

The Free Wi-Fi Internet Access in Public Places Project

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Project Background

- ❑ Ownership and usage of mobile phones is high at over 100% penetration rate;
- ❑ Is the “Texting Capital of the World”;
- ❑ Is the “Social Media Capital of the World”;
- ❑ Fastest growing internet population in the World with penetration raising to 52% in 2013;
- ❑ Mobile is the primary device for accessing the Internet, reaching 62% of total subscribers in Q3 2014;
- ❑ 3G/4G speed mobile broadband penetration at 37%
- ❑ Smart phone adoptions is at 54% and connections growth of 75% YoY;
- ❑ Strong competitive IT/BPO sector

Source: GSMA Intelligence; Phil. Star 03/28/15



Project Background

Philippine ICT Strategic Direction 2010-2016

Firstly, the PDS sets the development of e-Government as a priority, facilitating greater efficiencies and effectiveness in the delivery of basic social services and minimizing opportunities for corruption. The PDS calls for implementation of systems which will support the government's fight against poverty and ensure integration and interoperability of ICT infrastructure and programs across government agencies

Another element of the PDS is the focus on supporting continued growth of the IT/BPO industry and extending the benefits outside Metro Manila and Metro Cebu, so as to fast-track national development and provide opportunities for investment and jobs to other regions in the country.

The social & economic incentive to expand mobile and innovative solutions into under/un-served communities is now a key focus



Project Background

The Free Wi-Fi Internet Access in Public Places Project

In line with “Internet for all” thrust identified in Philippine Digital Strategy 2011-2016

Internet Opportunities for All People incorporates the development of the needed *infrastructure* to overcome the connectivity deficit in the Philippines and increase broadband coverage and penetration.

But the PDS also goes beyond infrastructure and emphasizes that the purpose is digital inclusion, and capacity building (i.e. digital literacy) thus looking at the demand side of broadband, affordability issues and services, content and applications available through this infrastructure

Broadband Internet access and integration of ICT in curriculum across all levels of our education system will be a priority to ensure that the shortfall of a skilled workforce will be addressed

Project Objectives

- ❑ Project aims to accelerate government's efforts in enhancing Internet accessibility for Filipinos; among the thrusts identified in Philippine Digital Strategy 2011-2016;
- ❑ It will focus on creating an enabling environment: with incentives and a broadband policy that will accelerate the expansion and service provision of broadband by the private sector, reaching previously un-served areas and customers
 - This project shall give appropriate consideration and attention to avoid undermining existing services, particularly in the served areas, thru policy and technical parameters. In served areas, this public service shall aim to provide a lower entry barrier for users, as well as, improving accessibility
 - Un-franchised site connectivity providers shall be allowed to offer commercial services using the natural franchise of the government through the DOST ICT Office.
 - The ultimate goal of seeing franchised commercial ICT services in all areas, as mandated

Service Provision

User Access

The Free WIFI is a public service , envisioned to provide ubiquitous connectivity to the Internet in the Philippines;

Policy Consideration:

- The public service shall generally be accessible 24/7;
- All Filipinos and visitors to the country will be the target users;

Service Provision

User Access

Policy Consideration:

- Implement a multi-level registration system as follows:
 - Level 1 - only requires the machine ID (MAC address) of a device for a user to gain access
 - Level 2 - through the web; a user registers & presents a Philippine government issued ID, or a valid passport
 - Level 3 - where a user will be issued a Citizen's Digital ID subject to the requirements of the National Public Key Infrastructure that will be used to gain access to the public service and to e-Government services.

Service Provision

Policy Consideration:

- A data volume based **Fair Usage Policy** shall also be implemented to promote an equitable distribution of the public service. A Fair Usage Policy (FUP) Imposing limits on the user's amount of data transferred on a duration basis The FUP shall correspond with each user's registration level.

Service Provision

Adherence to Public Policy

The Free Wi-Fi public service shall not be used for purposes that would be counter to public policy. This shall be implemented by restricting/specifying the services made available.

Policy Consideration:

- Users will agree to a set of Terms and Conditions upon first login.
- Create & update local content at the Captive Portal
- Setting-up or procuring the Whitelist;
- Setting-up; procuring; updating the Blacklist

Service Provision

Level	Registration	Ports Allowed	Content
3	Gov't Digital Certificate	Any	Any except those in a Blacklist of sites found inconsistent with public policy.
2	Gov't ID / Passport	Restricted to commonly used ports	Only from sites in a Whitelist, which would include news, education, government and social networking websites, selected public e-mail systems.
1	Device ID		

Project Scope

Service Coverage

Consistent with the mandate of the DOST ICT Office, the Government shall extend the coverage for broadband Internet connectivity, especially in underserved and un-served areas

Policy Consideration:

- On full deployment, the network would serve 105,000 concurrent users
- Establish WIFI Points of Presence (PoPs) or distribution points: NOC; Centers of Government; DOST & Field Operation Offices & Provincial Offices; Major cities
- Establish priorities on Service Coverage:
- Achieve for universal accessibility and utility and interoperability

Project Scope

WI-FI Distribution Points

14 Points-of-Presence (PoPs) shall be established at strategic locations of the Country including at identified centers of government where large numbers of public offices would be found:

- Tuguegarao, Cagayan
 - Dagupan, La Union
 - Tacloban City, Leyte
 - Mabalacat, Pampanga
 - Puerto Princesa City, Palawan
 - Pagadian City, ARMM
 - Legazpi City, Albay
 - Batangas City, Batangas
 - Zamboanga City, Zamboanga
 - Iloilo City, Iloilo
 - Calbayog City, Samar
-
- **Major Cities & Surroundings:**
Metro Manila, Metro Cebu, Metro Davao

Project Scope

Service Coverage

31 sites in Metro Manila, Cebu and Davao, as well sites at other cities that will serve as distribution points or Points of Presence shall also be included.

City of Las Piñas
City of Makati
City of Muntinlupa
City of Parañaque
Pasay City
Taguig City
City of Mandaluyong
City of Marikina
City of Pasig
City of San Juan
Quezon City
Caloocan City
City of Malabon
City of Valenzuela
City of Navotas
City of Manila

Davao City
Cebu City
City of Tagum
City of Mati
City of Digos
City of Panabo
Island Garden City of Samal
City of Naga
Lapu-Lapu City (Opon)
Mandaue City
Talisay City
City of Bogo
Toledo City
City of Carcar
Danao City

Project Scope

Service Coverage

In addition, 967 Municipality PoPs in Class 3, 4, 5 and 6 municipalities shall now also be covered. The Project will cover selected public spaces at:

Site Type	Count of BENEFICIARY SITE	
AIR	10	Airport
HSP	200	Hospital
LGU	731	Local Govt Unit
LIB	302	Library
PHS	3258	Primary High School
PLZ	64	Plaza
RHU	1244	Rural Health Unit
SEA	21	Seaport
SUC	125	State Universities and Colleges
TRN	15	Train Stations
Grand Total	5970	

IPTS-C/R Summary

LotGroup	# Lots	# Site	Min BW (Mbps)	Avg BW (Mbps)	Max BW (Mbps)	Total BW (Mbps)	Total ABC
LOT-G1	43	1,219	1.00	7.09	170	8,639 ₱	74,806,800.00
LOT-G2	947	3,952	1.00	2.10	18	8,317 ₱	53,007,000.00
LOT-G3	799	799	1.00	2.33	8	1,863 ₱	27,905,400.00
Total	1,789	5,970				18,819 ₱	155,719,200.00
IPTS-C	990	5,171	2	9	188	16,956	127,813,800
IPTS-R	799	799	1	2	8	1,863	27,905,400
Total	1,789	5,970	3	12	196	18,819	155,719,200

Project Scope

Region, Province	Count of BENEFICIARY SITE
ARMM	186
Basilan	13
Lanao Del Sur	91
Maguindanao	31
Sulu	36
Tawi-Tawi	15
CAR	272
Abra	59
Apayao	26
Benguet	39
Davao Oriental	1
Ifugao	57
Kalinga	30
Mountain Province	60
I	405
Ilocos Norte	82
Ilocos Sur	101
La Union	70
Pangasinan	152
II	240
Batanes	14
Cagayan	104
Isabela	86
Nueva Vizcaya	26
Quirino	10
III	253
Aurora	33
Bataan	21
Bulacan	6
Nueva Ecija	64
Pampanga	69
Tarlac	31
Zambales	29

Region, Province	Count of BENEFICIARY SITE
IV-A	364
Batangas	97
Cavite	42
Laguna	88
Quezon	124
Rizal	13
IV-B	251
Marinduque	35
Occidental Mindoro	46
Oriental Mindoro	44
Palawan	57
Romblon	69
IX	416
Zamboanga Del Norte	107
Zamboanga Del Sur	231
Zamboanga Sibugay	78
NCR	540
First District	75
Fourth District	167
Second District	187
Third District	111
V	484
Albay	65
Camarines Norte	45
Camarines Sur	137
Catanduanes	49
Masbate	105
Sorsogon	83
VI	465
Aklan	101
Antique	70
Capiz	71
Guimaras	24
Iloilo	166
Negros Occidental	33

Region, Province	Count of BENEFICIARY SITE
VII	715
Bohol	236
Cebu	380
Leyte	1
Negros Oriental	70
Siquijor	28
VIII	574
Biliran	23
Eastern Samar	85
Leyte	169
Northern Samar	98
Samar (Western Samar)	122
Southern Leyte	77
X	254
Bukidnon	19
Camiguin	24
Lanao Del Norte	63
Misamis Occidental	66
Misamis Oriental	82
XI	216
Compostela Valley	11
Davao Del Norte	44
Davao Del Sur	122
Davao Oriental	38
Iloilo	1
XII	47
North Cotabato	10
South Cotabato	21
Sultan Kudarat	16
XIII	288
Agusan Del Norte	100
Agusan Del Sur	6
Dinagat Islands	36
Surigao Del Norte	89
Surigao Del Sur	57
Grand Total	5970

Implementation Model

- **Funding Source:** from the General Appropriation Act of 2015; 1.408 billion 2015 GAA budget allocated; Capital Outlay is only for Php. 20M, the rest is MOOE. in its first year.
- **Leveraging Managed Services:** Use of Managed Services sourced as service subscriptions from the private sector shall be the primary means of implementing this Project
 - Procurement of Goods Contract Type is simple & transparent
- **Overall Architecture:** WIFI Network; National PKI; PHOpenIX; TVWS, VSAT; Capture Portal Services; Satellite Broadcast services;
- **Public Sector Participation**
 - National Social Marketing Campaign
 - Beneficiary sites will be engaged through a Memorandum of Understanding;
 - LGUs shall mainly provide “front desk” services that would include social marketing, and administrative assistance (custodianship);
 - A Project Management Team (PMT) attached to DOST-ICTO
- **Registration Authorities (RA)** Each LGU shall be enrolled to serve as a Registration Authority Public-Private-Partnerships shall also be considered in implementing;

Implementation Model: Leveraging Managed Services

Scope of Managed Services: Use of managed services shall by default reuse existing private sector infrastructure

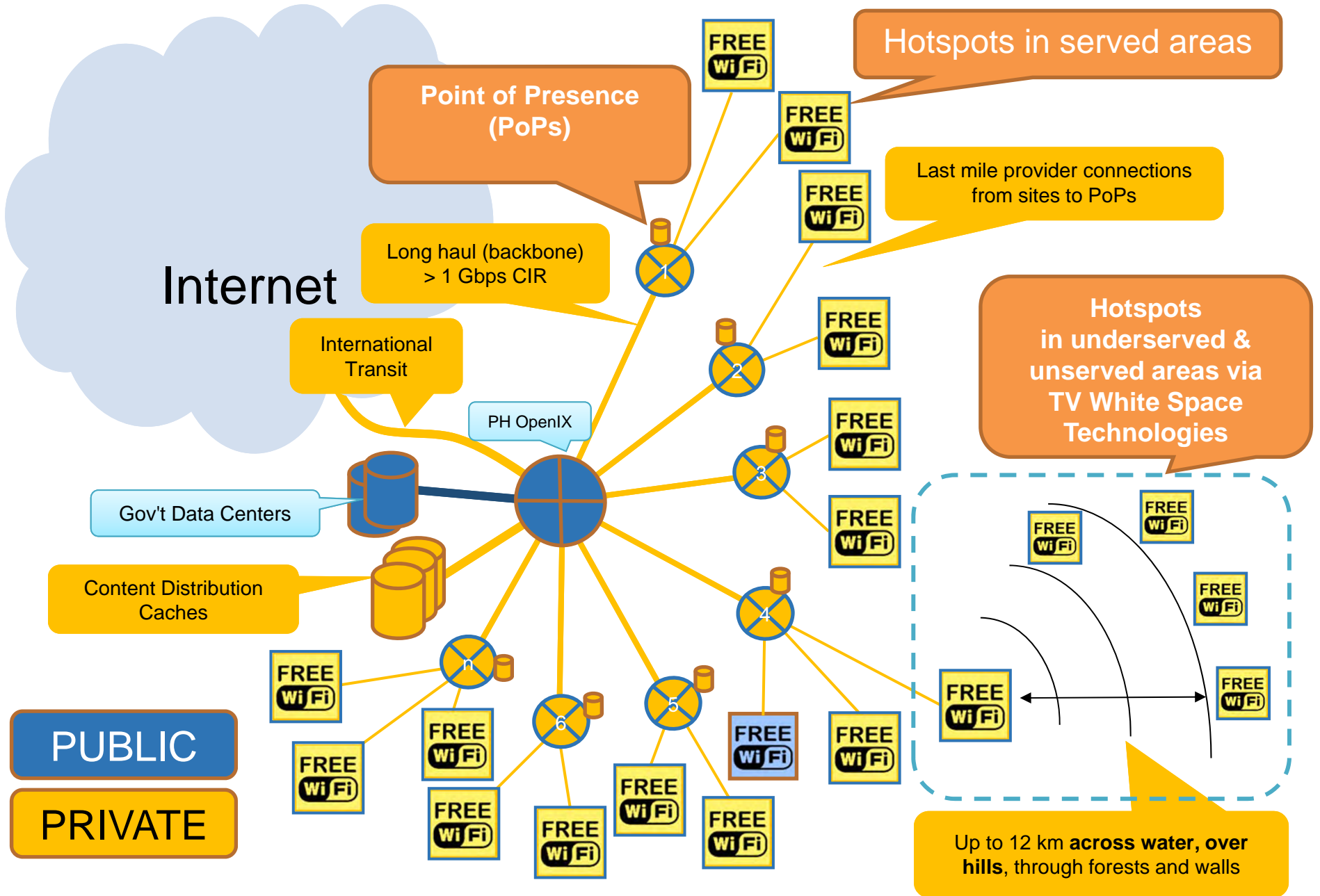
Connectivity Services – Links are classified as -

1. **International IP Transport Services:** bandwidth between the project's IP Core and the Internet bandwidth
2. **Domestic IP Transport Services:** bandwidth to a PoP
3. **Municipal IP Transport Services:** bandwidth between a PoP and a city or municipal center; connect MPoP to one or more PoPs at a specified bandwidth; commonly called the "Middle Mile".
4. **Last Mile & Rural Mile IP Transport Services:** bandwidth from a city or municipal center (i.e. from a PoP or mPoP) to a site within the area served by local connectivity providers; The Rural Mile links would be those to a site in an underserved or un-served area

System Integration Service - Nodes

5. **System Management & Access Service**

WIFI NETWORK OVERVIEW



Implementation Model

Leveraging Managed Services

- Partitioned into Level Playing Fields;
 - Independence of the Nodes and Links
 - SLAs enforcement services shall be procured separately
- Will not compete with existing commercial services
- Service Provider's equipment, using DOST ICT Office resources, to be used for other purposes than for the Project, shall not be allowed unless explicitly included as part of the contracts.
- Non-franchise holders are allowed to participate

Implementation Model

❑ Leveraging Managed Services

- Use of managed services shall by default reuse existing private sector infrastructure. This will maximize the use of the existing ICT infrastructure investments of the country; thus implementable by local industry
- Reuse of the shared services provisioned under the Integrated Government Philippines (iGovPhil) project, the PH OpenIX, and the PREGINET projects shall be mandatory
- Use of other existing public sector assets such as the DOST ICT Office outside plant facilities (e.g. poles, copper or fiber optic cables), telecommunication towers and other facilities, shall likewise be pursued, however on AS-IS basis.
- With direct government intervention, the Project will pursue public-private-partnerships and expects **Commercial Services** will be offered by the Private Sector/ provider in the un-served areas; along side those provided for the project using the same infrastructure and through the shared use of the Wi-Fi access points;

Implementation Model

- Leveraging Managed Services
 - The service subscriptions shall be on a 12-month basis;
 - Payment will always be for services rendered hence payment will begin 30-days after a service is installed
 - All One-Time-Charges should be embedded in the monthly subscription costs
 - After the 12th month of service, a subscription will be evaluated for possible renewal

Steering Committee

The project shall convene the Steering Committee **to formulate general policy and coordinate interventions amongst its members** and their various stakeholders

Advisory Committee

To ensure project's effectiveness and feasibility; composed of various non-government stakeholders, including industry and civil society

Project Management

The DOST ICT Office shall be responsible for providing beneficiaries with technical and administrative support, and capacity building, and shall also perform 2nd level and 3rd level user support once its personnel have been properly trained.

Steering Committee

Cooperation with the Steering Committee shall be with Area Project Directors

The Steering Committee shall be composed of:

1. Department of Science & Technology (DOST), Chairman
2. Department of Interior and Local Government (DILG), Vice Chairman
3. Department of Tourism (DOT)
4. Department of Trade and Industry (DTI)
5. Department of Transportation and Communications (DOTC)
6. Department of Health (DOH)
7. Department of Budget and Management (DBM)
8. Department of Social Welfare and Development (DSWD)
9. Department of Education (DepEd)
10. Commission on Higher Education (CHED)
11. Technical Education and Skills Development Authority (TESDA)
12. National Telecommunications Commission (NTC)
13. Metro Manila Development Authority (MMDA)
14. National Library
15. League of Cities (advisor)
16. League of Municipalities (advisor)

Roles and Relationship of the Committees

1) End-User related

- End user terms and conditions
- Fair usage policy
- Portal Content Localization

2) Technical implementation

- Issuance and use of digital certificate to access free Wi-Fi
- Blacklist
- Whitelist
- PH OpenIX

3) General implementation

- Deployment of free Wi-Fi
- Accreditation of private entities as Registration Authority
- Government agencies to extend free Wi-Fi service after office hour

Areas of Cooperation

- The DOST ICT Office shall be the lead agency responsible for the overall **planning, implementation and management of the Project**, and ensuring compliance to the guidelines and directives given by the Steering Committee
- **Training** for the LGUs shall be provided in partnership with the Field Operations Office of the ICT Office or a contracted private sector provider, as necessary
- **User support** shall be provided by the private sector providers and the DOST ICT Office.
- The **use of Future Technology “TV White Space”** shall be advocated by the DOST ICT Office in providing WiFi connectivity; for which technical assistance and support may be provided

Areas of Cooperation

- By way of a MOU, fiscal incentive with the Service Provider, the Local Government Units (LGUs) with un-served or underserved areas shall be enjoined to **distribute this Free WiFi public service** by provisioning connectivity to those areas. It will be entirely up to the LGUs and/or their providers to decide what technologies to use : **Area Project Director**
- In order to expedite implementation of the “Free Wi-Fi Internet Access in Public Places”, agencies from the government and LGUs where the Wi-Fi Internet access are located shall extend cooperation and assistance, **including the reasonable use of electricity and facilities for the purpose and ensure the security of the equipment: FOO Director**

Areas of Cooperation

- The LGUs shall mainly **provide “front desk” services** that would include social marketing, and administrative assistance;
- The campaign efforts shall be in coordination with the LGU
- LGUs will also be responsible for configuring the location specific content of the Capture Web Portal

Thank You!