

MPD Initiative Maturity Framework Summary

Tier 0	Tier 1	Tier 2	Tier 3
Feasibility "To what extent do the conditions in a country allow for and facilitate the use of MPD for official statistics?"	1. SUITABILITY OF LEGAL AND GOVERNANCE ENVIRONMENT	Legal & regulatory framework	Comprehension of data protection and privacy legislation and regulations Comprehension of statistics legislation and regulations Comprehension of MPD-specific legislation and regulations Comprehension of legislation or regulations related to work of the data controller (e.g. Mobile network operator licensing, scope of telecommunications regulator) Stability of legislation and regulations impacting the use of MPD
		Data governance policies of the data controller(s) (i.e. Mobile Network Operator(s) (MNOs) or telecommunications regulator)	<i>Data governance policies of the data controller(s) (i.e. Mobile Network Operator(s) (MNOs) or telecommunications regulator)</i> Suitability of data governance policies for the safe and secure storage and processing of MPD for official statistics Suitability of data governance policies export of MPD-derived anonymised aggregates and indicators for official statistics
		Data governance policies of the data end-users (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))	<i>Data governance policies of the data end-users (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))</i> Suitability of data governance policies for the safe and secure analysis of MPD-derived anonymised aggregates and indicators for official statistics Suitability of data governance policies for the safe and secure publishing of MPD-derived statistics
		Public perception	Public understanding and acceptance of the use of MPD for official statistics
	2. STAKEHOLDER ENGAGEMENT AND ALIGNMENT	Disposition of the Data Controller(s) (e.g. Mobile Network Operator(s) (MNOs), telecommunications regulator)	Organisation culture and leadership at data controller regarding data and data sharing Alignment of business strategy with data sharing (if not regulator or government agency) Engagement of technical management at data controller Understanding of drivers of data controller engagement (e.g. incentives, regulations)
		Disposition of the Data User(s) (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))	Organisation culture and leadership at data user(s) regarding innovation and novel data sources Engagement of technical team managers at data user(s) Clear 'demand-side' use/need/application opportunity communicated by senior manager(s)
		Disposition of regulatory bodies	Engagement of telecommunications regulator (if not data controller) Engagement of data protection agency (DPA) Engagement of other relevant regulators and agencies (e.g. national security agencies, information regulator)
		Partnership-level alignment	Documentation <i>in writing</i> describing each stakeholder's orientation towards the initiative, including willingness that it proceed, commitments to other parties, obligations and rights/expectations/authority within the agreements. Governance structures Conflict resolution process Risk management Approvals processes for release of data / products
	3. SUITABILITY OF DATA INFRASTRUCTURE	Data Infrastructure of individual Data Controller(s) (e.g. Mobile Network Operator(s) (MNOs), telecommunications regulator)	Access to necessary infrastructure to store the necessary volumes of MPD Access to necessary infrastructure to process the necessary volumes of MPD Necessary tools to appropriately manage and process the quantity of data (volume, frequency, and complexity) (e.g. FlowKit) Suitable tools and processes for the secure export of MPD-derived anonymised aggregates and indicators Frequency and regularity of MPD ingestion
		Data infrastructure of Data Users (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))	Access to necessary infrastructure to process anonymised aggregates and/or indicators derived from MPD Suitable data security tools and processes for the secure storage and analysis of MPD-derived anonymised aggregates and indicators
	4. SUITABILITY OF DATA ENVIRONMENT	Partnership-level data coverage	Sufficient geographic coverage of the (combined) mobile network(s) of participating MNO(s) <i>Note: if the data controller possesses the data from all MNOs (e.g. the data controller is the telecommunications regulator and is mandated to require MPD from all MNOs) then all MNOs can be considered to be participating</i> Sufficient representativeness of the (combined) subscriber base of participating MNO(s) <i>Note: if the data controller possesses the data from all MNOs (e.g. the data controller is the telecommunications regulator and is mandated to require MPD from all MNOs) then all MNOs can be considered to be participating</i> Sufficient (combined) market share of participating MNO(s) <i>Note: if the data controller possesses the data from all MNOs (e.g. the data controller is the telecommunications regulator and is mandated to require MPD from all MNOs) then all MNOs can be considered to be participating</i>
		Availability and suitability of cell data	Availability and reliability of location data for cell towers Availability and reliability of coverage data for cell towers
		Availability and suitability of census and survey data	Availability, reliability and frequency of censuses Availability, reliability and frequency of surveys containing modules on mobile phone use and on mobility or expenditure (as required for use cases)
		Suitability of complementary data sources from data end-users (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))	Availability of definitive GIS data on administrative unit boundaries Availability of complementary data sets (e.g. GIS data relevant to use cases (roads, building footprints, geographic features, hazard maps), dates of important events such as public holidays, other mobility dataset such as public transit or tourism data) Interoperability of data between Data Users and between Data Users and providers of complementary data
		Acceptance and usage of non-traditional data	Production, use and publication of "experimental" and non-official statistics Acceptance of "experimental" and non-official statistics by decision makers
	5. HUMAN RESOURCE CAPACITY AND AVAILABILITY	Data Controller(s) (e.g. Mobile Network Operator(s) (MNOs), Telecommunications Regulator)	Availability and skillset of data centre and systems engineers Availability and skillset of data scientists/analysts and BI staff Availability and understanding of communications and corporate affairs staff Availability of continued professional development (CPD) and training opportunities Recruitment and succession planning processes
		Data Users (e.g. National Statistical Office (NSO), other Ministries, Departments and Agencies (MDAs))	Organisational HR strategy for data science and MPD Availability and skillset of data scientists and analysts Availability and skillset of survey statisticians Availability and understanding of project managers Availability and understanding of communications staff Availability of continued professional development (CPD) and training opportunities Recruitment and succession planning processes
Impactfulness "To what extent does the use of MPD for official statistics result in improved decision-making that benefits the people of a country?"	6. IDENTIFICATION AND IMPLEMENTATION OF APPLICATIONS	Identification of application	Applications of MPD for official statistics have been identified and scoped
		Implementation of applications	Applications of MPD for official statistics have been developed and implemented
		Sharing, publication and use of outputs	Data products and reports derived from MPD being shared and published Data products and reports derived from MPD being incorporated into decision-making processes
	7. IDENTIFICATION OF AND PROTECTION AGAINST MISUSE	Awareness of ethical considerations	Awareness of and capacity to identify the potential for the (accidental or malicious) misuse of MPD, including those specific to the context of the initiative
		Suitability of ethical oversight and governance processes	Governance structure and processes for identifying and mitigating risks Independent oversight and transparency of decision-making
Sustainability "To what extent do current structures and processes enable the long-term use of MPD for official statistics?"	8. SUSTAINABILITY PROSPECTS	Prospects for on-going funding of the initiative	Sustainable model for financing the on-going maintenance of the data pipeline Sustainable model for financing the on-going maintenance of the partnership (e.g. governance processes)
		Prospects for on-going uninterrupted data access	Length of time for which the Data Controller(s) has agreed to share the data Understanding and processes for the renewal of data access agreements
		Capacity of stakeholders to maintain the data pipeline independently	Capacity of the Data Controller(s) to maintain the data pipeline independent of (routine) external support (e.g. Technical Service Provider) Capacity of the Data User(s) to analyse MPD to maintain existing use cases independent of (routine) external support (e.g. Technical Service Provider) Capacity of the Data User(s) to develop and implement new use cases MPD independent of (routine) external support (e.g. Technical Service Provider)