



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF INFORMATION AND  
COMMUNICATIONS TECHNOLOGY

# Pilot Study on Big Data: Philippines

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World Telecommunications/ICT Indicators Symposium (WTIS)  
14-16 November 2017  
Hammamet, Tunisia

# Background, Objective, Scope

- In June 2016 , ITU initiated a pilot project to ***identify big data sources for ICT measurement*** to produce ICT indicators to enhance data availability, benchmarks and methodologies to measure the information society.
- The project was participated in by six countries: Sweden, Georgia, UAE, Kenya, Colombia and the Philippines.
- The ITU identified the Department of ICT as the country focal for the project.
- The project is on-going as DICT awaits final submissions.



# Project Resources

- Data providers:
  - Average of 4-5 members for each team
  - Dedicated time and software and hardware resources
  - Hiring of additional team members
- DICT
  - Designation of agency focal
  - Support of Legal Division
  - Designation of additional team members as the need arises
- National Privacy Commission
  - Conduct of the training for the Privacy Impact Assessment and resource speaker



# Advantage for the Philippines

- Philippine ICT industry growth is consistent with GDP growth and is expected to continue the positive trend supported by financial, telecommunications, Business Process Management (BPM), and health IT sectors.
- It has an active mobile phone market with 120,089,267 mobile cellular subscribers as of December 2016 (NTC).
- The use of e-services is steadily increasing with improved quantity and quality of government e-services providing a good basis for growth in the ICT sector and active online citizen engagement.
- Philippines has a significant social media presence in such applications as Facebook, Instagram, Facebook Messenger and Viber, to name a few.



# Advantage for the Philippines

With an active mobile phone market of 120 Million plus mobile cellular subscribers:

- DICT sees the potential of big data as a source of ICT indicators and new measurement standards. DICT is cognizant of the potential of big data to support development planning and policy-making.
- DICT also sees the importance of establishing public-private partnership models for data sharing.
- Opportunity to “test” the new legal environment for data protection.
  - Republic Act 10173 – Data Privacy Act
  - Implementing Rules and Regulations – 3<sup>rd</sup> quarter 2016



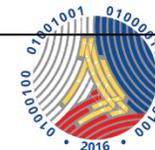
# Stakeholders

- The project invited as data providers telecom companies Globe Telecom, Smart Communications and the country's national statistical body, the Philippine Statistics Authority.
- Other stakeholders include the National Privacy Commission and the National Telecommunications Commission.



# Key Milestones

Date	Highlights
22-23 June 2016	<ul style="list-style-type: none"><li>• Project Kick-Off Meeting with ITU and Target Stakeholders.</li><li>• Overview, scope, and coverage of the project were discussed &amp; commitment setting of the stakeholders</li></ul>
17 February 2017	<ul style="list-style-type: none"><li>• Conduct of Threshold Analysis &amp; Privacy Impact Assessment Based on Data Privacy Act of 2012</li></ul>
8 March 2017	<ul style="list-style-type: none"><li>• Joint technical meeting with data providers and ITU's Project Consultant; discussed overview of the methodology, project scope, technical issues, and mission date(s)</li></ul>
19-27 April 2017	<ul style="list-style-type: none"><li>• ITU Data Scientist's Visit to the Philippines to assess the status of data processing, discuss with data providers issues in the methodology and actual processing of the indicators</li></ul>
20 July 2017	<ul style="list-style-type: none"><li>• Data transfer by at least two of the data providers on the <a href="http://pakete.gov.ph">pakete.gov.ph</a> or direct to the consultants.</li></ul>



# Concerns and Actions Taken

Concerns	Remarks
1. Privacy concerns and access to the data	<p>These were initiated to address the privacy concerns:</p> <ul style="list-style-type: none"><li>▪ Memorandum of Agreement between DICT and data providers – PSA, Globe and Smart</li><li>▪ DICT conducted a Privacy Impact Assessment</li><li>▪ ITU issued a privacy statement</li><li>▪ National Privacy Commission’s guidance and position paper</li><li>▪ DICT assuming most of the risks in the absence of NDAs between the data providers and consultants</li></ul>



# Concerns and Actions Taken

Concerns	Remarks
<p>2. There are 19 indicators identified under the study, <b>8 were agreed to be provided among the 15 indicators required</b></p>	<p>Reasons cited for non-inclusion of 7 indicators:</p> <ul style="list-style-type: none"><li>▪ Risk exposing sensitive data such as antennae locations (BD01 and BD02)</li><li>▪ Unavailable data and time constraints to process (BD10, BD12, BD13, BD14, BD15)</li><li>▪ BD 16 onwards are new indicators and not required</li><li>▪ Final 8 – BD03, BD04, BD05, BD06, BD07, BD08, BD09, BD11</li></ul>



# Concerns and Actions Taken

Concerns	Remarks
3. Data sharing/transfer	<p>Initially, there was no identified data-transfer protocol and platform. Data was transferred via the following:</p> <ul style="list-style-type: none"><li>▪ PSA submitted their data directly to ITU Project Consultant via supplied links to statistical resources online.</li><li>▪ Pakete.gov.ph was used as the data-transfer platform.</li><li>▪ Encrypted email is another means of transfer.</li></ul>



# Memorandum of Agreement: Relevant Provisions

The Data Providers shall:

- **Appoint its own Data Protection Officer** to ensure compliance and protection against any data breach from the Project;
- **Conduct a full Privacy Impact Assessment** to determine privacy issues and how to mitigate these;
- Ensure that the **data to be provided has undergone comprehensive anonymization** and processing (the “Processed Data”), and at no instance shall the data provider submit raw data;
- Ensure that the **Processed Data are processed within its premises.**



# Recommendations

1. Risk analysis for each country to include preliminary study of privacy and data protection concerns
2. Pre-project consultations with target stakeholders on the commitment and data they are willing to share
3. Development of legal instruments to define roles and responsibilities and data management cycles
4. Establish secure data sharing processes and platforms



# Thank you!

*For more information, please email  
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