Republic of the Philippines
PHILSYS INTER-AGENCY COMMITTEE ON
USE CASES AND AUTHENTICATION

Inter-Agency Committee on Use Cases and Authentication
Resolution No. 03
Series of 2021

RECOMMENDING APPROVAL OF PHILSYS NUMBER TOKENIZATION AND GUIDING PRINCIPLES FOR SEEDING FOR PHILSYS

WHEREAS, the Philippine Statistics Authority (PSA) is mandated to implement Republic Act (R.A.) No. 11055 also known as the "Philippine Identification System Act";

WHEREAS, Section 2 of R.A. No. 11055 states that the Philippine Identification System (PhilSys) shall promote seamless delivery of service to improve the efficiency, transparency, and targeted delivery of public and social services, to enhance administrative governance, to reduce corruption and curtail bureaucratic red tape, to avert fraudulent transactions and misrepresentations, to strengthen financial inclusion, and to promote ease of doing business;

WHEREAS, Section 2 of R.A. No. 11055 also states that a resilient digital system shall be deployed to secure the data collected and ensure that the people's right to privacy, confidentiality, and other basic rights are at all times upheld and protected;

WHEREAS, Section 3 of R.A. No. 11055 states that the PhilSys aims to eliminate the need to present other forms of identification when transacting with the government and with private institutions, subject to appropriate authentication measures based on a biometric identification system;

WHEREAS, the first paragraph of Section 18 of R.A. No. 11055 states that the PSA with the technical assistance of the Department of Information and Communications Technology (DICT) shall implement reasonable and appropriate organizational, technical, and physical security measures to ensure that the information gathered for the PhilSys, including information stored in the PhilSys Registry, is protected from unauthorized access, use, disclosure, and against accidental or intentional loss, destruction, or damage;

WHEREAS, Section 6(A) of the Implementing Rules and Regulations (IRR) of R.A. No. 11055, as amended, states that PhilSys Number (PSN) is a randomly generated, unique, and permanent identification number that will be assigned to

every citizen or resident alien upon birth or registration by the PSA, in accordance with the registration process provided in the IRR;

WHEREAS, the second sentence of Section 6(A) of the IRR of R.A. No. 11055, as amended, stipulates that all government agencies, including government-owned or controlled corporations (GOCCs), shall incorporate in their identification systems and databases the PSN, or its derivative, of covered individuals which shall be the standard number for the individual across all agencies of the government;

WHEREAS, the act of incorporating the PSN or PSN derivative/token of an individual in his or her record in a government or private sector information system in compliance with Section 6(A) of the IRR of R.A. No.11055 is referred to as "seeding," an internationally used technical term in the digital identity sector;

WHEREAS, Section 4(k) of the IRR of R.A. 11055, as amended, defines PSN derivative as referring to the act of assigning a randomly generated unique and replaceable set of identification numbers, characters, symbols, or combination thereof which shall serve as a substitute to mask or represent the PSN, such as but not limited to PhilSys Card Number (PCN), Alyas PSN, and/or tokens;

WHEREAS, the first paragraph of Section 22 of the IRR of R.A. 11055, as amended, similar to Section 18 of R.A. No. 11055, states that the PSA with the technical assistance of the DICT shall implement reasonable and appropriate organizational, technical and physical security measures to ensure that the integrity of the PhilSys, as well as the information gathered for the PhilSys, including information stored in the PhilSys Registry, is protected from unauthorized access, use, disclosure, and against accidental or intentional loss, destruction, or damage;

WHEREAS, Section 24 of the IRR of R.A. No. 11055, as amended, states that the PSA shall create a transition plan to gradually synchronize and consolidate all existing government-initiated identification systems by seeding the PSN or its derivative into the databases of all agencies into one integrated and interconnected identification system in order to provide the official and sufficient proof of identity of the registered person;

WHEREAS, the collection, storage, matching and sharing of a single common permanent and irrevocable unique identifier, such as the PSN, across multiple information systems in a raw format is a significant data protection, privacy, and information security risk, which has been realized to different extents in the implementation of national ID systems in other countries;

WHEREAS, tokenization is an information security measure that substitutes a sensitive data attribute, such as a single common permanent and irrevocable unique

identifier, with a non-sensitive equivalent or derivative (known as a token), that has no exploitable value by itself and can be revoked or rotated when and as needed;

WHEREAS, tokenization is one of the measures adopted by other countries to mitigate the risks of a single common permanent and irrevocable unique identifier across multiple information systems, while still benefiting from the advantages such as uniquely identifying individuals within the national population and enabling data matching across information systems when legally authorized. Tokenization is in line with the concept of the use of PSN derivatives as defined under Section 4(k) of the IRR of R.A. 11055, as amended. ;

WHEREAS, to satisfy and implement the above-mentioned provisions of R.A. No. 11055 and its IRR, as amended, the PSA shall employ PSN tokenization, which enables the seeding of PSN derivative to enable warranted interoperability of information systems without necessarily exposing the actual PSN that carries serious data privacy risks for registered individual;

WHEREAS, PhilSys Policy and Coordination Council (PSPCC) Resolution No. 04, Series of 2019, on Approving the PhilSys Implementation Plan 2019-2022, was approved last 15 February 2019, which included the approval of PSN Tokenization as part of the Privacy by Design feature of PhilSys (Annex CR 04-20190214-01);

WHEREAS, the PSA, in consultation with the Inter-Agency Committee (IAC) on Use Cases and Authentication last 11 May 2021 and 14 May 2021, discussed and proposed PhilSys Tokenization and Guiding Principles for Seeding for PhilSys which shall provide general guidance for Relying Parties and implementing agencies of the PhilSys adhering to PSN Tokenization of PhilSys;

WHEREAS, there are two broad approaches to storing PSN or PSN derivative or token in the information systems of Relying Parties:

a. **Inorganic seeding** is the process of storing/adding the PSN derivative or token to the information system of a Relying Party thru a back-end/batch automated process using programming tools matching one unique data attribute or a combination of two or more data attributes common to the PhilSys Registry and the information system of the Relying Party, without the involvement of the data subject; and

b. **Organic seeding** is the process of storing/adding the PSN derivative or token to the information system of a Relying Party thru a front-end process where the data subject will provide consent and be authenticated. Upon successful authentication, the derivative or token will be provided to the Relying Party.

WHEREAS, while inorganic seeding may on the surface seem more efficient due to the volume of records it can potentially process at a given time, inorganic seeding would involve tedious manual adjudication process to resolve any potential duplications. Moreover, implementing inorganic seeding would require the Relying Party to establish legitimacy of purpose and compliance to data privacy principles;

WHEREAS, organic seeding provides more reliable outcomes compared to inorganic seeding as organic seeding involves consent and authentication of the data subject. As such, it also provides additional assurance that the data subject is alive and the verified true owner of the claimed identity;

WHEREAS, the IAC on Use Cases and Authentication, in its meetings last 11 and 14 May 2021, agreed that Relying Parties employ organic seeding as the default approach. Inorganic seeding or a combination of both approaches may be allowed under certain conditions to be set and proposed by PSA and approved by the PSPCC;

WHEREAS, the IAC on Use Cases and Authentication, in its meetings last 11 and 14 May 2021, agreed that all government agencies shall seed a common PSN token while private institutions shall utilize sectoral or individual PSN tokens, subject to the guidelines to be issued by the PSA;

WHEREAS, in a meeting of the IAC on Use Cases and Authentication last 20 May 2021, the Committee agreed to endorse the PhilSys Number Tokenization and Seeding Guiding Principles for PhilSys to the Council for approval;

NOW THEREFORE, BE IT RESOLVED, the IAC on Use Cases and Authentication recommends to the Council the approval of the adoption of the PhilSys Number Tokenization and Guiding Principles for Seeding for PhilSys as follows:

a. Relying Parties shall use PSN tokens instead of the PSN for authentication (i.e. PCN and Alyas PSN tokens) and seeding (i.e. back-end PSN tokens);
b. Government agencies, including GOCCs, shall use a common back-end PSN token to facilitate matching, while the private sector shall use individual PSN tokens. Private entities in a given sector may use a shared sector token if there is an established legitimate requirement under the law for data matching; and
c. Organic seeding shall be the default approach for seeding, given its advantages in terms of data integrity and accuracy, process efficiency, and compliance with data privacy principles;

RESOLVED FURTHER, that PSA, in consultation with the IAC on Use Cases and Authentication, to ensure seamless, secure, and efficient implementation of PSN Tokenization and Seeding, shall develop corresponding implementing guidelines

which shall cover, among others, the conditions wherein a Relying Party may be allowed to conduct inorganic seeding or a combination of both organic and inorganic seeding, as well as the conditions for allowing private entities to seed shared sectoral rather than individual tokens;

RESOLVED FURTHER, that PSA and the IAC on Use Cases and Authentication shall continue to consult with and engage both public and private sector agencies and institutions to further enhance the approach for PSN tokenization for Relying Parties;
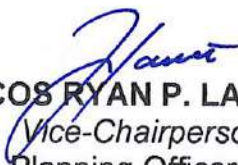
RESOLVED FINALLY, that the adoption of the PhilSys Number Tokenization and Guiding Principles for Seeding for PhilSys and its implementation shall strictly comply with RA No. 10173 otherwise known as the Data Privacy Act of 2012, its IRR, and relevant issuances of the National Privacy Commission (NPC).

Approved this 20th day of May 2021.

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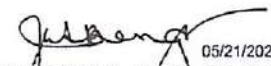Communications Technology

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