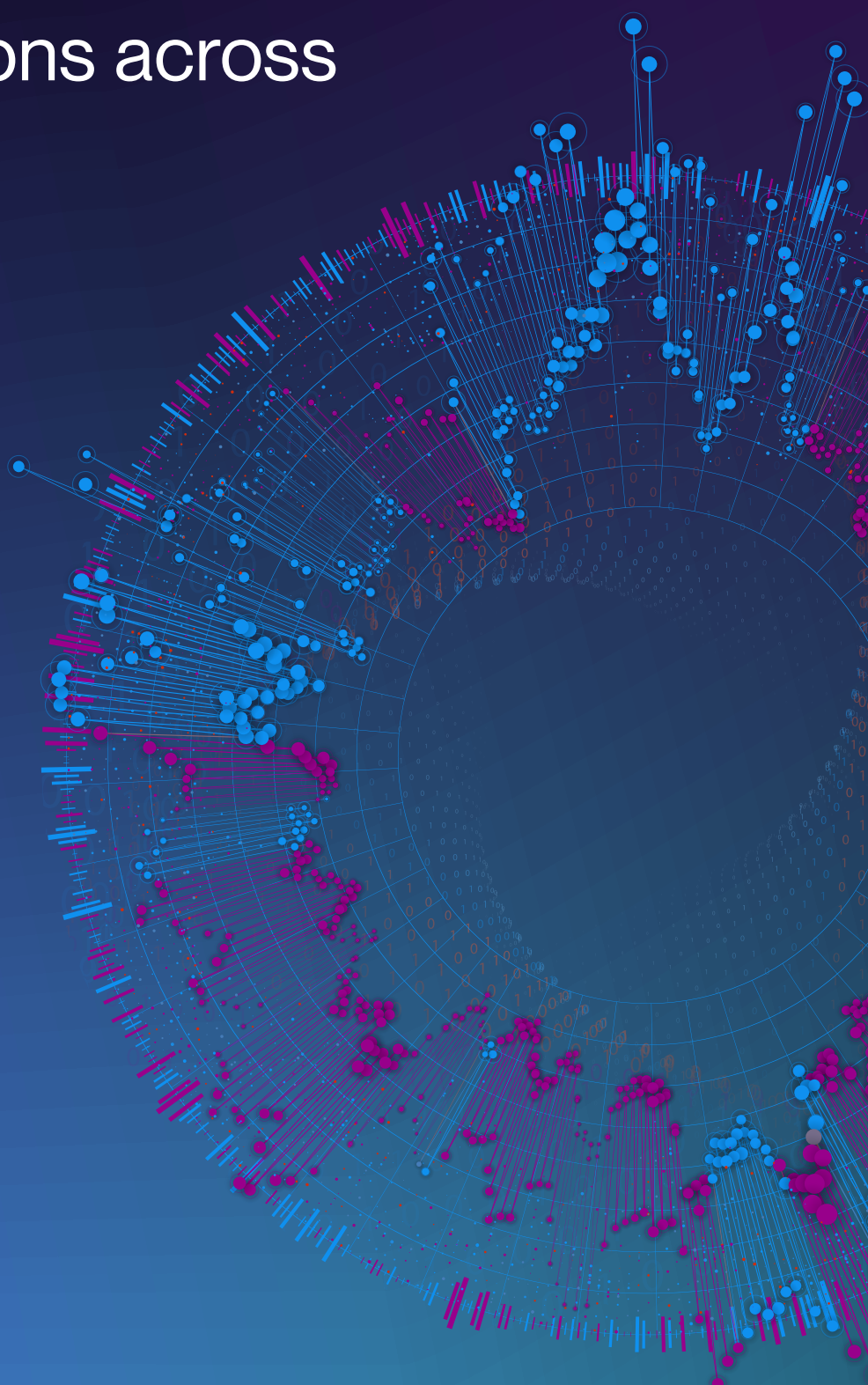




DATASPHERE
INITIATIVE

Sandboxes for data:

creating spaces for
agile solutions across
borders



UK Government

EXECUTIVE SUMMARY

Broadly speaking, operational sandboxes are testing environments where hosted data can be accessed and used, while regulatory sandboxes are collaborative processes where regulators and firms evaluate new technologies within a regulatory framework. More succinctly, operational sandboxes actually handle data, and regulatory sandboxes provide dialogue and guidance on how data is handled.¹

This report considers existing kinds of sandboxes, and seeks to apply lessons learnt towards the designing and implementation of cross-border sandboxes for data.

This report's typology of regulatory sandboxes shows that they vary according to the flexibility or leeway permitted by regulators, how directly the findings are used to shape or inform future laws, and if any incentives are offered to innovators to participate. These differences are shaped by the legal and cultural environment of each national regulator. Sandboxes also vary in goals, scope and scale.

Sandboxes are an agile response to the 'Datasphere', the complex system encompassing all types of data and their dynamic interactions with human groups and norms. This report argues that the new and complex challenges brought by data require innovative governance mechanisms to address them. Sandboxes are one such mechanism. They can reduce regulatory uncertainty, help emerging innovators, build capacity within and cooperation between regulators, and increase regulatory clarity and compliance. However, they are also resource-intensive, can increase risk and face difficulty in scaling up.

Cross-border sandboxes for data can address these challenges by using careful design and issue identification and definition, choice of regulatory partners, stakeholder engagement and active management of information asymmetry and risk. Ongoing assessment and iterative improvement in the design and operation of the sandbox will also be essential.

This report analyses a range of cross-sectoral innovations – emerging intermediaries, privacy enhancing technologies (PETs) and browser-based consent management to identify areas of regulatory opportunity that sandboxes could address. It also summarises challenges and opportunities in wider applications of data-flows like innovation and trade, health data, mobility and biodiversity genomics where sandboxes could be used to tackle friction and bottlenecks.

Currently, cross-border sandboxes for data are just emerging. An initiative by the Association of Southeast Asian Nations ASEAN and the GSM Association (GSMA) is just beginning. Provision for sandboxes has been made in agreements such as the Canada-United States-Mexico (CUSMA) trade agreement, which refers to cross-border sandboxes for financial services, and the Digital Economy Partnership Agreement (DEPA) between Singapore, Chile and New Zealand. These sandboxes are still in the planning phase. This report and its roadmap are a contribution to the evolving discussions on how to implement cross-border sandboxes for data.

1. IMDA and PDPC (2019), *Public-Private Data Collaboration Case Study*, Infocomm Media Development Authority.

Cross-border sandboxes have the potential to improve regulatory capacity-building and cooperation across borders, increase innovation, competition and choice in many markets, enhance compliance and reduce regulatory arbitrage, and make data more available and accessible across borders and sectors.

The report's roadmap sets out a preliminary guide for how to design and initiate cross-border sandboxes for data. It also sets out key questions that must still be addressed, including how to ensure compliance across borders and what kind of internationally binding commitments innovators and regulators can make.

The report is structured in six sections. **Section 1** defines the different types of sandbox, describes their uses, sets out a typology of key differences between regulatory sandboxes, and summarises the emerging examples of cross-border sandboxes. **Section 2** sets out the lessons learnt from sandboxes so far, and how they have been applied to data. **Section 3** looks at innovations in technology and new approaches to data - emerging intermediaries, PETs and browser-based consent management - to identify issues sandboxes could be used to address. It also examines policy or sector challenges where sandboxes could help to bridge divides for innovation and trade, health, mobility and biodiversity genomics. **Section 4** sets out the main challenges of implementing cross-border sandboxes, and how these challenges could be addressed. **Section 5** outlines the process or model for setting up cross-border sandboxes for data. **Section 6**, the conclusion, summarises the main findings and identifies future questions to be answered for the successful design and implementation of a cross-border regulatory or operational sandbox.