the development of data stewardship models⁴⁷ rooted in the collective exercise of users’ rights. But it stops short of framing a larger understanding of data cooperatives aimed at sharing data within a group of participants and some terminology confusion may arise around the term as a consequence.

Additionally, the DGA defines the rules for data intermediation services,⁴⁸ which are a fundamental institutional framework for future data sharing, to ensure that they will function as “trustworthy organizers of data sharing”. With these new rules, the DGA effectively aligns⁴⁹ its international transfer regime of non-personal data with the one of personal data initially defined by the GDPR and Schrems I⁵⁰ & II⁵¹ jurisprudence. However, potential conflicts with the GDPR are still being identified and clarified.

Data spaces are on the rise in Europe, and are being created to bring stakeholders together and enable interoperable uses of data in a safe environment.

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An interesting initiative is GAIA-X,⁵² which was originally a Franco-German initiative but is now a European project. It seeks to develop cloud service providers and data infrastructure in Europe by providing safe spaces for stakeholders to:

- contribute to the data ecosystem based on European values,
- stimulate innovation through numerous data spaces,
- and strengthen expert communities per industry and provide input to discussions on innovation at the European level.

Overall, European data governance efforts have sought to enhance trust by supporting new institutions such as stewards and data spaces where data can be collectively governed and shared. The DGA has effectively defined data intermediation services and pushed forward the importance of trust in data sharing.

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**Trends and Insights from Switzerland: the “push” for digital self-determination**

The need to foster trustworthy data spaces materialized by some of the European Commission's efforts is linked with the ongoing discussion in the region on the concept of digital self-determination, an effort led by Switzerland.

Digital self-determination relates to the use of digital technologies to empower and not limit the choices and possibilities of individuals and companies, while recognizing the challenges that these technologies pose to a “self-determined life”.⁵³

According to several interviewees, this implies avoiding “manipulation and nudging through targeted advertising, exclusion and discrimination caused by the digital divide or bias, black box problem of algorithms in decision-making processes, etc.”.⁵⁴ In fact, Jeni Tennison, Executive Director of Connected by Data, remarked that the regulation of data and technology should be designed with a view to integrate its “collective impacts.” By bringing forward a participatory and bottom-up approach, data flows can be used to guarantee digital self-determination.

Self-determination and participatory approaches can indeed catalyze trustworthy digital spaces. The five main values that some interviewees associated with trustworthy digital spaces are: 1) transparency, 2) control, 3) fairness, 4) accountability, and 5) efficiency. Ensuring that governance frameworks promote these values, while also encouraging innovation is one of the challenges Europe faces nowadays.

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⁵³Roger Dubach, Ambassador at the Swiss Federal Department of Foreign Affairs (FDFA) and Switzerland's representative before the Council of Europe on AI (CAHAI).

⁵⁴Ibid.
Switzerland has adopted a key value-based approach centered on and leveraging the idea of “digital self-determination”. It provides a holistic lens to determine the goal of various of its national and international policies that impact data, from consumer rights to innovation to trade issues, moving forward.

“Digital self-determination”, as framed by Switzerland, focuses on a human-centered approach in the digital age and seeks to advance the establishment of reliable and trustworthy data spaces at the national and international levels. A multistakeholder coalition is supporting the government in leveraging this approach and to develop its implementation framework.

Key pillars to this concept have been elaborated by a multistakeholder Network called the “Digital Self-Determination Network” and include:

1. **Trust**: transparency about who has access to which data and for what purpose data is being collected and processed is a key factor in ensuring traceability and thus social trust in the digital transformation process.

2. **Control and self-determined transfer of data**: citizens have control over their personal data. They can access all data relevant to their decisions, decide on the significance and potential value of this data, and, on this basis, determine how it may be used by third parties.

3. **User-centric, data-driven ecosystems**: data-driven ecosystems give users more choice and offer solutions tailored to their specific needs. Users can choose varying degrees of disclosure for their data and are clearly informed about these choices. Individuals are free to transfer their own data efficiently to other service providers.

4. **Decentralization and proximity to citizens**: data is controlled by different stakeholders instead of being concentrated in the hands of technology giants or state institutions. Decentralized data governance helps to prevent abuses of power. Data collaborations create new possibilities for the use of data and improve the services available at local and regional levels.

On March 30, 2022 the Swiss Federal Council adopted various measures to promote trustworthy data spaces and digital self-determination in Switzerland and abroad building from this framework and set of principles.
Such measures are supported by the report "Creating trustworthy data spaces based on digital self-determination"\textsuperscript{61} by the Office of Communications (OFCOM) Federal Department of Environment, Transport, Energy and Communications (DETEC) and the Directorate of International Law (DIL) Federal Department of Foreign Affairs (FDFA) – Federal Department of Foreign Affairs.

The report suggests that the potential of data use is not fully exploited in Switzerland today, and identifies the creation of trusted data spaces – also suggested by the European Commission within the European Data Strategy\textsuperscript{62} – as a promising approach.

The report highlighted barriers to exploiting the full potential of data, noting that:
- big players are increasingly holding more data than they use mostly for their own purposes;
- there are different barriers to data use among private and public service providers (e.g. lack of know-how, insufficient resources, and fears of competitive disadvantage); and
- a growing share of the population is wary of the use of data, whether for fear of misuse and loss of privacy, lack of decision-making possibilities, or lack of incentives to make the data available for common use.

Based on the report, the Federal Council mandated the FDFA and DETEC to develop a voluntary code of conduct for the operation of trustworthy data spaces and to develop approaches to strengthen interoperability between data spaces.

The vision of digital self-determination that Switzerland is following makes it possible to improve access to data while strengthening control over one's own data. By building confidence, data subjects are more likely to share their data with others. This trust can be built through making available trustworthy data spaces based on fundamental principles like transparency, control, fairness, accountability and efficiency.

Roger Dubach, Ambassador at the Swiss Federal Department of Foreign Affairs and Switzerland's representative before the Council of Europe on AI (Switzerland).
Europe has adopted a rights-based approach mainly focusing on privacy protection in regard to personal data. Although this has contributed to asserting citizens’ rights and addressing their concerns over their data, the European approach may pose a wider extraterritorial impact. The normative instruments that are being issued to protect personal and non-personal data have raised the standards when it comes to privacy protection and the sharing and use of data across borders.

By raising privacy protection standards to international operators, those outside of the EU could potentially be restricted from accessing the data. This could trigger international reactions and EU actors being denied access to data from other places, as well as operators leaving European space.

For instance, Europe is currently struggling to establish its relationship with the US on a transatlantic basis.

Regarding non-personal data, in its vision for the Data Strategy, the EU Commission has called for the free and safe flow of data with countries subject to exceptions and restrictions for public security, public order and other legitimate public policy objectives of the EU, in line with international obligations, including on fundamental rights.

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GDPR has become important beyond the EU. Some countries see it as a blessing, others as a problem. This, increasingly, has an impact on global standards.

Torbjörn Fredriksson, Head E-commerce and Digital Economy Branch at the United Nations Conference on Trade and Development (UNCTAD) (Switzerland).

EU regulation is unique in the sense that it puts the citizen at the heart of the regulation (...) [which seeks] to see what the individual and the citizens rights are, and to try to protect those rights.

Gautam Kamath, Senior Advisor, International Affairs at Centre on Regulation in Europe (CERRE) (previously an advisor to the private sector).

I see some protectionist forms of dealing with data that prevent collective and transnational uses of data (...) Both complete inaction and over-regulation are not suitable.

Roger Dubach, Ambassador at the Swiss Federal Department of Foreign Affairs and Switzerland's representative before the Council of Europe on AI (Switzerland).

We have seen Europe go from GDPR and a real focus on privacy and protection of individuals to a bigger emphasis on a way in which data might be used and the impacts of those uses of data in, for example, AI development.

Jeni Tennison, Executive Director of Connected by Data (United Kingdom).
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DATA AND VALUE
Unlocking the value of data in a way that is of benefit to the region and its citizens – often in detriment to parties outside that economic block – is clearly of importance to policymakers in Europe. It is also behind motivations for the renewal of data policy and new legal frameworks. From an economic angle, the European Union Data Strategy⁶³ seeks to make the European economy competitive in the international market. Beyond the Data Strategy, all the subsequent acts and frameworks that have been released, such as the DGA and the DA, materialize this objective.

The EU Data Strategy was published in 2020 after years of multistakeholder consultation with the promise of creating a single European data space to make the EU a leader in a data-driven society. Its goal is to create a single market for data to allow it to flow freely within the EU and across sectors for the benefit of businesses, researchers and public administrations, ensuring security as well as enabling access to high-quality industrial data, boosting growth and creating value while minimizing environmental impacts.⁶⁴

As a way to drive up European competitiveness⁶⁵ and achieve its digital transformation targets,⁶⁶ the EU Data Strategy stated aim is to support the EU’s ambition to become an attractive, secure and dynamic data economy by:

- setting clear and fair rules on access and re-use of data
- investing in next generation tools and infrastructures to store and process data
- joining forces in European cloud capacity
- pooling European data in key sectors, with common and interoperable data spaces⁶⁷
- giving users rights, tools and skills to stay in full control of their data

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⁶⁵Ibid.

⁶⁶The 2022 findings of the EU Digital Economy Report show that while most of the EU Member States are making progress in their digital transformation, the adoption of key digital technologies by businesses, such as AI and Big Data remains low. Efforts need to be stepped up to ensure the full deployment of connectivity infrastructure (notably 5G) that is required for highly innovative services and applications. Digital skills is another important area where Member States need to make bigger progress, European Commission (2022). Digital Economy and Society Index 2022: overall progress but digital skills, SMEs and 5G lag behind. Press Corner. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4560

The DGA introduces a new category of actors — “data intermediation services” — enabling companies and individuals to engage in data sharing in a secure environment. This could be a key area to watch for companies and professionals developing activities in data governance.

Data intermediary services aim to facilitate data sharing between data subjects and data holders, on the one hand, and data users on the other hand, via trusted and independent intermediaries. To ensure that the shared data is not used by entities providing the intermediary services themselves, the measure introduces structural separation requirements, which obliges such intermediaries to formally dissociate data intermediation from any other commercial activity.

The DGA and DA seek to address the challenge of enabling interoperability and freer data flows for data spaces. **Europe needs to create frameworks and infrastructures for data spaces to be connected and compatible to enable cross-border and cross-sectoral data flows.** Several interviewees highlighted the need for proactive efforts to address unjustifiable barriers to digital trade. Trade agreements have thus become instruments to tackle digital protection measures.

**In its effort to enable economic competitiveness, Europe has also favored data localization requirements and other means to ensure that the economic value of data remains within Europe.** By putting forward the DGA and the DA, the European Commission seeks to define who could access data and under which conditions. Europe wants to store the data based on an assumption that storing the data is not only in line with the privacy protections, but it is a way to nurture the economy and enhance its value. The European Commission is thus looking for ways to assert its economic influence to exercise more control over industrial data.⁶⁸

Data governance experts across sectors from around the world are following the developments of this initiative closely, as well as the coming and recently released normative frameworks such as the DGA and the DA.

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Trends and Insights from the UK: enabling data flows

The United Kingdom (UK) is one interesting country that has put forward a flexible and agile strategy to enable data flows and foster the data economy while ensuring the protection of rights.

In September 2020, the Government of the UK published the draft framework National Data Strategy (NDS)⁶⁹ for public consultation, updating it in May 2021 in response to the views and evidence received.⁷⁰ It outlined the government's framework strategy to drive the UK in building a world-leading data economy while ensuring public trust in data use. Responses to the consultation, which was open to organizations and individuals across the UK, will help expand the strategy's evidence base, as well as its overall development.

The Open Data Institute (ODI) created a spreadsheet⁷¹ to map the different elements of the UK National Data Strategy (NDS), to better see how they joined up and what they covered, to help organizations plan their responses to the consultation. ODI with partners, also hosted a series of events – Getting data right: perspectives on the UK National Data Strategy 2020⁷² – to collect national voices on the potential best ways to further implement the UK’s strategy.

The NDS aims to ‘leverage existing UK strengths to boost the better use of data across businesses, government, civil society and individuals’. The strategy is structured around four core pillars of interconnected issues currently preventing the best use of data in the UK: data ‘foundations’, such as quality; data skills; data availability; and responsible use of data. It also has five missions, or priority areas for action:

- **Mission 1:** Unlocking the value of data across the economy
- **Mission 2:** Securing a pro-growth and trusted data regime
- **Mission 3:** Transforming government's use of data to drive efficiency and improve public services
- **Mission 4:** Ensuring the security and resilience of the infrastructure on which data relies
- **Mission 5:** Championing the international flow of data

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⁷¹Open Data Institute's document with elements of the UK NDS: [https://docs.google.com/spreadsheets/d/1sQ8fGSjedysYSjO-2aGt8rXu1nl0RnSaLPnWLVMsQ/edit#gid=1783820664](https://docs.google.com/spreadsheets/d/1sQ8fGSjedysYSjO-2aGt8rXu1nl0RnSaLPnWLVMsQ/edit#gid=1783820664)

In addition to the National strategy, and as part of its post-Brexit data reform, the UK has also published two important new normatives that impact data governance late in July 2022: The Data Protection and Digital Information Bill and the All Action Plan part of the 2021 National AI Strategy and Roadmap. Both documents point to a, in the UK's words 'less centralized approach than the EU', as further discussed in the new AI paper published by the government in support of the plan and that outlines the UK's approach to regulating AI and data. The Data Protection proposal is a 192-page bill, which is structured in six parts: data protection; digital verification services; customer data and business data; other provisions about digital information; regulation and oversight; and final provisions. As such, while maintaining data protection, the UK has also strived for data to flow freely and for the UK's economy to raise its competitiveness by leveraging data.

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**Leveraging data flows within and beyond the EU is crucial for digital transformation and innovation in the region**

Data flows are fundamental for innovation and hence for digital transformation. EU priorities regarding innovation can be broken down into four main categories:

- The importance of allowing data to flow freely across different sectors and member states in accordance with EU rules and values,
- The crucial role of data available to drive innovation,
- The need to have rules that are clear and fair with regards to access and use of data, and
- The necessity of an open but assertive approach to international data flows in accordance with EU values

In the EU, the Estonia case can provide interesting insights when it comes to fostering digital transformation and innovation. It has prioritized digital transformation and innovation by implementing data protection frameworks, but also encouraging data sharing and data management guidelines to ensure the quality, openness and safety of data. In the past decade, its data economy has grown significantly and in 2022 it scored ninth in the Digital Economy and Society Index (DESI), scoring higher than the EU average. Its digital agenda has focused on promoting online governance innovation, cybersecurity, and information society.

Estonia's personal data protection framework draws from the GDPR, and was specifically materialized through two acts: the Personal Data Protection Act (PDPA) and the Personal Data Protection Implementation Act (Implementation Act). These acts help to implement the GDPR to Estonian law, and have created a stronger framework for data protection in the country.

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Other relevant frameworks include the Public Information Act⁸² and the Official Statistics Act,⁸³ thanks to which Statistics Estonia⁸⁴ has been tasked with the duty to coordinate data governance. Instead of focusing on aspects of the digital agenda – such as public sector duties, cybersecurity, or protection of personal data –, they concentrate on data management requirements, concretely: 1) having an up-to-date and content overview of databases and datasets; 2) standardizing data descriptions to ensure data clarity, findability and accessibility; and 3) monitoring data quality and guarantee that it is accurate and complete.⁸⁵

In 2022, Estonia signed digital cooperation agreements with Ukraine⁸⁶ and Japan⁸⁷ to strengthen collaboration in developing a digital society. In fact, governments across Europe and the world have been learning from Estonia's good practices in terms of digital public services, connectivity and data management. The country's new initiatives include the creation of a centre of excellence for data management,⁸⁸ in charge of ensuring the quality of data collected by Estonian authorities, increasing its use for decision making, and making data available as open data to enable stakeholders’ reuse.

Data in Estonia is increasingly being made available through platforms and public-accessible services. From 2019 to 2021, Estonia increased its open data score by 24 percentage points.⁸⁹ In 2021, its Open Data Portal hosted around 800 datasets and more than 100 publishers (covering topics from agriculture and health to education, energy and transport).⁹⁰ The country also improved the cross-border availability of information,⁹¹ which sets the path for new technological and data governance developments.

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(1)%20If%20a%20personal%20data%20subject%20becomes%20aware%20thereof


⁸⁹Ibid.

It can be argued that, in general, one of the main emerging barriers for innovation in the private sector is, to an extent, the propensity of certain societies of being more risk averse and often suspicious of the private sector. In this sense, it is observed that the narrative in Europe is considerably focused on privacy, data protection and confidentiality, and less so on data sharing, opportunities for innovation or the potential to provide new services for society.

One of the questions raised by interviewees about the new European legislation – the DA and DGA in particular – is how do these regulations break down at a business level. Despite that the DA and DGA seek to apply to all sectors, the acts have still not been broken down at the operational level to ensure that certain sectors or industries are not diminished, but are rather bolstered by the new legislation. This thus points to the need for a cooperative environment in which regulations can be tested with all stakeholders in mind.

Data policies might only work with the right incentives and the right private sector culture change

There's a need to train and educate with regards to data. There's a need to bring the conversation away from considerations that only pertain to GDPR. That's something that we see a lot, like data protection, data confidentiality. What about data opportunities, data sharing, new services? And I think in Europe there's this risk aversion culture where we're looking at it through that lens, and that's probably driving the conversation.

Ella Etienne-Denoy, Chairwoman and CEO at Green Soluce (France).

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Another emerging barrier for the private sector in terms of data sharing is the culture of data secrecy. In many industries, data secrecy is perceived as a competitive advantage, which discourages openness and sharing of information. Companies tend to close any possibility of sharing data precisely because there is a belief that this will harm their business model. The secrecy culture requires new incentives to be put in place to encourage cooperation within the EU and with countries outside of it within sectors to ultimately foster innovation.

And while the discussion around Data Spaces in the EU might foster infrastructure investments that could potentially support cooperation, clear incentives for the private sector – or an effort for cultural change based on e.g., open business models⁹³ – do not seem to be in place.

I think one interesting aspect about data governance is that the rules governing data in the EU are within a single market, but the question is what kind of mechanisms and incentives are they creating for the industry as well as for all the different stakeholders involved to contribute, participate and monetize innovation.

If your industry has a data secrecy culture, it also means that sharing data might be perceived as potentially losing competitive edge. So how can you guarantee data confidentiality where it makes sense and data sharing rules of the game that are a win-win for all the players around the table? I don’t think this is being taken into account industry to industry.

The European approach to data flow might create challenges to effectively unlock the socio-economic value of personal and non-personal data across sectors

In its quest to promote economic growth and make the European economy competitive in the international market, the EU approach to data governance could create a series of challenges. The DGA and the DA could be transcending individual approaches to data regulation by rather perceiving data as a “strategic national asset”⁹⁴ that could help the region to consolidate its economic and political power through “increased control, ownership, and application irrespective of the nature of data, except for its geographical origin.”⁹⁵ By restricting who can use data being produced in Europe and under which conditions, policies curtailing data flow could therefore potentially restrict access to data to external actors and operators.

The DGA introduces provisions that encourage EU internal data sharing to increase the value derived from society-wide access to data between Member States.⁹⁶

On the other hand, the new rules proposed by the DGA pose significant challenges by increasing the bureaucratic and legal steps to allow for cross-border data sharing of non-personal data with the rest of the world. This could therefore potentially reduce non-EU member countries’ access to knowledge and information collected, created and held in Europe. It could also add burden to small and medium enterprises “by imposing further design obligations in relation to the products they design or manufacture, or the related services they might provide”.⁹⁷ This has led to debates on the number of companies, especially SMEs, that could potentially be exempt from data-sharing obligations.⁹⁸
The proposed DA\textsuperscript{99} brings a proposal for harmonized rules on fair access to and use of data.\textsuperscript{100} Its core elements are: (1) It sets new rules allowing businesses and consumers to access data generated by connected devices; (2) Introduces a framework for business-to-government (B2G) data sharing, but limited to public emergencies and narrowly defined situations of exceptional need; (3) Introduces interoperability as a key measure of the European data governance framework.\textsuperscript{101} There are five main changes\textsuperscript{102} introduced by the new Regulation, with regards to: Business-to-Consumers, Business-to-Business,\textsuperscript{103} Business-to-Government,\textsuperscript{104} Interoperability of data spaces and of cloud computing providers, and Cross-border Transfers.\textsuperscript{105}

The DA also envisages the development of a variety of European industry standards to permit interoperability and switching among data processing services and portability of data. The DA will likely prove a leading test of the EU's recently announced, proactive approach to standards.

At a practical level, the proposed rules for international data transfers have important implications for cloud computing service providers as these regulations are strongly restricting foreign governments' access to non-personal data stored in Europe, unless these are based on international agreements, such as mutual legal assistance treaties.


This seems to be a direct response to the previous controversies sparked by the CLOUD Act,¹⁰⁶ which foresaw executive agreements between the US government and third countries’ law enforcement agencies to grant reciprocal access to data held by cloud providers in each other’s territories.

While ambitious, the DGA and the DA initiatives are yet to provide a clear path for implementation and raise questions on the facilitation of cross-border data flows between the EU and the rest of the world. Organizations grappling with this legislation will need to dig deep to understand the full complexity of these packages and how they are interrelated, once they are both approved and adopted.

**While facilitating data sharing within the EU, the DGA will potentially increase transaction costs for organizations outside the EU, and not only for personal data.** The Commission may also have to confirm, through a combination of implementing and delegated acts, the adequacy of non-EU countries’ legal regimes vis-à-vis the EU in providing appropriate safeguards to non-personal data.

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EUROPE AND THE GLOBAL DATASPERE

Geopolitical tensions materialize in different approaches to data governance

As amounts of data increase and as data is perceived as an economic advantage not only for companies, but for entire economic blocks, regions find themselves stuck in the duality between free flows of data vs. data sovereignty. Some have advocated for a more rights-based approach, while others have positioned themselves in the free market narrative.¹⁰⁷ Europe has strongly led efforts towards privacy protection. The United States has leaned towards a more market-driven approach, promoting data flows. China and Russia have adopted a more State-led intervention with local storage, transmission and processing of data. These geopolitical tensions have pushed countries to adopt different approaches to data governance (legal, institutional, sectoral, linguistic, etc.) and thus it is profoundly fragmented.¹⁰⁸

Power structures are at the center of this conversation.¹⁰⁹ Power imbalances, different political priorities and values, as well as geopolitical tensions are at the heart of the ongoing European data governance discussions. Each country and region has its own perspective around free data flows and rights-protection, and that impacts international cooperation. Data governance legislation is thus developing around three main pillars: 1) digital economy, 2) privacy, and 3) security.¹¹⁰ Finding a standpoint between these three determines how each nation is developing legislation.

The challenge for Europe is to dialogue with other international players and find convergences between each country’s/region’s values and priorities. While ensuring the protection of individual and collective rights, Europe cannot afford to cut itself out of the global economy or fail to support other nations in the fight against global challenges (from the economic crisis, to climate change impacts, to pandemics and even migration). Perhaps pushing for the application of the lens of the commons or global public goods could help Europe to find a middle path.

¹⁰⁷The We Need To Talk About Data report dives deeper into this tension, which has not changed since its publication. De La Chapelle, B. & Porciuncula, L. (2021). We Need to Talk About Data: Framing the Debate Around Free Flow of Data and Data Sovereignty. Internet and Jurisdiction Policy Network. https://www.thedatasphere.org/datasphere-publish/we-need-to-talk-about-data/


¹⁰⁹Markus Overdeik, Project Manager of Europe’s Future Program at Ethics of Algorithms.

¹¹⁰Andrin Eichin, Senior Policy Advisor, International Relations, at the Swiss OFCOM.
There are geopolitical tensions, especially with China and the United States. We need to create an inclusive framework and discussion that includes everybody.

Andrin Eichin, Senior Policy Advisor, International Relations, at the Swiss Federal Office of Communication (OFCOM) (Switzerland).

[We should] imagine a world of “commons” where there is not a dominant player and take the necessary steps to get there. Let’s never discuss data or the concept of the common of data or technologies without always thinking about these technological elements in the context of the economic power concentration in which we live today.

Paul Nemitz, Principal Adviser on Justice Policy for the European Commission (Belgium).

Innovative frameworks to govern data: regulatory, self-regulatory and technical tools

New business models are emerging due to the amount and quality of available data, and the number of companies headquartered in countries outside of Europe but operating in the region is also increasing.¹¹¹ Novel governance tools are thus required to mitigate risks and concerns, while promoting innovation and the development of technologies.

Examples include AI applications, data intermediaries, Privacy Enhancing Technologies (PETs)¹¹² such as homomorphic encryption, trusted execution environments, multiparty computation, differential privacy method, as well as browser-based solutions for consent management. Sandboxes could be used to test these innovations,¹¹³ and are in fact in the process of being deployed in the region.

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The EU Artificial Intelligence Act\textsuperscript{114} envisages setting up AI ‘regulatory sandboxes’ to foster innovation in AI across Europe.\textsuperscript{115} Similarly, the European blockchain regulatory sandbox for Distributed Ledger Technologies\textsuperscript{116} was launched in February 2023, and seeks to support start-ups in their testing of new products and services.\textsuperscript{117}

All stakeholders consulted stressed the importance of creativity to promote multidisciplinary and systemic approaches to governance issues. Overall, Europe – as other regions of the world – faces the challenge to strengthen the regional and national governance mechanisms to ensure trust, while allowing for experimentation and cross- and multi-sector data sharing and use by both public and private players.

For instance, there is a need for legal certainty and clarity on the deployment of some innovations that support rights respecting data flow, such as PETs that create trust, and support and support to ensure compliance.

However, stakeholders are still working in silos, and bridging them is one of the biggest challenges. Transversal and horizontal integration of the silos – which can be sectorial, geographical, regional – is most needed nowadays. Regulators need to be able to talk to each other, learn the technology, and from different experiences, and share information between them. Stakeholders consulted agreed that only by bridging the silos and addressing this structural fragmentation will Europe design frameworks that are inclusive and operationally relevant to all.

\begin{flushright}
\textit{Start to think about regulatory frameworks for data governance in a non-regulatory way. By codes of conduct to be developed with the industries themselves. Different from the Acts of the EU (much more regulatory approach).}
\end{flushright}

\textbf{Andrin Eichin, Senior Policy Advisor, International Relations, at the Swiss Federal Office of Communication (OFCOM) (Switzerland).}

\textsuperscript{114}The EU Artificial Intelligence Act (2023). Homepage. \url{https://www.artificial-intelligence-act.com}


Some regulation is needed, but if this regulation comes from the government, it is not efficient. Self-regulation is the best way. Companies have good policies, which can attract SMEs and individuals (...). Self-regulation can protect SMEs, especially if big tech companies make mistakes (...). Big tech companies could also anonymize information and share it with people and SMEs voluntarily.

Oğuzkan Güzel, Founder Güzel Law Office and previous Representative of ICC Turkey (ICC Commission on Digital Economy).

Given the global nature of the issue and the fact that there’s a lot of third-country headquartered companies in the EU, most of the platforms are the US or China (...). In order for these companies to operate in the EU it should be very clear what the rules are for these data transfers to their jurisdiction.

Gautam Kamath, Senior Advisor, International Affairs at Centre on Regulation in Europe (CERRE).

We value legal certainty more than anything else, and so does every company. It’s really important given that you’re digitizing, there’s more and more data being produced. More and more critical assets are going online, more and more businesses that are traditionally not online or not digital are going digital – including critical infrastructure, for example- so it’s very important to have this collaborative approach and to build trust in technology because without trust and having all stakeholders on the table, it would be impossible to design the right solutions and have the most optimal outcomes.

Gautam Kamath, Senior Advisor, International Affairs at Centre on Regulation in Europe (CERRE).
Another challenge is reaching consensus on standards. Although within Europe and internationally there seems to be an agreement on the importance of talking about data, there is an absence of a real common language when it comes to data governance. Across regions and sectors in the world there are different meanings of data governance and therefore divergence on how to govern the datasphere – defined as the complex system encompassing all types of data and their dynamic interactions with human groups and norms.¹¹⁸

The only way to reach agreements and advance frameworks that create value for all is by bridging sectoral and geographical silos, encouraging multistakeholder engagement and addressing the complexity of global data governance through the tools that enable interoperability, experimentation and iterative processes for improvement. A common language is needed, on the one hand, to guarantee that regulations can be used and implemented internationally, and on the other hand, to open dialogues and conversations to ensure that stakeholders understand each other and are able to share experiences and necessities.

On a more organizational and international element, the absence of a real common language when it comes to data governance is still an issue. There is a lack of common standing points. Sometimes people use the same language but mean different things. Then when it comes to policy challenges they are trying to solve, they do not shoot from the same direction.

Andrin Eichin, Senior Policy Advisor, International Relations, at the Swiss Federal Office of Communication (OFCOM) (Switzerland).

Striving for convergence is key to responsibly unlocking the value of data for all

A fundamental question for regulators designing governance frameworks is whether the framework, if copied or implemented by other actors, leads to positive outcomes. This implies asking if a country would want other countries to replicate its legal frameworks. When regulations are too self-serving, “the self-defeating ultimate result might be a fragmented environment detrimental to everyone”.¹¹⁹ Replicating scalable regulations could lead to a convergence on higher standards that benefit everyone. As put by Francesco Vogelezand, “this can become a litmus test for evaluating the European Strategy for Data and EU efforts to leverage its normative power to foster international convergence on higher standards.”¹²⁰

In its effort to raise thresholds for norms, especially regarding privacy protection, Europe could potentially be contributing to the internationally fragmented setting. The new EU regulations – the DGA and DA – establish conditions for who can access non-personal data produced in the EU and under which circumstances. Such conditioning, in addition to the already existing frameworks to control personal and non-personal data flows, adds layers of complexity to access and use data in Europe both by local actors and international operators.

As data localization efforts augment, so does the challenge of finding a common ground in the global data governance setting regarding data sharing. Countries do not seem to find enough incentives to open their data unrestrictedly because they fear losing the competitive advantage that comes from data. At the same time, countries want to gain access to data from other regions and “establish more control over precious information.”¹²¹ Data localization measures and other geographic approaches to data could further deepen fragmentation, especially if local competitive advantage is prioritized over cooperation.¹²²


¹²⁰Ibid.

¹²¹Ibid.

¹²²Ibid.
Data localization efforts that prioritize local competitive advantage could also end up in the undesirable setting of data fortresses, “where data is hoarded within a national jurisdiction due to the lack of legal interoperability with third countries.”¹²³ This could increase fragmentation and uncertainty for global data governance as a whole.

Europe has been putting forward regulations that advance its competitive advantage and the control over data that is produced within its borders, potentially limiting the access that countries overseas can have to it. However, more awareness is needed regarding the European ability to influence markets’ and states’ conducts through its legislation and frameworks. Several authors refer to the term ‘Brussels effect’ coined by Bradford to describe the EU’s ability to influence global frameworks and actions across the globe.¹²⁴

In fact, as the EU develops its domestic regulations, it also creates global standards for regulations that are not only applicable to non-EU actors that seek to enter or are part of the European markets, but also for third countries where EU regulations become objects of emulation.¹²⁵

Several countries around the world have inspired¹²⁶ their national data protection frameworks particularly in the EU’s GDPR. For instance, Brazil inspired its General Data Protection Law (in Portuguese, LGDP)¹²⁷ on Europe’s GDPR and has signed MOUs with European actors to collaborate on data protection governance. India has had a similar development, drawing heavily on the GDPR principles to develop its personal data regulation framework.¹²⁸

European frameworks have nonetheless been built to function within Europe, and reflections have hardly gone beyond its borders when it comes to asking about the kinds of positive or negative externalities that could materialize if third countries emulate or draw inspiration from European regulations and norms. The Brussels effect can either bring benefits or advance drawbacks, as it can contribute to both legal convergence across borders and to global fragmentation if not sufficient considerations are borne in mind.

The European influence over other continents’ digital and data strategies has not only been manifested through the extraterritorial effects of EU’s legal instruments, but through different alliances, collaborations, and projects that have emerged to research data governance trends in Europe and abroad.

¹²³Ibid.


For instance, the Commission developed the Digital for Development Hub (D4D) to achieve coordination, advance multistakeholder dialogue, and “leverage expertise, resources and share best practices”.¹²⁹ 11 EU Member States¹³⁰ created the Digital4Development (D4D) Hubs to promote international partnerships on digital transformation, with a first implementation in the AU-EU D4D Hub for Africa.¹³¹

Similarly, the EU-AU Data Flagship, which is an initiative that brings together the European Union and the African Union so that the European and African visions of “fair and sovereign data economy” come together based on shared values and policies that find a balance between data protection and inclusive economic growth.¹³²

The examples displayed above show Europe’s potential of becoming a global norm setter, raising standards and leveraging its extraterritorial components and effects to foster the emergence of a global data sharing compact. To contribute to solving fragmentation, Europe could promote strategies that not only benefit countries in the region – which could create digital fortresses –, but promote the adoption of rules that seek to unlock the value of data for all and implement an architecture that is beneficial for other regions as well.

The fundamental challenge for Europe is hence to fully engage at the global level to ensure that the European model is indeed replicable and scalable. Applying a Kantian Categorical Imperative – that is, to act as you would want all other people to act towards others, as if it were a universal law¹³³ – could mean that Europe constantly asks itself if the norms and standards that it is setting indeed contribute towards a more equitable data economy, and to what extent it is desirable that its frameworks are copied by other countries worldwide. If countries need to adapt their legislation to comply with the European standards, then the model might not only be irreplicable, but could further increase fragmentation and deepen the gaps between views around data.

By opening the space to participant states from everywhere in the world, data governance frameworks could not only be enriched, but also be tailored to each nation’s needs, interests and contexts. Different international organizations have been promoting this cooperation, and wish to include not only the countries with the most advanced economies, but every government, regardless of a country’s economic prospects. International participatory forums and dialogue are thus essential to develop participatory, comprehensive, and actionable data frameworks.

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¹³⁰Germany, Belgium, France, Estonia, Luxembourg, Spain, Portugal, Sweden, the Netherlands, Lithuania, and Finland signed the initial letter of intent.


Through a cooperative mindset and by looking at the rest of the world, Europe could indeed become a global norm setter and contribute towards unlocking the value for all. In doing this, it might just as well start learning from the good practices and models implemented in other regions of the world.

Striving for convergence does not only imply the recognition of European influence overseas, but also the need to enhance multistakeholder cooperation within the region. Stakeholders consulted shared the need for even more multistakeholder engagement and international cooperation. In a context where governance frameworks are being developed in a siloed manner, there are significant power imbalances in the data market and geopolitical interests at stake. Bridging existing silos and fostering collaboration is more important than ever to enable fair and trustworthy governance mechanisms. Interviewees mentioned how national data hubs could be one alternative to encourage collaboration.

As different stakeholders have different needs, mapping and addressing those contrasts could enhance interoperability and data sharing. This could include making available an open source, smart, cloud-edge, which would enable the integration of data infrastructures and services. It could also ultimately enable a sort of cloud federation, which is currently being discussed and interviewees highlighted as a desirable space to have at the European level.

Another challenge for Europe when striving for convergence is enhancing bottom-up approaches and community engagement. Consulted stakeholders pointed to the importance of organizing collective powers and rights to further create opportunities for citizen empowerment. Citizen and community engagement, as well as bottom-up approaches are one of the bigger new trends and challenges for Europe today. Collective data governance and bottom to top thoughtfulness could foster community participation in decisions around data. This could be done domestically (within Europe), but also internationally with other regions of the world.

Understanding that data is not neutral and can indeed maintain existing societal injustices is the entry point to participatory governance mechanisms. Several European actors are promoting the democratization of the digital sphere and are encouraging those who are usually affected by the rules to participate in shaping them. The notion of digital self-determination is highly connected with the need for bottom-up approaches. It encourages the development of participatory digital spaces and the adoption of horizontal approaches to data governance. Digital self-determination materializes in actions that put citizens at the heart of the conversations and promote digital and data literacy to ensure their engagement. One interesting trend to foster citizen participation are the consultations that some European countries are conducting with cities and local governments to share experiences and implement good practices.
One of the things I find interesting about that is the sense of being able to talk about the community in its own terms. To represent them in terms they find important. You find the same kind of things in patient communities where they want to talk about their experiences, not how doctors are talking about them. Not only about who gets sovereignty, it’s even the framing of what the data is and who has governance over it.

Jeni Tennison, Executive Director of Connected by Data (United Kingdom).

We need digital literacy that allows people to recognize that they have rights, to recognize when they’re infringed and also know what to do in order to act against that infringement and advocate for their rights.

Paola Pierri, Senior Research Associate at Luzern University of Applied Science (Germany).

We need to find these opportunities that are in between these extreme positions that can help generate the opportunities that data flows can bring but also to address the development concerns from the privacy, security, trade and development perspectives.

Torbjörn Fredriksson, Head E-commerce and Digital Economy Branch at UNCTAD (Switzerland).

Finally, to keep striving for convergence, member states need to be engaged to ensure that the proposed data governance models work for the purposes they were created for. This means identifying interesting best practices developed within the region and the challenges that some stakeholders (local and international) might be facing with their approach. Europe could strive, as well, to adapt its frameworks to lower transaction costs, keep protecting citizens’ rights, enhance trust, and bolster the data economy.

Current data governance issues require interdisciplinary discussions and a legal-socio-technical perspective. The challenge for the region nowadays is to promote multistakeholder collaboration – including citizen engagement and bottom-up and community approaches – within Europe and abroad. Internationally, it has the possibility to implement a sort of Kantian Imperative and assess the positive and negative externalities (or chilling effects) that European frameworks could or are already having on third countries. Leveraging dialogues and promoting collaborative efforts will be the only way to strive for convergence and develop models that work for each particular context. A global vision and strategy is needed to make sure that European data governance frameworks unlock the value of data for all.
4

THE ROAD AHEAD
UNLOCKING THE VALUE OF DATA FOR ALL IN EUROPE AND THE WORLD

As part of the European Dialogues’ project, this report lays out some of the main trends and priorities, challenges, emerging barriers, good practices and recommendations to responsibly unlock the value of data for all in Europe. It analyzes some of the regulatory efforts led by the European Commission, some EU member states, and the UK and Switzerland, as well as the initial views that the interviewees have on them.

The main takeaways from the interviews have been categorized into three groups: 1. Data and responsibility: the rights-approach adopted in Europe Leveraging; 2. Data and value: the trends to allow data to flow freely and enable innovation and competitiveness; 3. Data for all: the key role Europe plays in striving for international data governance convergence.

Europe’s priorities for data governance have revolved around protecting constitutional rights and freedoms, promoting human-centrivity and sovereignty, and the use of data for public good. In order to build trustworthy spaces, new normative trends in Europe place more emphasis on bottom-up approaches and the importance of collective rights and impacts.

Positive or negative impacts of certain data uses might not be easily detected at an individual level, but might become evident at the collective level, which means that collective identities and societal dynamics are fundamental for data analysis and governance efforts. The collective approach is an upcoming challenge for the region.

Another challenge for Europe is the need to create new incentives to encourage innovation, supporting digital transformation and competitiveness goals. Europe – as the rest of the world – needs to find a balance and avoid over-regulation in order for the data governance frameworks not to stop innovation or discourage cooperation and data flows. By leveraging data for digital transformation and creating incentives for data sharing, industries can create new products and services. Future initiatives (e.g. norms, technology, model contracts, procurement, self-regulation and voluntary frameworks etc.) should create the appropriate incentives and thus contribute to responsibly unlocking the value of data for all.

The interviewees highlighted that data governance efforts have developed in a fragmented and siloed manner. The increasing number of sector-specific norms contribute to that. Overcoming this fragmentation and mapping existing platforms, overlaps and gaps is necessary to build a common framework that ensures data interoperability and sharing.

Additionally, multistakeholder engagement, especially engaging practitioners and innovators, and international cooperation are key to create a common language around data governance, protect human rights and also promote global competitiveness and data usage for innovation. International cooperation and dialogue should seek to find convergence between actors’ priorities and values, and develop models that work for different contexts and needs.
As highlighted before, two interviewees referenced the idea of the “commons” in which there is great cooperation in a low-entry barriers data market, no dominant players, and open data.

The EU Data Act provides several opportunities for the “data commons”¹³⁴ which according to Open Future⁰³⁵ could “empower public institutions in the online sphere, strengthen the role of Open Access Commons (OAC) in the current data economy, and unleash the society-wide benefits derived from open data.”¹³⁶ While the “commons” are appealing, a nuanced approach is needed to ensure that this potential world respects rights and freedoms. International cooperation is key in order to find a balance between fostering digital trade and free data flows, on the one hand, and protecting rights in a human-centric approach to data governance on the other.

Since the interviewees do not represent all the voices impacted by the European efforts, including the EU strategy and normative frameworks, further dialogue is still needed. While ambitious, the DGA and the DA initiatives are yet to provide a clear path for implementation and raise questions on the facilitation of cross-border data flows between the EU and the rest of the world. Dialogue should engage stakeholders in Europe, but also engage in conversations with other regions of the world.

Europe would benefit from sharing its good practices and experiences, but also from learning from other regions’ and countries’ needs and best practices. This learning should also be focused on best operationalization practices for data governance models, particularly in support of SMEs and start-ups.

Another important consideration drawn from this first instance of the Datasphere Regional Dialogues in Europe is how the European approach to data governance is still not finalized and is just starting to be shaped. The current Euro-centric understanding of several issues (such as human rights) can still be questioned by opening spaces for engagement. As a trailblazer of human rights and data protection, Europe has done a good job at marketing its approach to data governance. Nonetheless, the task is still unfinished, and these dialogues hint to the difficulties of implementing governance frameworks. Now that there is more awareness about the societal harms and challenges of governing data in the region, the challenge now is to translate back into governance models that can effectively target these issues and unlock the value of data for all.

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Finally, **some questions remain**. Questions which are important to answer as the European Dialogues keep unfolding and as the Datasphere Initiative's Dialogue Program engages in conversations in other regions of the world. These questions include:

- How to harness the data for value creation (social or economic value)? How to leverage the data for corporate competitiveness in the global context? How to secure the fair sharing of the value that is being created from the evolving digital economy?
- How to enable participatory, community, and bottom-up approaches for data governance that engage all affected stakeholders – within and beyond each region?
- How can regulators design normative frameworks that consider distinct industries' needs and create the appropriate incentives for innovation?
- Which types of incentives are needed to foster innovation but also ensure the protection of human rights and constitutional freedoms?
- How can legislation be evaluated to determine if it is fit for purpose, in other words, if it is fulfilling the purpose for which it was created?

These are key questions for further research and discussion. These questions can be answered by bringing stakeholders together and breaking silos to work towards collective data governance frameworks which foster data protection and innovation. This will help Europe and any region become intentional about the digital society they collectively want to build and govern data accordingly.
Methodology

The Datasphere Initiative adopted a participatory methodology to conduct the European dialogues. It developed a literature review and desk research on the European experiences and trends regarding data governance, which was complemented by a Datasphere Initiative Fellow research¹³⁷ and semi-structured interviews with key stakeholders. The team gathered impressions from governments, European Commission representatives, civil society, academia, and the private sector on how these new rules may play out as well as other initiatives and trends beyond the EU that are gaining attention in Europe.

The Datasphere Initiative team started by interviewing stakeholders in Europe who are working on data governance policies or developing some of the innovations and initiatives that are leveraging data. These interviews are timely given the new data governance initiatives taking place in the region. The interviews gathered impressions from governments, European Commission representatives, civil society, academia, and the private sector on how these new rules may play out as well as other initiatives and trends beyond the EU that are gaining attention in Europe.

To complement such research, it identified a sample of more than 60 policymakers or contributors to data governance policies. Around 20% accepted to participate in semi-structured interviews. The interviews were conducted over a period of 2.5 months, from May 31 until August 20, 2022. The questionnaire applied consisted of six standard questions, subject to adjustments or additional queries depending on the flow of the conversations and expertise and focus of the interviewee (Table 1 in the Annex). Interviews were transcribed and the main highlights per question were extracted. These highlights were categorized by interviewee and by topic, and a qualitative bottom-up approach was implemented to codify the extracts on a Miro board. Tags (or codes) were created based on the content of each contribution, then a filtered database was developed. A detailed description of the tags used to codify the interviewee’s contribution can be found in the Annex (Table 2). Highlights from the interviews enrich this report and support its objective of analyzing the European approach to data governance and its global contribution to the debate.

To kick off its European Dialogues Project, the Datasphere Initiative identified a sample of 59 policymakers or contributors to data governance policies working in public or governmental organizations, the private sector, civil society, academia and international/regional organizations (including the European Commission). The sample was developed with gender and multistakeholder balance in mind to remain inclusive and diverse. Individuals were contacted via email and invited to participate in a 30-minute semi-structured video interview. Until the publication date of this report, from the almost 60 individuals identified via a review of stakeholder submissions to various instances of the European Strategy development and implementation and via the Datasphere Network of partners via a review of stakeholder submissions to various instances of the European Strategy development and implementation and via the Datasphere Network of partners, 13 accepted to take part in the interviews (11 via Zoom, and two of them submitted written contributions). More detailed information about the interviewees, their organizations and backgrounds can be found in the Annex.

The questionnaire applied to the participants consisted of six standard questions, subject to adjustments or additional queries depending on the flow of the conversations and expertise and focus of the interviewee (Table 1). The questionnaire was shared with the participants beforehand and they all granted their consent to be recorded, and for their interviews to be used for reporting purposes and shared with the Datasphere Initiative’s network.

After a qualitative review of the extracted highlights, they were grouped into key highlights, which enriched this report.

Table 1: Questionnaire for the semi-structured interviews

<table>
<thead>
<tr>
<th>Main topic</th>
<th>Question</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trends and priorities</td>
<td>What are the main trends and priorities regarding data governance in Europe today?</td>
<td>Understand the participant's perspective of the main trends and priorities regarding data governance in Europe</td>
</tr>
<tr>
<td>Main challenges</td>
<td>In your opinion, what are the main challenges for Europe and stakeholders engaging in Europe?</td>
<td>Based on the participant's experience, this question seeks to understand the challenges that they experience in terms of governing data in Europe</td>
</tr>
<tr>
<td>Emerging barriers</td>
<td>Are there any emerging barriers to data sharing that impact international cooperation and trade with other countries and regions?</td>
<td>Identify the emerging barriers or limitations that impact international and regional cooperation, as well as multistakeholder alignment for data sharing</td>
</tr>
<tr>
<td>Good practices</td>
<td>Can you provide an example of good practices (normative, technical, operational) related to data governance?</td>
<td>Gather the good practices related to data governance that each participant has identified and that could be shared with other European and global actors</td>
</tr>
<tr>
<td>Recommendations</td>
<td>What would be your recommendations for the key stakeholders in the data governance ecosystem (governments, private sector, civil society)?</td>
<td>Leverage the background and experience of each participant to collect recommendations on how to better govern the data ecosystem nowadays</td>
</tr>
<tr>
<td>Hope for the future of collaborative data governance</td>
<td>What is the Datasphere that you hope to see? What does collaborative data governance mean to you?</td>
<td>Collect the participant's aspirations for the future of data governance and understand the priorities and values they hope to see</td>
</tr>
</tbody>
</table>

Source: developed by the authors.
## Table 2: Description of the tags used to analyze the extracted highlights

<table>
<thead>
<tr>
<th>Tag(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI and New Tech</td>
<td>Contributions highlighting innovation, the creation of new technologies, AI in particular (+ its regulation)</td>
</tr>
<tr>
<td>Bottom-up/community engagement</td>
<td>Contributions highlighting the importance of collective action, of horizontal and bottom-up approaches and in creating citizen and community engagement for data governance</td>
</tr>
<tr>
<td>Building trustworthy spaces</td>
<td>Contributions highlighting democratization of digital spaces and the values of Transparency, Control, Fairness, Accountability, Efficiency for the governance of the datasphere</td>
</tr>
<tr>
<td>Culture change</td>
<td>Highlights insisting on the importance and need of a change in the culture either to promote openness, risks, innovation, but also to promote horizontal and bottom-up approaches to data governance</td>
</tr>
<tr>
<td>Cities</td>
<td>Insights that highlight the importance of cities and their good practices</td>
</tr>
<tr>
<td>Creativity</td>
<td>Highlighting new ways of thinking about data governance and the different challenges</td>
</tr>
<tr>
<td>Digital self-determination</td>
<td>Insights emphasizing on the emancipatory force of new technologies, while recognizing the challenges that digital tools pose to self-determination (e.g. targeted advertising, exclusion, discrimination, etc.)</td>
</tr>
<tr>
<td>Environment/climate change</td>
<td>Contributions that highlight the importance/good practices with regards to DG and environmental issues</td>
</tr>
<tr>
<td>Fragmentation (reg, geo, sector)</td>
<td>Contributions that discuss regional, geographic and sectorial fragmentation (silos) of data governance</td>
</tr>
<tr>
<td>Global competitiveness</td>
<td>Highlights discussing the importance of global competitiveness of businesses and the enabling or disabling role that data governance has/can have when it comes to competitiveness</td>
</tr>
<tr>
<td>Human rights</td>
<td>Contributions discussing human rights issues (data protection, privacy, etc.)</td>
</tr>
<tr>
<td>Human-centric</td>
<td>Discussions around human centricity and the creation of value for all</td>
</tr>
<tr>
<td>Title</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>International cooperation</td>
<td>Highlights pointing at the importance of international cooperation or the impacts of certain challenges on international cooperation</td>
</tr>
<tr>
<td>Interop_free data flows</td>
<td>Contributions bringing out the relevance of interoperability and free data flows (of both personal and non-personal data)</td>
</tr>
<tr>
<td>Language</td>
<td>These contributions bring out the linguistic and conceptual challenges of data governance (speaking -or not- the same language and referring to the same concepts with the same words, etc.)</td>
</tr>
<tr>
<td>Legal/Institutional Fragmentation</td>
<td>These highlights discuss legal and institutional fragmentation (ranging from regulation to the lack or existence of certain institutions for data governance)</td>
</tr>
<tr>
<td>Literacy</td>
<td>Contributions that highlight the importance of literacy (data and digital) not only for citizens, but also for the private and public sector</td>
</tr>
<tr>
<td>Multistakeholder Engagement</td>
<td>Contributions that underline the importance of bringing all the stakeholders to the table and to the discussion</td>
</tr>
<tr>
<td>Operational perspective</td>
<td>Highlights calling the attention over the importance of governing data at the operative levels, looking at industry per industry processes and needs</td>
</tr>
<tr>
<td>Political fragmentation (power and values)</td>
<td>Contributions that draw special attention to political disagreements and the difference of power and values across countries and regions</td>
</tr>
<tr>
<td>Public good</td>
<td>Contributions discussing the importance of data for public good, interoperability to create public value, etc.</td>
</tr>
<tr>
<td>Role of State</td>
<td>Highlights pointing at the importance of the role of the State for governing the datasphere</td>
</tr>
<tr>
<td>Sovereignty</td>
<td>Highlights emphasizing on strengthening independence in digital infrastructures, as well as aspects related to speaking about communities in their own terms and allowing communities to govern their data</td>
</tr>
<tr>
<td>Transportation</td>
<td>Contributions discussing applications of data governance models to transportation and mobility services</td>
</tr>
</tbody>
</table>

*Source:* developed by the authors.
Interviewee's profiles and background

Antonio Biason
Legal and Policy Officer at the Data Policy and Innovation Unit
Directorate-General for Communications Networks, Content and Technology – DG CNECT
Luxembourg

Antonio has worked for the European Commission as a Legal and Policy Officer since 2021 in the implementation of the European Strategy for Data (2020), in particular with respect to the Data Governance Act and Data Act. Previously, he worked as a Deputy Attaché for Digital and Telecom Affairs at the Portuguese Permanent Representation to the European Union and as a Blue Book Trainee for the Southern African and Indian Ocean Unit of the European External Action Service (EEAS).

António holds a master's degree in International and European Law from the Universidade Nova de Lisboa as well as a bachelor's degree in Politics and International Relations from the University of Kent.

Roger Dubach
Ambassador at FDFA and Switzerland’s representative before the Council of Europe on AI (CAHAI)
Swiss Federal Department of Foreign Affairs (FDFA) / CAHAI
Switzerland

Roger Dubach studied Law at the University of Fribourg (Switzerland) and Philosophy at the University of Louvain-la-Neuve (Belgium).

In 2003, he joined the diplomatic service of the Federal Department of Foreign Affairs and was appointed as a Diplomatic Advisor to the Director of the Federal Office for Energy in 2006. In this and his next function as Energy Counsellor at the Swiss Mission to the EU in Brussels, he acted as Technical Director of the energy negotiations between Switzerland and the EU.

In 2013, he was appointed as a Personal Advisor to the Minister of the Federal Department of the Environment, Transport, Energy and Communications, and later as Deputy Director of the Task Force for the Swiss OSCE Chairmanship.

He also served as Diplomatic Advisor on digital policy issues in the Cabinet of the OECD Secretary-General in Paris. In 2018, the Federal Council appointed him as an Ambassador and Deputy Director of the Directorate of International Law. Since 2020, he has represented Switzerland in the CAHAI (Council of Europe on AI).
Mr. Andrin Eichin works as head of data policy issues at the Swiss Federal Office of Communications (OFCOM). As an expert on platform and data policy, he works in policy development on national level and represents Switzerland's position in various fora of global digital policy and Internet governance.

He has been the project lead and one of the main authors of a report by the Swiss Government on trustworthy data spaces and digital self-determination. He has also been part of OFCOM's core policy team on platform regulation, contributing to the Swiss Government's recent report on impacts of platforms on public opinion formation and public communication (report available here).

He is a member of the Council of Europe's Committee of Experts on the Integrity of Online Information. He is also one of the Swiss Government representatives in the OECD Working Party on Data Governance and Privacy and covers disinformation in the context of the OECD Committee on Digital Economy Policy (CDEP).

Before joining the Swiss Federal Office of Communications, Mr. Eichin worked as Assistant Director in the UK's Department for Business, Energy and Industrial strategy, where was among other the UK negotiation lead for the EU Platform-to-Business Regulation. He holds a Master degree (M.A.) in International Studies from Goldsmiths, University of London and a Bachelor degree (B.A.) in International Relations from the University of Geneva. Mr. Eichin is fluent in German, French and English and has basic knowledge in Italian.

References:
- Government Report on Trustworthy Data Spaces and Digital Self-Determination, Federal Department of the Environment, Transport, Energy and Communications DETEC and Federal Department of Foreign Affairs FDFA
- Swico Ethics Charter on Data Governance, Swico (only available in German)
- Data Sharing Canvas, Data Sharing Coalition
Ella Etienne-Denoy is the CEO of Green Soluce, an innovative consulting firm dedicated to enabling the rise of more sustainable, smarter and user-centric real estate and cities, i.e. great places we love to work in, live and play.

She has significant experience in leadership, team management and business development in consulting, with a strong track record in launching pioneering initiatives, managing multistakeholder projects in real estate, together with a first-class academic background (ESSEC Business School & Universität Mannheim) and an international profile (French & Australian with full fluency in French, English and German).

Mr. Torbjörn Fredriksson heads the E-commerce and Digital Economy Branch at the UN Conference on Trade and Development (UNCTAD). The Branch’s work covers the Digital Economy Report, the eTrade for all initiative, eTrade for Women, the E-commerce Week, various capacity-building activities, and the Intergovernmental Group of Experts on E-commerce and the Digital Economy.

Fredriksson joined the UN in 2000. Before joining UNCTAD, he held positions at the Invest in Sweden Agency and the Swedish Ministry of Industry and Commerce. He has an MSc in International Economics from the Stockholm School of Economics.
Heleen Janssen is a postdoctoral researcher at the University of Amsterdam, Faculty of Law, at the Institute of Information Law (IViR), in the Blockchain Society and Policy research group. She is an associate researcher at Cambridge University, Department of Computer Science and Technology, at the Compliance and Accountable Systems research group.

Paul Nemitz is the Principal Advisor in the Directorate General for Justice and Consumers of the European Commission. He was appointed in April 2017, following a 6-year appointment as Director for Fundamental Rights and Citizens Rights in the same Directorate General.

As director, Nemitz led the reform of Data Protection legislation in the EU, the negotiations of the EU – US Privacy Shield and the negotiations with major US Internet Companies of the EU Code of Conduct against incitement to violence and hate speech on the Internet.

He is a Member of the Commission for Media and Internet Policy of the Social Democratic Party of Germany (SPD), Berlin and a visiting Professor of Law at the College of Europe in Bruges. Nemitz is also a Member of the Board of the Verein Gegen Vergessen – Für Demokratie e.V., Berlin and a Trustee of the Leo Baeck Institute, New York. He chairs the Board of Trustees of the Arthur Langerman Foundation, Berlin.

Nemitz studied Law at Hamburg University. He obtained a Master of Comparative Law from George Washington University Law School, where he was a Fulbright grantee. He also passed the first and second cycle of the Strasbourg Faculty for Comparative Law.
Markus Overdiek works for the Europe's Future program at the Bertelsmann Stiftung. Within the Bertelsmann Stiftung, he previously worked on the projects “Ethics of Algorithms” and “Global Economic Dynamics”. Markus has a focus in the fields of economics, data science, digitization, and European affairs. He has received his Master's degree in "Public Policy" with a focus on economics from the University of Münster. He also studied at the University of Leipzig and the Aix-Marseille School of Economics.

Paola Pierri is Director of Research and Design at Democratic Society, which works across Europe to ensure that everyone has the right to participate in the decisions that shape their lives. Among other things, in her role at Democratic Society Paola is exploring the social implications of digitalisation on our democratic practices and our public space, and working on questions of data governance and public oversight.

Paola has been previously a Research Fellow at the Weizenbaum Institute, researching questions of Digital Inequalities and Digital Sovereignty. She is a visiting lecturer and researcher collaborating with different Universities across Europe. Paola has a doctorate in Design Anthropology from the London College of Communication.
Jeni is the founder of Connected by Data, an initiative that aims to put community at the heart of data narratives, practices and policies.

She is co-chair of GPAI's Data Governance WG, a Shuttleworth Foundation Fellow and Associated Researcher at the Bennett Institute for Public Policy. She sits on the Boards of Creative Commons, the Global Partnership for Sustainable Development Data and the Information Law and Policy Centre.

She was previously CEO of the Open Data Institute, where she worked for nine years.

She loves Lego and board games and is the proud co-creator of the open data board game, Datopolis.

Gautam Kamath is a Senior Advisor for International Affairs at the Centre for Regulation in Europe (CERRE). He has worked for several years with leading global technology companies in Brussels, New Delhi, Singapore as well as with public sector organizations like the World Bank and the United Nations on infrastructure finance (mergers & acquisitions), social entrepreneurship, and human rights.

A common thread driving Gautam's career is the role of technology in shaping society positively, and he has worked on bridging the digital divide, enabling financial inclusion through digital payments, or using data to mitigate effects of natural disasters or public health crises. He has a Masters degree in Public Policy from Harvard Kennedy School, an MBA (Finance & International Business) from National Taiwan University, and a liberal arts degree from Maastricht University.
Christiaan is VP, Strategy and Regulatory for Sovos Compliance, which in 2018 acquired TrustWeaver, a leading e-invoicing and e-archiving compliance vendor that Christiaan co-founded in 2001.

During his 25+ years of experience, Christiaan has served on executive and supervisory boards for European and international business and organizations. He was elected a World Economic Forum (WEF) Global Leader for Tomorrow in 2000.

Earlier in his career, Christiaan was Deputy Director at the Paris-based global headquarters of the International Chamber of Commerce (ICC). He is a frequent convener, speaker and moderator of high-level policy, standardization and other key multistakeholder events and processes. As Vice Chair of the ICC Commission on the Digital Economy Christiaan heads up ICC’s cross-functional public/private sector initiative to develop global good practices for continuous transaction controls (CTCs). Among other industry roles, Christiaan is also a member of the Executive Committee and Chair of the Public Policy Working Group of the European E-Invoicing Service Providers Association (EESPA). He is a Dutch and French dual citizen and holds a law degree from the Erasmus University in Rotterdam, Netherlands.

Oğuzkan Güzel is the founder of Güzel Law Firm in 2016. He is a graduate of Ankara University, Faculty of Law in 1994 and holds Master degree in EU Competition Law, and a Ph.D degree in Public Law. He holds a LL.M degree in Law, from University of Minnesota, USA.

Having more than 25 years of experience in the field of competition and regulation, including 10 years of expertise in the Turkish Competition Authority, Oğuzkan Güzel provides consultancy services to Turkish and international companies and public institutions on regulation, competition law and foreign trade. His work life has passed with the application of competition and regulation law in different sectors.

Since 2009, he has been working on electronic communication law, digital economics and internet law mostly. He was the representative of Turkey at the Commission of Digital Economy of ICC between 2009-2019.
Recommendations made by the participants

- Swico Ethics Charter on Data Governance. Merkblatt (only available in German).
- Data Sharing Canvas. Data Sharing Coalition.

Written submissions

Markus Overdiek, Europe’s Future, Bertelsmann Stiftung

What are the main trends and priorities regarding data governance in Europe today?

The term “data governance” is used in different contexts; depending on the context, its meaning can differ substantially. Data governance is not only an important topic for most organizations either from a corporate, governmental, or civil society perspective. It is also of increasing concern from an international politics perspective.

In this context, there are at least a handful of regulations that are to different degrees relevant for data governance. Those are now in the process of finalization and then adopted by the legislative institutions of the EU, e.g.:

- Data Governance Act (already published in the Official Journal of the European Union on June 3, 2022; will apply from September 24, 2023 onwards.)
- Data Act
- Artificial Intelligence Act
- Digital Markets Act
- Digital Services Act
- Chips Act

These legislations and legislative proposals will become active in the upcoming months and years – and thus, will shape (digital) Europe. Due to tensions in international relations with the US and China, supply-chain issues with respect to the corona pandemic, and Russia’s war in Ukraine, it is now a policy priority for the European Union to become more independent regarding its digital infrastructure and its digital markets.

Also, the EU aims to become a worldwide trailblazer for a more human-centric and value-based approach to digitization. Particularly, sovereignty and human-centricity are currently two key aspects of data governance from the policy perspective.
What are the main challenges for Europe and stakeholders engaging in Europe?

I see two core issues that pose challenges related to regional sovereignty and the need for a human-centric approach.

- **Sovereignty:** Our geopolitical environment is currently loaded with a lot of uncertainty. The EU responds to this uncertain environment with policy measures that aim to strengthen independence in digital infrastructures and facilitate the dissemination of European companies that are based on amplifying the establishment of European-based companies with digital and data-driven business models.

- **Human-centricity:** Coming from another perspective, data use needs to be beneficial to us all. But corporate undertakings are dominant, and oftentimes, they only have unilateral profiteers. It is therefore necessary that the diverse engagement of civil society actors and researchers are better facilitated by European institutions. Otherwise, data usage will only benefit the few, not the many.

Are there any (emerging) barriers to data sharing that impact international cooperation and trade with other countries and regions?

There is no one size fits all solution for data sharing. Depending on the application case, different approaches are worth considering: Open Data, Data Trusts, Data Commons, Data Spaces, and Data Markets – just to name the most well-known. However, these theoretical frameworks sometimes still miss the link to real-world practice – and this real-world link is still a barrier to a secure exchange of data.

Besides finding the best fitting models to share data, political negotiations will show how freely data can be exchanged. For example, there are currently discussions within the WTO about a permanent tariff ban on digital goods. While some countries are strongly in favor, others neglect this initiative. Anyway, (small) tariffs on digital goods would not be a huge barrier to data sharing. If political disagreement about digital goods prevails, it could also impact international cooperation in this matter negatively.

Can you provide an example of good practice (normative, technical, operational) related to data governance?

More initiatives exist that promote open data as a model to share non-personal data. Especially on the city-level, a lot is happening: More and more data in relation to aspects such as waste management, air quality, or transportation modes are becoming publicly available. Another example is provided by the city of Barcelona, which implemented a data commons model. An overview of many of these kinds of good practices for Europe is available on Europe's Data Portal. However, there is still room for improvement when it comes to the explicit design of different data-sharing models. For instance, using a PDF file to publish data can only be the minimum effort. Linked open data in the context of open data is on the other end of the spectrum and something to aim for when working towards good open data practices.
What would be your key recommendations for the stakeholders in the data governance ecosystem (governments, private sector, civil society)?

When we talk about data, we are also talking about power structures: Oftentimes, some own many data, while many own some data – and those with economic power are mostly those who have a lot of data at their disposal. This is an issue because data are not neutral, and their careless use can contribute to the maintenance of prevailing societal injustices.

When key stakeholders in the data governance ecosystem conduct their actions and initiatives, they should always identify and have in mind the current power structures and the nascent ones.

What is the datasphere that you hope to see?

On a political macro-level, let us work towards a data governance ecosystem that tackles existing inequalities by taking into account the perspective of the unfavoured side of the balance of power: This would imply taking the perspective of individuals rather than corporations, the perspective of developing countries rather than developed countries, and finally a common-good perspective rather than a market perspective.

**Ambassador Roger Dubach, Government of Switzerland**

What are the main trends and priorities regarding data governance in Europe today?

- **Priorities:** States have very different priorities with regard to the use of data: some put the focus on data protection to build trust, others on data use to foster innovations. Some follow a more market-based model, others a more state-centered model. Some use regulatory means, others use self-regulation, ethical guidelines and incentives more than prohibitions. The role of the state and the economy differs significantly based on the data strategy of the state.

- **Trends:** States and communities have different philosophies on how to deal with data. This leads also to different regulatory frameworks that apply to data internationally. Regulatory fragmentation is therefore one of the major trends that constitute a fundamental challenge to global data governance.

In your opinion, what are the main challenges for Europe and stakeholders engaging in Europe?

The economy has understood that there is a huge potential in data based innovations. States are now willing to unleash this potential by providing appropriate frameworks and by giving incentives. One of the main difficulties is overcoming the trade-off narrative between data protection and data use. The vision of digital self-determination that Switzerland is following makes it possible to improve access to data while strengthening control over one's own data. By building confidence, data subjects are more likely to share their data with others. This trust can be built by making available trustworthy data spaces based on fundamental principles like transparency, control, fairness, accountability and efficiency.
One of the main challenges is to find appropriate incentives for collective forms of data use. Companies should not fear competitive disadvantages when making their data accessible to others for the common good. They should rather see it as a win-win situation. However, this requires suitable framework conditions.

Another main challenge is interoperability. Data spaces must be connected and compatible in order to enable cross-border and cross-sector data flows.

**Are there any emerging barriers to data sharing that impact international cooperation and trade with other countries and regions?**

States begin to understand the value of data: this can lead to protectionist forms of dealing with data that prevent collective and transnational uses of data.

States should enable data sharing in a responsible manner. Both complete inaction and over-regulation are not suitable. States should enable and guide data flows but not control them.

**What do you mean by Digital Self-Determination?**

The concept of digital self-determination stands for a human-centered and rule-based approach that does not see digital development as an end in itself but as a means for individual and collective development.

It builds upon the idea that new technologies can have an emancipatory force and should be used to empower and not limit the choices and possibilities of individuals and companies.

It recognizes at the same time the challenges that new technologies pose to a self-determined life (e.g., manipulation and nudging through targeted advertising, exclusion and discrimination caused by the digital divide or bias, black box problem of algorithms in decision-making processes, etc.).

It understands the potential of cross-border data flows and the enormous importance of interoperability for the linking of data spaces.

**What are the principles for trustworthy data spaces that you came up with in your Swiss report?**

- Transparency
- Control
- Fairness
- Accountability
- Efficiency
Can you provide an example of good practices (normative, technical, operational) related to data governance?

Switzerland launches a National Data Infrastructure on Mobility that enables users to better switch from different modes of transport. The aim is to foster multimodal or connected mobility and empower travelers. However, until now this national data infrastructure will operate without personal data and is mainly limited to non-personal data.

Other prominent examples that were analyzed in our report on digital self-determination for the Swiss Federal Council are open finance and the electronic patient record.

These use cases all aim at implementing the five fundamental principles of digital self-determination, namely transparency, control, fairness, accountability and efficiency in their respective sector. This leads to the creation of trustworthy data spaces.

What would be your key recommendations for the key stakeholders in the data governance ecosystem (governments, private sector, civil society)?

- Work in sectors but also horizontal with a transversal perspective!
- Think internationally! Think globally! Especially while building trustworthy data spaces!
- Foster interdisciplinary! Especially between legal, economic, socio-philosophical and technological experts!
- Public sector: Don't use prohibitions but use incentives instead!
- Private sector: Think of data also as a common good that has a societal value when used in the public interest.
- Civil society: make sure that existing human rights are respected, protected and fulfilled also in the digital sphere, meaning offline and online.
- Promote collective forms of data use by creating win-win situations!
- Put a focus on data access, re-use of data and interoperability!
- Building trust is essential and makes it more likely that people share their data, including personal data, voluntarily!
- Principles and rules are crucial to promoting legal certainty!

What is the DataspHERE that you hope to see? What does collaborative data governance mean to you?

I understand the following under collaborative data governance:
- First, it means, that different actors come together to share their data based on common rules. Data access is guaranteed to all actors participating in the data space.
- Second, it means that the governance structure of this data space is participatory. All actors that have a role in the data space as data producers or users have a say in how the common rules on data sharing are built and implemented.
- It therefore stands for a democratization of the digital sphere where those affected by the rules are also shaping them. It stands for an approach that wants to end data monopolies and concentrations and work in decentralized data spaces.