

Draft Code of Conduct for Third-Party Use of Big Data Generated by Mobile Network Operators

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Purpose

- Reduce transaction costs of releasing mobile network big data (MNBD) to third parties for public and commercial purposes

First step in a process that will hopefully lead to the adoption of a voluntary code of conduct by the region's mobile network operators (MNOs) that will be the most effective in minimizing possible harms

Method

- Potential harms have been identified through
 - the literature (Annex 1) and
 - engagement with ongoing analysis of MNBD at LIRNEasia

Anchored on my work on utility transaction-generated data since 1991

Definitions

- Big data: data that are very large in volume, diverse in variety and/or moving with such velocity (3 Vs), that traditional modes of data capture and analysis are insufficient and the insights generated therefrom are qualitatively more valuable
- MNBD include, but are not limited to
 - Call Detail Records of CDRs (associated with voice calls, SMS and data use)
 - Visitor Location Register (VLR) data used to locate mobile devices in use (collected but rarely stored)
 - Reload data applicable to prepaid customers
 - Additional data such as GPS [Global Positioning System] and some app generated data in case of smartphones
 - Data from certain apps such as Google and Facebook not included

One classification, based on actions related to processing

	Real time	Historical
Identifiable	RTI	HI
Anonymized	RTA	HA

Considered harms

- Privacy (9 out of 16)
 - Surveillance
 - Aggregation
 - Identification, individual and group
 - Insecurity
 - Secondary use
 - Exclusion
 - Breach of confidentiality
 - Disclosure
 - Increased accessibility
- Anti-competitive effects
- Marginalization

Remedy	Identified potential harm	Include in agreements transferring identifiable MNBD	Include in agreements transferring anonymized MNBD
<p>Mobile Network Operators (MNOs) will not engage in active surveillance of their customers, except as required by applicable law. MNOs will desist from collecting more data than are needed for the efficient operation of the networks and the supply of good service to customers. To the extent feasible, data collection practices will be transparent.</p>	<p><i>Active surveillance</i></p>	<p>No. Applying only to MNOs, this need not be included in agreements. However, active surveillance is a root cause of problems that could be manifested in other forms at the subsequent information processing and dissemination phases.</p>	<p>No. Applying only to MNOs, this need not be included in agreements. However, active surveillance is a root cause of problems that could be manifested in other forms at the subsequent information processing and dissemination phases.</p>

Remedy	Identified potential harm	transferring identifiable MNBD	anonymized MNBD
anonymization.	<i>De-anonymization</i>	No	Yes

Remedy	Identified potential Identified potential	Include in agreements agreements identifiable identifiable MIBD	Include in agreements agreements anonymous anonymous MIBD
<p>Individually identifiable Individually identifiable data will be released to third parties, unless the purposes are specified in the agreement and have been approved by an ethics review committee, if one is available. If an ethics review committee is not available, an equivalent third-party</p>	<p><i>Individual identification</i> identification</p>	<p>Yes</p>	<p>No</p>

Remedy	Identified potential Identified potential	Include in agreements agreements identifiable identifiable MIBD	Include in agreements agreements transferring
<p>Any agreement transferring identifiable data to a third party will also transfer responsibility to the third party to maintain safeguards to ensure security of individually identifiable data.</p>	<p><i>Insecurity</i></p>	<p>Yes</p>	<p>No</p>

Remedy	Identified potential harm	Include in agreements transfers identifiable MIBD	Include in agreements
<p>The agreement governing the transfer of data will include provisions governing risks posed by increased provisions accessibility risks data by increased to third parties</p>	<p>Increased accessibility</p>		<p>Yes</p>

Remedy	potential harm	transferring identifiable MNBD transferring identifiable MNBD transferring identifiable MNBD	transferring anonymized MNBD
accommodation for	<i>Anti-competitive effects</i>	Yes	Yes