# Putting Mobile Phone Data to work for Policy: A Theory of Change

Pre-conditions EOI->Proposal

# **Actions-Outputs**

# Outcomes

# Impact

- · Key stakeholders are committed to exploring a partnership. MoU established (at least between MNO and NSO/MDA, with proposed roles
- · There is a clearly identified lead to drive forward
- The incentives, value exchanges, of participating MNOs and other stakeholders are understood
- · No blocking factors, (eg Data Protection Agency, National Intelligence Agency are "non-objecting", plans comply with country regulation.)

 At least one MNO committed in principle to sharing data

- · Partners have available staff resource to enable them to engage, potentially with seed funding.
- There is foundational capacity at the recipient organisation (NSO/MDA)

access, the processing pathway and potential benefits of using NSO model (data quality, integration into data ecosystem and use). Technical requirements for chosen approach are well specified for MNO. There is an opportunity for win-win value exchange between data controller and recipient.

- · Legal partnership data sharing agreements signed
- · Governance established eg SteerCo, civil society

- MNO data, infrastructure, capability assessed with specialist support, bespoke pipeline plan
- Data pipeline, required infrastructure established, NSO/data users access aggregate data

### Capability - training received:

- MNO trained on maintaining secure data pipeline, production of aggregates, QA
- · NSO trained on data use and limitations, how to account/adjust for biases in the data
- NSO (and/or MDA) on how to combine mobile data statistics with other use case specific data

### Data and Use cases:

- · NSOs engage with end users to develop use case, and with wider eco-system on MPD data
- · End users specify the outputs they need, how they might integrate into their workflows
- Survey data are generated / accessed for purpose of MPD bias adjustment and scaling
- Additional data for use cases is accessed

If countries are using standardised methods they will produce robust, comparable indicators efficiently. The use case has strong demand with clear operational need, and is feasible with available methods and timeframe. Trained

· An active and mutually responsive public-private partnership with shared purpose, meeting all incentives and needs

· MNO providing sustained, secure, high quality, data flows that protect privacy of subscribers

### Capability - outcomes:

- MNO is processing mobile phone data in a secure. automated, privacy protecting and standardised manner. quality assuring their data and maintaining the data pipeline
- . NSO understands the uses and limitations of the data, how to interpret it, and the range of applications and use cases, and are able to advocate for it
- NSO analysts able to produce population / mobility indicators from aggregates, applying standardised methods, accounting for bias, and combine it with other data for policy use

### Data and Use cases:

- · Data is adjusted for biases as required using survey data (by NSO / specialist implementing partner)
- High quality data outputs are available to decision makers and being used for a use case

### Assumptions

Decision-makers know and trust the data and have confidence in sutainable access. Use of the data results in better-informed decisions being made, improving accuracy, timeliness and effectiveness of policies and programmes. Stakeholders realise value from their engagement in the programme and are incentivised to continue in the Mobile data is being used systematically to enhance the evidence base for policy and decision making

Mobile data is integrated into the national data system such that country ownership is sustained, with limited dependence on outside actors.

National institutional environment is strengthened with enablers and safeguards to responsibly use MPD for policy and

Sovernment and other data users are better able to assess and predict policy challenges, target solutions, and monitor realtime progress on a wide range of Sustainable Development Goals.

# Contribution to achievement of SDGs relating to:

Transport

Crisis resnonse Climate change Displacement issues (National statistics) Digital Connectivity + Mobility

# **GDF Program** Support to **Country Pathway**

Country pathway

to Impact

(Country actors:

MNO(s) NSO/MDA,

Regulator etc)

(Management core team, research stream, TTLs. specialist implementation/ advisory partners, donors, other WB programmes, wider MPD multistakeholder initiatives)

- Convening country partners, engaging, communicating on value of MPD
- Aligning, leveraging other multi-stakeholder MPD
- · Identifying and responding to MNO and other
- Landscaping data governance and MPD ecosystems

# Assessment and technical assistance

- · Maturity assessment, proposal support, identification of country pathway / stream
- Support for legal and data sharing agreements • Technical support for identification of use case(s),

# Funding mobilisation:

Financial resources seed funding to countries

# R&D Stream (ongoing):

· Alignment of countries / use cases with research streams, method and software development, operational research, standardisation

# Resource Development:

 Maturity assessment framework, training modules, technical, legal, management resources

# Resource development:

- Modular technical training developed (informed by standardisation R&D stream 1), building on existing resources
- Technical specifications for data pipeline development and associated costs
- . Templates and support for TORs to flexibly provision data infrastructure and technical assistance, as needed

 Design / adaptation and delivery of software and standardised coding notebooks (manuals) for building aggregates, statistics

Delivery of training, mentoring - MNO, NSO/MDA/other users

# Assessment and Technical Assistance:

- Assessment of MNO data and pipeline requirements, establishment
- Privacy assurance of transmission channels for data pipelines
- · Identification and assessment of data science trainees
- Advice on required MNO and other data for use case
- Assessment on whether bias adjustment is essential / desirable / optional for the use case
- · As needed specialist support for bias adjustment and scaling, combining data for identified use case(s)
- . Quality checks of raw data and calculated data

# **Funding mobilisation:**

Connecting to WBG data lending projects, other sources, to sustain and scale use of MBD for policy solutions

Convening as part of country cohort for sharing experience, capacity strengthening (ongoing)

# **Technical Assistance**

As needed for:

- · Integration of new data into systems and workflows (INSD)
- Developing new use cases
- Disseminating learning

# Funding mobilisation:

. Support to access lending and other resources for sustainability.

Convening as part of country cohort for







