Procurement of Consultancy Services as Systems Integrator for the Supply, Delivery, Installation, and Maintenance of the Philippine Identification System (PhilSys)

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ANNEX A

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ANNEX A - Use Cases for PhilSys

A. Priority Use Cases

This section elaborates on use cases that are of immediate importance for the PhilSys. The exact timing for the implementation of these use cases will depend on the readiness of relying parties and the final registration strategy.

1. Targeting and delivery of the Pantawid Pamilyang Pilipino Program (4Ps)

The cornerstone of social protection in the Philippines is the *Pantawid Pamilyang Pilipino* Program (4Ps; Bridging Program for the Filipino Family), which is implemented by the Department of Social Welfare and Development (DSWD). Through 4Ps, poor households with three (3) children in high school can receive a maximum conditional cash transfer of up to PHP 6,900 every two months for complying with a range of health and education conditions. 4Ps is anchored on the paradigm of breaking the intergenerational cycle of poverty by keeping children in school and healthy. Cash is primarily delivered to an eligible grantee, usually the female head of household, through a cash card from Land Bank. In areas where ATMs are less accessible, off-site cash payments are scheduled or payments are made over-the-counter through rural banks, cooperatives and NGOs.

As of 30 June 2019, 4Ps is being implemented in 144 cities and 1,483 municipalities in 80 provinces, with a total of 4,893,346 registered households since the program started in 2008. Out of the total number of registered households, 4,123,829 are active households or 93.72% of this year's target of 4.4 million households.

4Ps uses a national household targeting system known as Listahanan to identify the poor households to benefit the program. Listahanan is an information management system that identifies who and where the poor are, which is created through a survey of over 15 million households every five years (last in 2015; to be carried out in 2019), covering approximately 75% of the Philippine population. A proxy means test (PMT) is used to determine which households are poor. No unique identifier is collected at the time of the Listahanan survey, and no deduplication takes place. Each household in the Listahanan is assigned a 16-digit number, which has a logic based on its geographic location. There is no unique identifier for individual household members.

4Ps operates three major information systems: Beneficiary Update System (BUS), Compliance Verification System (CVS), and Grievance Redress System (GRS). The BUS records changes on the status or condition of households. It captures recent information about household members to serve as basis in monitoring compliance of beneficiaries. Updating is a continuous process to ensure that the beneficiaries are availing the maximum health and education grants. The CVS monitors the compliance of households with the conditions of the program as basis for the provision of grants. On the other hand, complaints were encoded and recorded in the GRS through various modes such as calls, grievance forms, social networking sites, courier, and electronic mail. The 4Ps information systems are anchored on the eight major steps in the implementation of the program, namely: 1) Selection of Provinces/ Cities/ Municipalities; 2) Supply Side Assessment; 3) Selection of Households; 4) Registration and Validation

of Households; 5) Family Registry; 6) Release of Initial Grants; 7) Compliance Verification; and 8) Release of Succeeding Cash Grants.

Beneficiary registration / community assembly serves as a beneficiary entry point into the Program. It is conducted to gather identified potentially eligible beneficiaries for validation and registration/ enrollment and to orient enrolled beneficiaries about the program. DSWD considers validation of potentially eligible households as the most important activity of the community assembly, because it is through it that the information on eligible households and their members is checked, corrected and updated and their program eligibility is verified. To be deemed eligible for the program, the households should be a resident in the area selected for the program roll-out, should be identified as poor by *Listahanan*, and must have a pregnant member or at least one child 0-18 years old. Once the household is positively validated and verified, it is registered with the program and called a "*Pantawid Pamilya* beneficiary household".

At the registration, the grantee of the registered household is identified. The program design stipulates that a grantee should be a mother in the household. If there is no mother in the household, than an adult household member is authorized to receive and withdraw the grants. Grantees must be included in the household roster. Once the grantee is identified, she / he chooses who from among the children in the household would be monitored for school enrollment and attendance. The maximum number of children that could be selected for education monitoring is three. To be selected for education monitoring a child should be 3-18 years of age, be a child/ grandchild in the family and included/ listed in the household roster reported to *Pantawid*.

After the registration, the grantee fills the Land Bank Cash Card Enrollment Form. The data stated in the form is verified for accuracy. All validated beneficiaries are asked to sign an *Oath of Commitment* as a confirmation of their agreement to comply with *Pantawid*'s conditions. The signing of the Oath of Commitment signals that the beneficiaries have fully understood and accepted *Pantawid*'s conditions and commit themselves to complying with them. This Oath serves as a living proof of the program acceptance. The signing of the *Oath of being a new Pantawid Pamilya beneficiary* is meant to ensure that neither a household nor any of its members had previously been registered with the program. This is expected to help minimize registration duplicates.

A photo of each grantee is taken to be attached to the Land Bank Cash Card Enrollment Form and to issue the *Pantawid* identification card (ID), which has a unique beneficiary household number, which is the same as the household's *Listahan* number. The Regional Project Management Office (RPMO), together with the Working Team is responsible for the *Pantawid* ID picture taking. Once this has been completed, the grantee signs the ID. The ID is for parent grantees, not for children. If grantees can't read or write, then grantees use their thumbmark to sign the registration documents. To the extent possible, the ID cards are handed to the grantees on the actual day of community assembly. To make sure that the grantee's identity is true, DSWD requires that an official from the LGU or barangay is present to witness the picture taking and the ID issuance and to confirm the identity of newly enrolled beneficiaries. If for some reason the IDs are not released to grantees during the assembly, they are subsequently informed about the release of the ID and Cash cards by the Municipal/City Link in coordination with the Municipal/City Social Worker.

The *Pantawid* ID is an identification (ID) card provided to all heads of households in 4Ps. The ID card can be used to establish eligibility to claim benefits, such as the monthly grants and National Health Insurance Program (NHIP) benefits. The card does not have any security features nor authentication mechanism beyond the photo and this, combined with the glued-on photo, makes it easy to forge.

The Oath of Commitment of Pantawid program signifies the co-responsibilities between the government and the beneficiaries to strengthen the commitment to invest in human capital and to improve lives of the family-beneficiaries and their children. The oath is signed by the beneficiary upon registration into the program to signify his/her duty to comply with the conditionalities that are anchored on health and education.

Encoding and approval of registered households: City / Municipal Links check and clean collected beneficiary information prior to encoding it into the Community Assembly Registration System (CARS) by checking completeness, accuracy and validity of the CA update forms. The RPMO spot checks beneficiary information as part of the final quality audit. Once the quality check is completed, the Regional Director approves the encoded registered households. There are online and offline versions of CARS.

Based on anecdotal evidence and according to Beneficiary Data Management Division (BDMD), it takes about 6-7 months for the registration and validation process to be completed.

The 16-digit household number issued by the *Listahanan* is also used for the administration of the 4Ps, and this number is displayed on the card.

Following the completion of the 2019 *Listahanan* survey and 4Ps targeting process, the use cases of the PhilSys for the 4Ps will be:

- **Unique identifying all beneficiaries and seeding PSNs or PSN tokens**: PSNs and/or PSN tokens should be over time validated and seeded in the 4Ps information systems to help DSWD ensure that each beneficiary is recorded only once and in only one household. This process should involve obtaining the informed consent of beneficiaries, including on behalf of minors. Minors younger than five are unlikely to be registered by PhilSys for some time (e.g. 2022) so they will not have a PSN. The process for resolving potential duplicates will be separate and the responsibility of DSWD, and should not involve gaining access to the PhilSys registry. This use case is likely to involve substantial process and system re-engineering on the side of DSWD, as well as the procurement of hardware to carry out authentication.

- **Verifying the identity of beneficiaries at payment and grievance redressal**: DSWD should have the capability to periodically or on-demand verify the identity of the grantee (head of household) or their designees before or at the time of payment to help ensure that the right person is receiving the payment (e.g. that the funds are not being intercepted) or when they are reporting a grievance in a DSWD office at the city or municipality level. This use case is likely to involve substantial process and system re-engineering on the side of DSWD, as well as the procurement of hardware to carry out authentication.

- **In the longer-term, using the PSN or PSN tokens to validate compliance**: Systems to check compliance with the health and education conditions are organized at the city and municipal level. For example, local schools and health facilities will manually report compliance to the local DSWD office, using the 16-digit household number or beneficiary names as a reference. Once the PSNs or PSN tokens are seeded into relevant information systems, opportunities to streamline compliance reporting, using the PSNs or PSN tokens, should be explored (e.g. automated reports by local health facilitates and schools sent to local DSWD offices).

Any solution for the 4Ps use cases must take into account that these beneficiaries are the poorest and among the most vulnerable segment of Philippine society. Of upmost importance is ensuring inclusion, not creating new barriers for accessing 4Ps benefits, and having readily available exception handling mechanisms. Many households are in remote and far-flung areas with limited or no reliable connectivity and beneficiaries are likely to have limited literacy and means and capability to use technology (e.g. no mobile phone or no smartphone). Households are known to share mobile phones within and among themselves. Furthermore, their biometrics are likely to be of worse quality than others in the Philippines, which could lead to increased error rates for fingerprint matching.

2. Financial account opening

The 2017 Global Findex Survey found that only 34% of Filipinos aged 15 and older had an account with a financial institution, which was only a modest increase from 31% in 2014 and no increase among the poorest 40% of the population. This translates to approximately 48 million Filipinos aged 15 and older without a financial account. By comparison, the rate of account ownership among all economies in East Asia and the Pacific was 74% in 2017, and among all lower-middle income economies worldwide it was 58%.

According to the BSP dashboard on financial inclusion in the Philippines for the first quarter of 2019, there were 12,378 bank offices and branches (including 1,892 branch-lites). 1,101 cities and municipalities have a banking presence, while 465 have some other kind of financial access point and 68 have no access point.

Customer Due Diligence (CDD) (or Know Your Customer (KYC)) regulatory requirements for identity verification are a major constraint to financial inclusion, deepening and integrity in the Philippines. In the Philippines, these requirements are set by the BSP through the Implementing Rules and Regulations of Republic Act No. 9160 (or the Anti Money Laundering Act), which were last amended in 2016. While the BSP has introduced simplified CDD regulatory requirements for low-value accounts, many financial institutions decide to still require one specific or two or more identification documents as part of the customer onboarding process because of the perceived risks, and the issues around the quality of existing identification noted in the background section of this document. A 'lack of necessary documentation' (45%) was the third most cited barrier by those who do not have a financial (following 'insufficient funds' at 69% and 'too expensive' at 53%), which is also the third highest rate of any economy behind Madagascar (50%) and Zimbabwe (49%). In addition, 41% cited that financial services were too far away.

The PhilSys will help directly address the 'lack of necessary documentation barrier' because its universally-accessible credentials, by themselves and following authentication, should allow all Filipinos and resident aliens to meet the CDD regulatory requirements for identity verification (but not other requirements, such as beneficial ownership and sources of funds). The PhilSys will also provide a valid proof of address. Furthermore, by reducing paperwork and manual processes by financial institutions as part of the identity verification part of the onboarding process, the PhilSys will contribute to reducing the cost for financial institutions to onboard customers, which will hopefully lead to reduced fees for opening and maintaining accounts. Finally, the PhilSys will also contribute to expanding the delivery of financial services by allowing agents to go to underserved communities (e.g. because they do not have brick-and-mortar branches) with equipment (e.g. tablets or point of sale devices) that can leverage the PhilSys for customer onboarding.

The use case of the PhilSys for financial inclusion will be:

- **Verifying the identity of customers as part of Customer Due Diligence (CDD) requirements for financial account opening**: The PhilSys, by itself, should facilitate various methods of reliable verification of the identity of customers to comply with the IRRs of R.A. 9160. As an 'e-KYC' verification, this process, following consent, should also facilitate the secure transmission of specific data attributes required under the IRRs in a standardized and machine-readable format (e.g. XML) to pre-fill the financial institutions electronic forms. The level of assurance provided should be enough to not require the financial institution to require other documents for the purposes of identity verification. There should be different methods of authentication offered for both online and offline contexts, including without the need for a face-to-face interaction. This use case is likely to involve substantial process and system re-engineering on the side of participating financial institutions, and may require enabling amendments to the IRRs or circulars by the BSP.

Any solution for the financial inclusion use case must comply with relevant laws and regulations, as well as best practices in terms of data protection and privacy. Furthermore, any solution must minimize costs to financial institutions for adopting the PhilSys as part of their customer onboarding process.

3. Management of social insurance

The Social Security System (SSS) and Government Social Insurance System (GSIS) are government-owned and controlled corporations that provide social insurance (e.g. pensions and health insurance) and related financial services to non-government and government workers respectively. The SSS has more than 35 million members (of which 15 million were paying members during the period January to June 2019) and the GSIS has 1.8 million active members. The SSS operates 291 branches across the country and GSIS has 42 branches. Both organizations also provide services through their website, call center and smartphone apps. GSIS operates self-service kiosks in its branches and major government buildings.

The SSS and GSIS operate their own information systems to manage their registry of members and service delivery. Both also use the Unified Multi-purpose Identification (UMID) smartcard and the

Central Verification System (CVS) to deduplicate and authenticate their members and, in the case of GSIS, as a cash card (e.g. for accessing advances and loans). The CVS is operated by the PSA, based on data submitted separately by SSS and GSIS, which includes four fingerprints for deduplication. Each unique registrant is assigned a Customer Reference Number (CRN), which becomes their member number and is used for portability between these schemes and with others such as the H. After being processed in the CVS, SSS and GSIS will have their private partner produce the contactless UMID smartcard, including fingerprints for authentication in branches and at kiosks. As of July 2019, there were 21 million records in the CVS and 12 million UMID smartcards have been issued.

The precise relationship between the PhilSys and the UMID / CVS will be subject to the transition plan that PSA will develop in collaboration with SSS and GSIS.

The use cases of the PhilSys for social insurance delivery by SSS and GSIS will be:

- **Uniquely identifying all members and seeding PSNs or PSN tokens**: PSNs and/or PSN tokens should be over time validated and seeded in the SSS and GSIS information systems as well as the CVS to help ensure that each beneficiary is recorded only once. This process should involve obtaining the informed consent of beneficiaries. The process for resolving potential duplicates will be separate and the responsibility of SSS and GSIS, and should not involve gaining access to the PhilSys registry. This use case may involve substantial process and system re-engineering on the side of SSS and GSIS, as well as the procurement of hardware to carry out authentication.

- **Verifying the identity of members**: SSS and GSIS should have the capability to periodically or on-demand verify the identity of members or their designees before or at the time of registration, service delivery (e.g. loan application), payment, and grievance. This use case is likely to involve substantial process and system re-engineering on the side of SSS and GSIS, as well as the procurement of hardware to carry out authentication.

- **Proof of life for pensioners**: SSS and GSIS should have the capability to periodically or on-demand verify the identity of pension beneficiaries to ensure that they are still alive and thus still eligible to receiving benefits.

4. Universal health coverage

The Philippines has long had a policy to implement universal health coverage. The main insurers are the Philippine Health Insurance Corporation (PhilHealth), a government-owned and controlled corporation attached to the Department of Health, SSS, GSIS and private insurers. According to the 2017 National Demographic Health Survey, 66% of the population receive health insurance through PhilHealth, 22% through SSS, 3% through GSIS, and 2% through private insurers. Meanwhile, 31% of the population reported having no health insurance coverage. Currently PhilHealth operates eight programs and its own registry of more than 90 million records, which are not deduplicated. PhilHealth provides a very basic paper-card for its members but also offers a voluntary PVC-plastic cards for a fee.

A significant reform is underway. The landmark Republic Act No. 11223 (or the Universal Health Care Act), signed into law in February 2019, guarantees for all Filipinos the full range of high-quality health

care services – from preventive to promotive, curative, rehabilitative, and palliative – at affordable cost. Implementation of the Universal Health Care Act will involve automatically including all Filipino citizens into the National Health Insurance Program (NHIP) to be administered by PhilHealth, which will also have a greater role in purchasing health goods and services and improving health facilitates. Beneficiaries will not have to provide identification when accessing health services.

Beneficiaries will be split into Direct Contributors (e.g. formal workers, migrant workers, and lifetime members) and Indirect Contributors (e.g. indigents and senior citizens) who will be subsidized by the Government. The new model for health insurance delivery will therefore require accurate and efficient data sharing between PhilHealth, SSS, GSIS and other insurers, as well as other information systems (e.g. *Listahanan*) to target Indirect Contributors and to prevent fraud and leakages. The PhilSys will play a key role in facilitating this, drawing on the experiences of other countries, such as Thailand, who have used their foundational identification system to enable reliable data sharing across public and private health insurance programs.

The use cases of the PhilSys for universal health insurance delivery will be:

- **Uniquely identifying all beneficiaries and seeding PSNs or PSN tokens**: PSNs and/or PSN tokens should be over time validated and seeded in PhilHealth, SSS, GSIS and private health insurer information systems as well to help ensure that each member is classified correctly as Direct or Indirect Contributors in the NHIP, including movement between different health insurance programs. This process should involve obtaining the informed consent of beneficiaries, including on behalf of minors. Minors younger than five are unlikely to be registered by PhilSys for some time (e.g. 2022) so they will not have a PSN. The process for resolving potential duplicates will be separate and the responsibility of DSWD, and should not involve gaining access to the PhilSys registry. The process for resolving potential duplicates will be separate and the responsibility of respective insurers, and should not involve gaining access to the PhilSys registry. This use case may involve substantial process and system re-engineering on the side of PhilHealth, SSS, GSIS, private health insurers and health facilitates.

- **Verifying the identity of members**: Health insurers and service providers should have the capability to periodically or on-demand verify the identity of members or their designees before or at the time of registration, service delivery, payment, and grievance. This use case is likely to involve substantial process and system re-engineering on the side of health insurers and health facilities, as well as the procurement of hardware to carry out authentication. Critically, failed authentication should never lead to a denial of health service, which necessitates the existence of exception handling mechanisms.

5. Obtaining authenticated civil registration certificates

The PSA's central civil registration repository, the Civil Registry System (CRS), contains more than 166 million digital civil registration records, including more than 115 million birth registration records. Records from before 2002 were digitized through optical character recognition (OCR) and manual data entry on demand, after requested have been made for certificates related to those records. While the actual act of registration is carried out by Local Civil Registration Offices (LCROs) in each city or

municipality (and reporting to the mayor), this data is reported to the CRS, usually within 4-6 weeks. Each birth registration record is assigned a Birth Registration Number (BReN) when it reaches the CRS, and this BReN is included on any 'authenticated' birth certificate issued by the PSA.

The 'authenticated' civil registration certificates issued by the PSA are typically what service providers will require if they need evidence of identity or of a birth, marriage, death or other vital event. They can be obtained through a website (www.psaserbilis.com.ph) or through 40 service points (known as 'Serbilis Centers') in urban centers. The CRS IT system is developed and maintained by a private partner through a public-private partnership (PPP), which goes through 2029. The private partner also manages the website, call center, Serbilis Centers, and distribution of 'authenticated' certificates.

The PSA receives 60,000-80,000 requests for 'authenticated' certificates per day (or around 50 million per year). Customers have their identity verified by providing exact details on the record for which they are requesting an 'authenticated' certificate. This is prone to potential identity theft and there is therefore an opportunity to improve the speed, accuracy and integrity of this verification process.

The use case of the PhilSys for civil registration certificates will be:

- **Verifying the identity of customers requesting civil registration certificates**: The PhilSys, by itself, should facilitate various methods of reliable verification of the identity of customers requesting a civil registration certificate from the PSA either through the website, by phone, or at Serbilis Centers.

In the medium-run, the PSA plans to seed the PSN into each person's civil registration records, including for their birth, death, marriage and other vital events. For future vital events, this will happen as they are registered. For past vital events, this will be done gradually, as people request copies of their certificates, so that consent can be obtained and to ensure that the right PSN is being seeded into the right records.

6. Passport renewals

The Department of Foreign Affairs (DFA) issues approximately three million passports every year. Roughly 15 million passports are active at any given time. Each application involves the collection of four fingerprints, which are used for deduplication purposes, as well as authentication for renewals. New applications undergo a rigorous identity proofing procedure (including nationality verification) that involves multiple identification documents and an 'authenticated' birth certificate. Renewal applications have a simplified procedure, with just one identification document required, as the identity verification uses existing data at the back-end (i.e. not at the time of applying). Applicants typically have to book an appointment at a DFA office (or mission abroad). The standard processing period for new and renewal applications is 10-15 days. For an additional fee, a customer can expedite this process.

The use case of the PhilSys for passport renewals is:

- **Verifying the identity of customers for passport renewals**: The PhilSys, by itself, should facilitate various methods of reliable verification of the identity of customers and facilitate

matching against their existing passport record (using their old passport number). As an 'e-KYC' verification, this process, following consent, should also facilitate the secure transmission of specific data attributes required for the passport application to carry out the matching. The level of assurance provided should be enough to not require DFA to require other documents for the purposes of identity verification.

In the medium-run, the DFA should have the opportunity to move passport renewal applications to online channels, potentially without the need for any face-to-face interaction.

B. Other Important Use Cases

1. Electronic signatures

Republic Act No. 8792 (the Electronic Commerce Act) provides that no electronic document or message, regardless of technology type, shall be denied legal effect because it is in electronic form. Like a 'wet' or handwritten signature on a physical document, an electronic signature (or e-signature) verifies a person or legal entity's acceptance of the content of a document or a collection of data linked to that signature, but in a digital format (e.g. through a website or smartphone app). Electronic signatures, which are a service typically offered by Governments and/or private sector 'trust service' providers, can provide greater assurance than 'wet' signatures because technology can more easily allow relevant parties to see if a signature or the document or data it is linked to has been modified. Furthermore, by linking electronic signatures to a national digital ID system such as the PhilSys, relevant parties can more reliably link the electronic signature with the signee. If a digital ID system answers the questions "who are you?" and "are you who you say you are?", electronic signatures answer the question "do you commit or agree to this transaction, service or terms and conditions?".

Electronic signatures are a fundamental component of the digital economy and digital government. Aside from bringing greater integrity to contracts and commerce in the Philippines, it will also enable service providers to provide even greater value-added services through online channels, such as formal notarization of documents, property transfers, and credit applications. By reducing the onboarding costs and risk to financial service providers, there is an opportunity to reduce the cost of credit.

In order to allow for the PhilSys to focus on reaching high-levels coverage and adoption, the PhilSys itself may not facilitate electronic signatures in the short-term. However, it should allow 'trust service providers' to onboard customers, reducing their risks, costs and time for creating electronic signature accounts. Eventually, as the market and Government policy on electronic signatures mature matures and grows, the PhilSys may itself offer electronic signature capabilities, such as through a special method of authentication.

2. Digital government services

An increasing number of departments, agencies and LGUs are shifting their Government to Citizen (G2C) and Government to Business (G2B) online. The Department of ICT (DICT) has a number of related initiatives, including development of a National Government Portal (NGP) to serve as a single-entry point and the Philippine e-Government Interoperability Framework (PeGIF) to facilitate back-end

data exchange. The ability to offer many services online, without a face-to-face interaction, is dependent on being able to verify the identity of customers with a high-level of assurance, as well as to be able to accept electronic signatures that have the same legal effect as 'wet' signatures.

The use case of the PhilSys for digital government services is to facilitate verification of the identity of customers through online channels. The PhilSys should be able to be linked to electronic signature service providers (e.g. Certificate Authorities) to facilitate secure electronic transactions.

3. Developing a dynamic Listahanan National Household Targeting System and supporting future social protection programs

The *Listahanan* is a registry of over 15 million households that is compiled every five years (last in 2015; to be carried out in 2019 to 16.1 million target households), covering approximately 75% of the Philippine population, for the purposes of targeting social welfare services using a proxy means test (PMT). As of March 2018, 1,252 entities (e.g. Government departments and agencies and local government units (LGUs) were using the *Listahanan* to identify poor households, including 59 national-level programs (including the 4Ps and Sustainable Livelihoods program). No unique identifier is collected at the time of the *Listahanan* survey, and no deduplication takes place. Each household in the *Listahanan*is assigned a 16-digit number, which has a logic based on its geographic location. There is no unique identifier for individual household members.

The use case of the PhilSys for the *Listahanan* is to support the shift away from a survey every five years to a more dynamic data collection model (e.g. real time data sharing between social welfare and social security stakeholders). This will make the overall social protection system in the Philippines more responsive and adaptive as households move above and below the poverty thresholds.

Furthermore, an enhanced *Listahanan* and dynamic social registry will facilitate rapid deployment of future programs, such as the unconditional cash transfer (UCT), which was introduced through the Government's Tax Reform for Acceleration and Inclusion (TRAIN) under the Comprehensive Tax Reform Program, for the poorest 10 million households and individuals to offset the moderate but temporary increase in prices due to other measures of TRAIN. One of the challenges in delivering the UCT was targeting the right beneficiaries, which in the end comprised 4.4 million 4Ps beneficiary households, 3 million senior citizen-beneficiaries of the Social Pension Program, and 2.6 million of the next poorest households identified by *Listahanan*.

4. Credit information

The Philippines ranks relatively low in terms of credit information coverage. One of the main challenges is the inability for credit bureau to unify data from different sources because of the absence of a ubiquitous unique identifier. While the Tax Identification Number (TIN) is currently used by the credit bureaus for this purpose, the TIN is not fully deduplicated. The present situation has made it more challenging for people to access credit through formal channels. A 2017 survey by the BSP found that 40% of Filipinos with an outstanding loan obtained loans from informal sources.

The use case of the PhilSys for credit history is for financial institutions to seed PSNs and PSN tokens, and for the credit bureau to be able to use this information to uniquely identify persons and to efficiently collate relevant data on the same person from a variety of sources, including those who have defaulted.

5. Targeting and delivery of humanitarian assistance, including emergency cash transfers (ECT)

The Philippines experiences many natural disasters every year, including typhoons, earthquakes and volcano eruptions. According to the Joint Typhoon Warning Center, around 80 typhoons develop near the Philippines every year, 19 enter its territory, and six to nine make landfall. The impact of this is millions of people internally-displaced and hundreds of millions, if not billions, of dollars of damage. For instance, the Philippines was devastated in 2013 by Typhoon Haiyan, which killed at least 6,300 people, displaced 4 million and caused an estimated US$2 billion in damage. Among the damage is often the loss of personal property, including IDs and birth certificates, which can hamper the ability for the Government and relief agencies to effectively respond to such disasters. Most recently, the Government carried out a registration of internally-displaced persons from the Marawi siege, in order to profile the affected population and deliver targeted assistance, and established a management information system (MIS), but there have been challenges in implementation due to the ad-hoc nature of this project. A more systematic approach to registering affected and displaced persons is needed, which could be enabled by a foundational identification system.

DSWD recently adopted guidelines for emergency cash transfers, which are geographically targeted to affected areas along with other criteria such as 4Ps beneficiaries and certain vulnerable populations. The aim is to use information from *Listahanan*, which may be out of date in terms of the locations and composition of families and thus some affected households could be excluded when the ECT is applied while unaffected households who have moved from the location may still be counted as a beneficiary.

The use case of the PhilSys for humanitarian assistance and ECT delivery is to enable DSWD, other agencies and non-governmental organizations to reliably verify the identity of affected persons before, during and after natural disasters and other shocks to ensure that the right people are receiving the right assistance, such as the ECT. This will include the ability to quickly compile lists of affected persons, depending on PSNs to establish uniqueness. Furthermore, after a disaster, data collected (e.g. on persons who may have become disabled) can be shared, following consent, with appropriate authorities to render the necessary services. Any solution should take into account that emergency situations often result in no or low connectivity and electricity, and that many affected persons may not have any credentials with them.

C. Extended List of Use Cases

User	Identity authentication for transaction (e.g. to trigger a payment)	e-KYC for enrolment	Uniqueness (seeding validated PSN token)
AFP - Recruitment	X	X	
Airlines/Airports	X		
Banks - Accounts and Applications	X	X	
Barangays	X	X	X
BI - ACR-I Card	X	X	X
BIR - Customs	X		
BIR – TIN	X	X	X
CFO	X		
CHE	X	X	X
Cities and Municipalities	X	X	X
COMELEC - Voter registration		X	X
Credit bureaus			X
CSC	X		X
DA - Farm loans and subsidies	X	X	X
DepEd - Learner Reference Number	X	X	X
DFA - Passports	X	X	X
DICT - National Government Portal	X	X	
DOH - Electronic Health Records	X		X
DOJ - Access to justice	X	X	
DOLE – Alien Employment Permit,	X	X	
DSWD - Listahanan			X
DSWD - Regular programs (4Ps, Supplemental feeding)	X	X	X
DSWD - Special programs (UCT, Disaster Response	X	X	X
DTI	X		
GSIS	X	X	X
Health facilities	X		
Insurance providers - Accounts and Applications	X		
LCROs - Civil registration	X	X	

User	Identity authentication for transaction (e.g. to trigger a payment)	e-KYC for enrolment	Uniqueness (seeding validated PSN token)
LTO	X	X	X
Mobile operators - Accounts and Applications	X	X	
NBI - Background check	X	X	X
NCDA	X		
NCIP	X		
NCMF	X		
NHA	X	X	X
OWWA/POEA – Overseas Employment Certificate	X	X	X
Pag-IBIG	X	X	X
PhilHealth	X	X	X
PNP - Gun licenses	X	X	X
PRC	X	X	
PSA - Civil registration	X	X	X
SSS	X	X	X
Task Force BangonMarawi	X	X	X
UMID	X	X	X
Universities	X	X	

Table 1. Extended list of use cases