



# Global Identifier Project

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# Background

- Identifying applicants or right holders across jurisdictions is a challenge experienced by many members of the IP community
- The Name Standardization Task Force was established under the Committee on WIPO Standards (CWS) in 2017
- A survey among IP offices in 2019 noted that the use of a global identifier, commonly used across different jurisdictions, would be a desirable solution to deal with name standardization challenges
- The WIPO white paper on Blockchain technologies and IP ecosystems explored in 2021 potential applications and opportunities provided by blockchain technologies in the IP ecosystem, and emphasized the importance of digital identity and global identifiers in IP community

# Global Identifier?

- A single global identifier (GID) will be used to identify a natural person or a legal entity uniquely, consistently, accurately and securely across IP systems and jurisdictions
  - Natural person: Name, e-mail and date of birth
  - Legal entity: Name, e-mail and cooperation registration number
- GIDs can be issued by any participant authorities which meet business and technical requirements
  - GIDs issued by one authority in the GID network should be accepted by all other participant authorities
  - GID Governance will be established to define the requirements, and participants' role and their responsibilities
- GIDs aim at providing more effective and seamless service experience, removing duplication, and making online transactions easier in the IP ecosystem

# GID Goals and Values

- Each participant authority should be able to issue, verify and maintain GIDs (“distributed operation”)
  - To support distributed operation, the International Bureau will provide the GID platform using private/permissioned blockchain technologies and associated solutions.
- The GID holders should be responsible for controlling who can access their data and maintaining their data quality (“user-controlled data”)
- The GID service will be operated under a governance framework which will be established by the participant authorities and coordinated by the International Bureau (“coordinated governance”).
- GIDs can be used in almost all transactions between actors within the IP ecosystem, including global assignments.
  - the use of Global ID will play a pivotal role in IP ecosystems.

# Objectives of GID Project

- Initiate a collaborative project with several IP offices and other stakeholders to address the long-standing issue of name standardization;
- Explore with the stakeholders the feasibility of using blockchain technologies to implement global digital identifiers for individuals and entities operating in the IP ecosystem to streamline their IP journey;
- Identify business and IT challenges which may be experienced when establishing the GID network;
- Provide potential solutions to address those challenges;
- Prepare technical recommendations, including a GID Governance model;
- Develop IT solutions for the GID platform

# Project Roadmap

Phase	Planned main activities	Timeframe
Phase 1	<ul style="list-style-type: none"> <li>– Define Business analysis and scoping</li> </ul>	Completed
Pre-Phase 2	<ul style="list-style-type: none"> <li>– Finalize the Global ID Governance</li> <li>– Agree on the participant Offices and other Stakeholders which will actively participate in Phases 2 and 3</li> <li>– Agree on the common use cases of Global ID such as global assignment</li> </ul>	On-going until March 2024
Phase 2	<ul style="list-style-type: none"> <li>– The International Bureau to develop Sandbox</li> <li>– Offices and other stakeholders to participate the Sandbox development and test it with mock data</li> <li>– The International Bureau to start implementing Global ID to its services</li> <li>– Offices to prepare their implementation considering required changes to their business practices and regulations, and IT systems</li> </ul>	March 2024 - 2025
Phase 3	<ul style="list-style-type: none"> <li>– The International Bureau to develop production system and support Offices' implementation</li> <li>– Some Offices and other stakeholders to test Sandbox with real data</li> <li>– Some other Offices to start their implementation of Global ID</li> </ul>	Year 2025 - 2026

# GID Phase 1

- Duration: from Feb to Oct 2023
- Participated by EUIPO, KIPO, SAIP, USPTO, UPOV(International Union for the Protection of New Varieties of Plants)
- Participating Offices nominated their experts from business, legal and IT areas, as the Global ID Project has a broad impact
- Several IP Industry Groups consulted: Interviews and Surveys
- Researched, collected and analyzed
  - regulations, practices, guidelines and recommendations
  - technical solutions currently used in relation to digital identity, including blockchain-based digital ID and existing industry standards
- assessed potential challenges and explored solutions

# Key findings from Pilot Phase 1

- GID is fundamental step towards the establishment of a more connected IP ecosystem;
- Offices have different practices and regulations on managing customer IDs and are at different stages of readiness to implement GIDs;
- GID governance should be established in an agile manner to build trust among the participant Offices while addressing Offices' various data privacy policies and practices;
- Common use cases of GID should be agreed on early and the International Bureau should engage in the development of the use cases; and
- Use of Global IDs for WIPO services will accelerate the Global ID's adoption around the globe.



# GID Governance Framework

- Membership of Participant Authorities
- Participants and Accountability
- Operational guidelines
- Legal governance scheme
  - Terms and Conditions (Holders and IPOs/WIPO-IB)
  - Data protection
- Technical governance scheme
  - Blockchain
  - Type of network: Private/permissioned network
  - Frameworks: Hyperledger Fabric, Indy and Aries.....

# Membership of Participant Authorities

- Any CWS Member IP offices: having WIPO Standard ST.3
  - There could be multiple IP offices in the countries and regions, e.g., one for industrial property and the other one for copyright
  - Two types of participant authorities:
    - Participant/Operational Offices vs. Accessing Offices (read only)
- To become a participant authority, the IP office should meet technical and governance requirements (draft)
  - The candidate Office should submit their application to WIPO-IB
  - WIPO-IB should evaluate the application and provide an evaluation report for consideration by existing member Offices
  - A new membership should be approved by all existing members

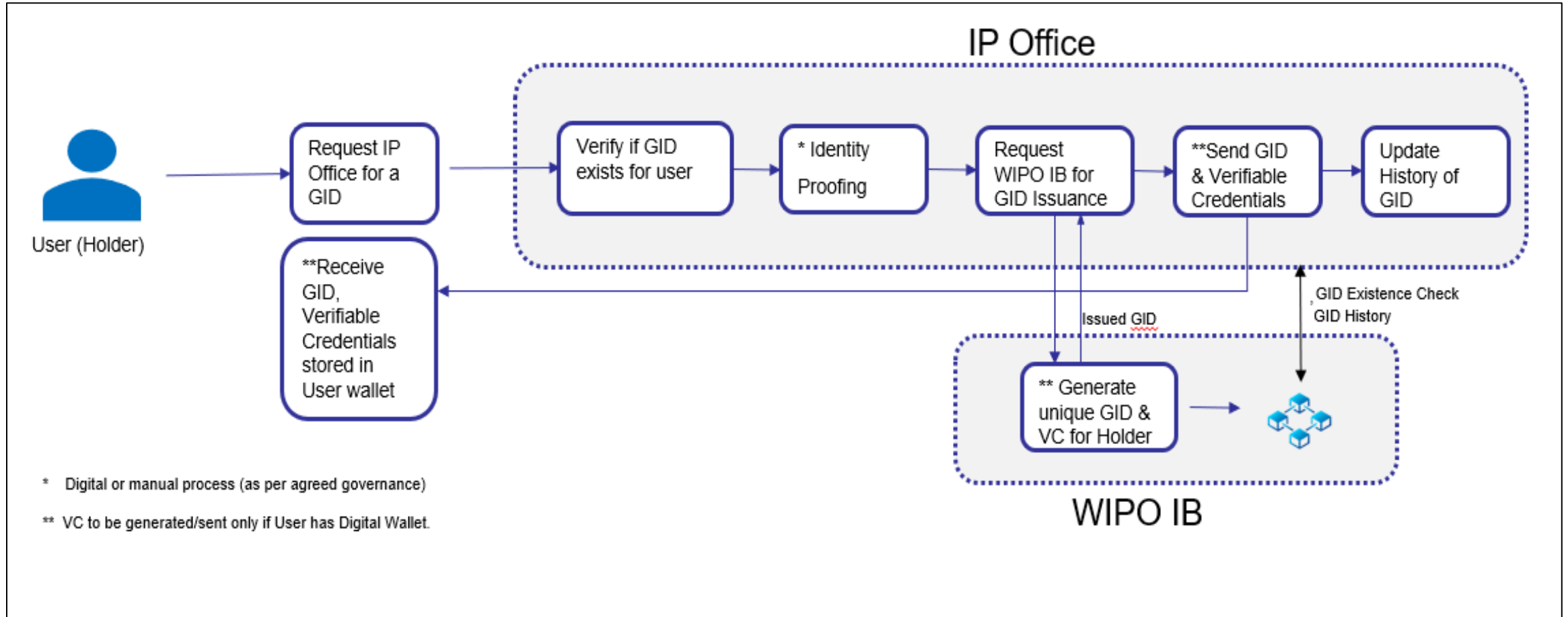
# Roles and Accountability

Roles	Actors	Accountability
Holders	natural persons (individuals) and legal entities (businesses)	<ul style="list-style-type: none"> <li>– Request Global ID</li> <li>– Provide required data considering terms and conditions</li> <li>– Ensure the data remains up-to-date</li> <li>– Controls whom the data is made available to</li> </ul>
Issuers	IP offices and International Bureau	<ul style="list-style-type: none"> <li>– Collect and process required data of Holders of issuing Global ID, including identity proofing</li> <li>– Amend Global ID related data upon Holders' request</li> <li>– Following data protection</li> </ul>
Verifiers	IP offices and International Bureau	<ul style="list-style-type: none"> <li>– Collect and process required data for verification following data protection</li> </ul>
Platform provider	International Bureau	<ul style="list-style-type: none"> <li>– Provide and maintain Global ID Platform and services, including Global ID generation upon requests by issuing Offices</li> <li>– Ensure platform security, availability and scalability</li> </ul>

# GID Main Services

- **GID Issuance** : Issue of GID by IP Office upon request or “ex-officio” to a Holder (natural person or legal entity)
- **GID Verification** : Verification of Holder’s GID by IP Office
- **GID Maintenance**:
  - **GID Modification** : Modification of associated data (Holder’s name, address etc.) in GID upon request from Holder,
  - **GID Merge** : Merge of two or more GIDs belonging to an entity,
  - **GID Linking**: Linking two or more GIDs belonging to an entity,
  - **GID Revocation**: Revoke GID upon request from Holder,
  - **GID Recovery**: Recover GID of Holder (in case of forgotten/lost GID)

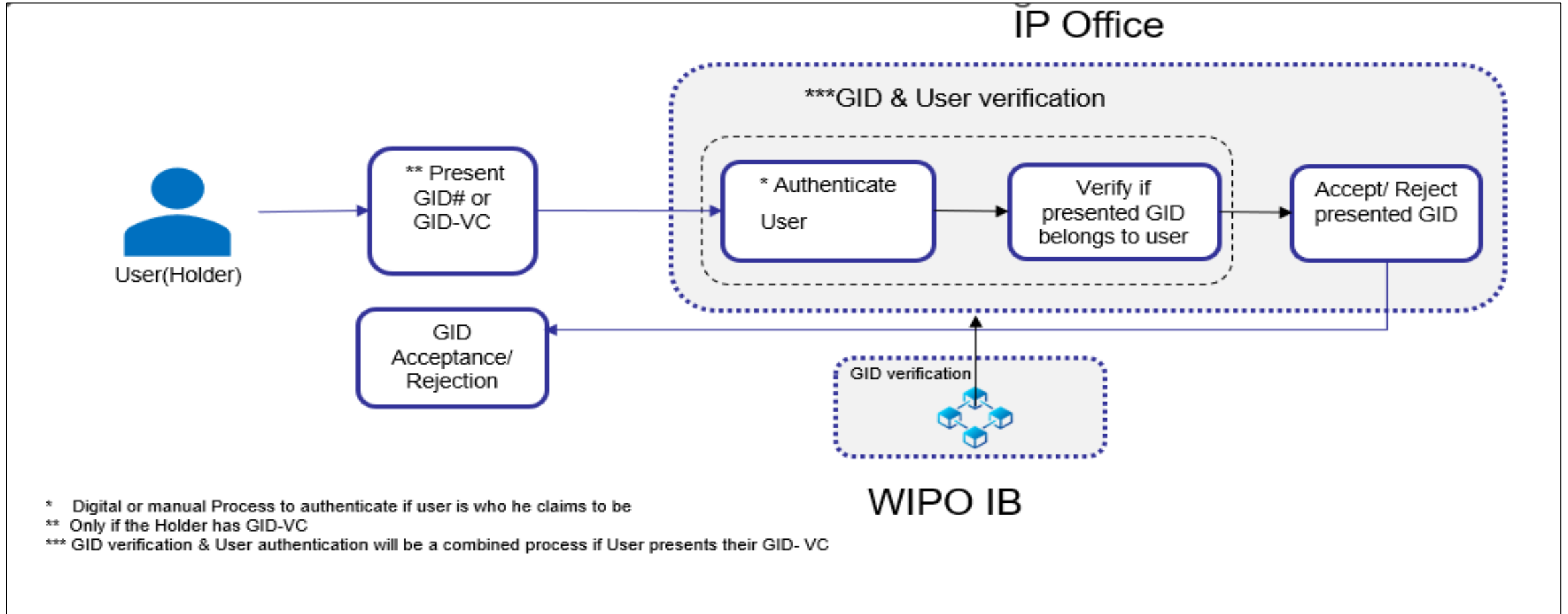
# Operational guidelines - **GID Issuance**



\* Digital or manual process (as per agreed governance)

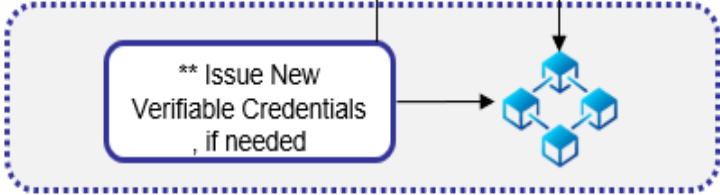
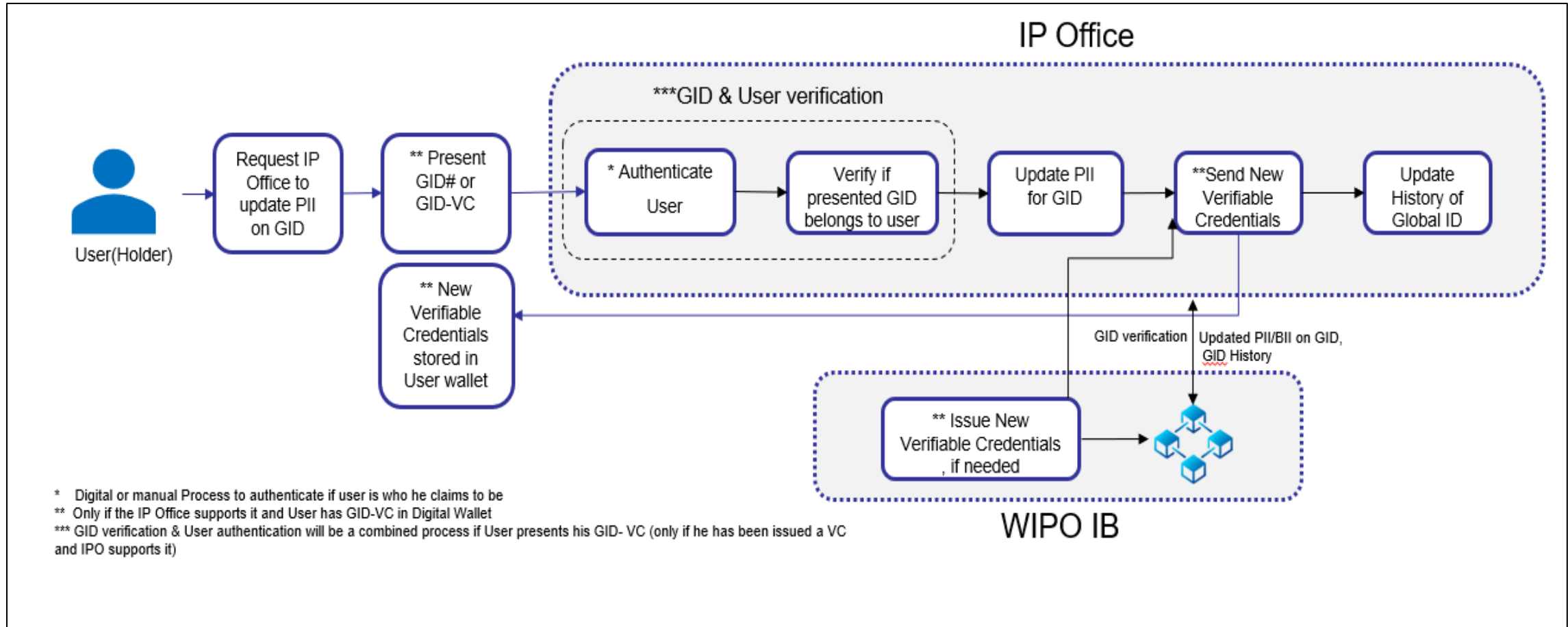
\*\* VC to be generated/sent only if User has Digital Wallet.

# Operational guidelines - GID Verification



- \* Digital or manual Process to authenticate if user is who he claims to be
- \*\* Only if the Holder has GID-VC
- \*\*\* GID verification & User authentication will be a combined process if User presents their GID- VC

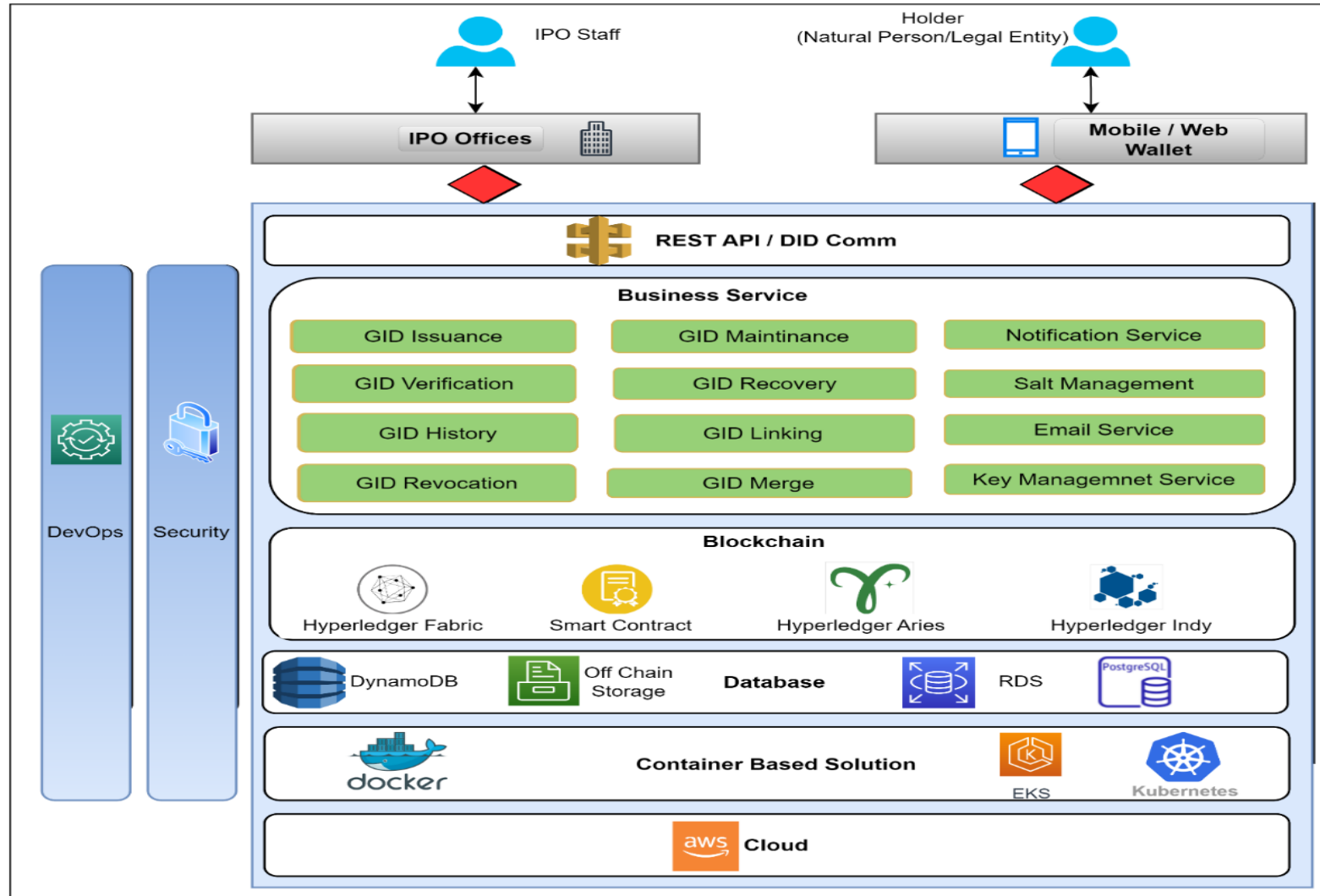
# Operational guidelines - **GID Maintenance**



\* Digital or manual Process to authenticate if user is who he claims to be  
 \*\* Only if the IP Office supports it and User has GID-VC in Digital Wallet  
 \*\*\* GID verification & User authentication will be a combined process if User presents his GID- VC (only if he has been issued a VC and IPO supports it)

WIPO IB

# GID Architecture Overview: WIPO Platform (provisional)





# High-level Technical Specification- Maturity Levels (provisional)

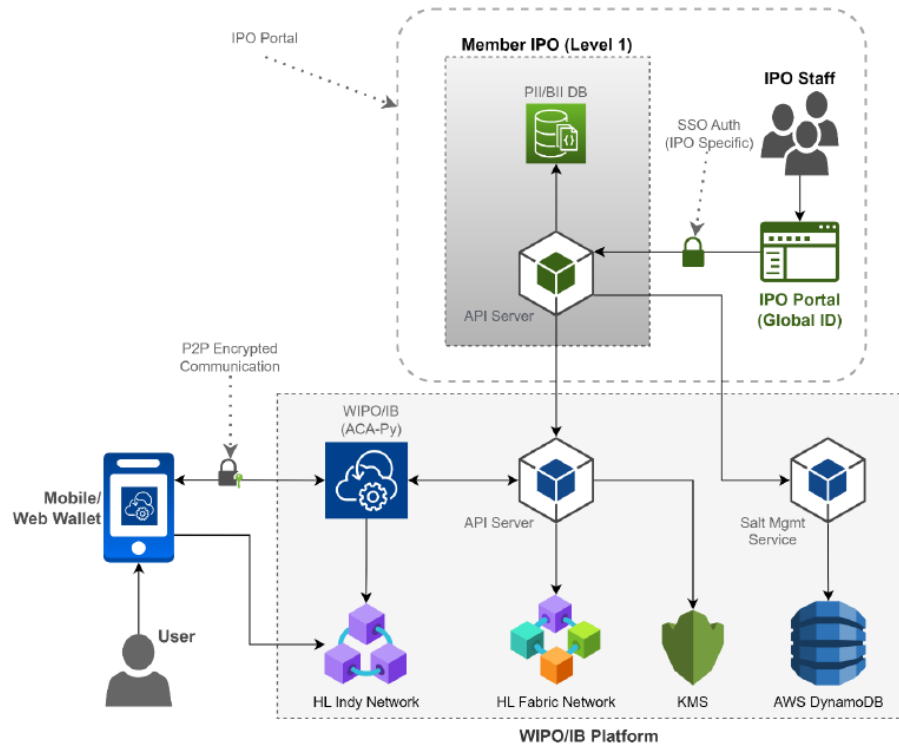


Figure 5 IPO - Level 1

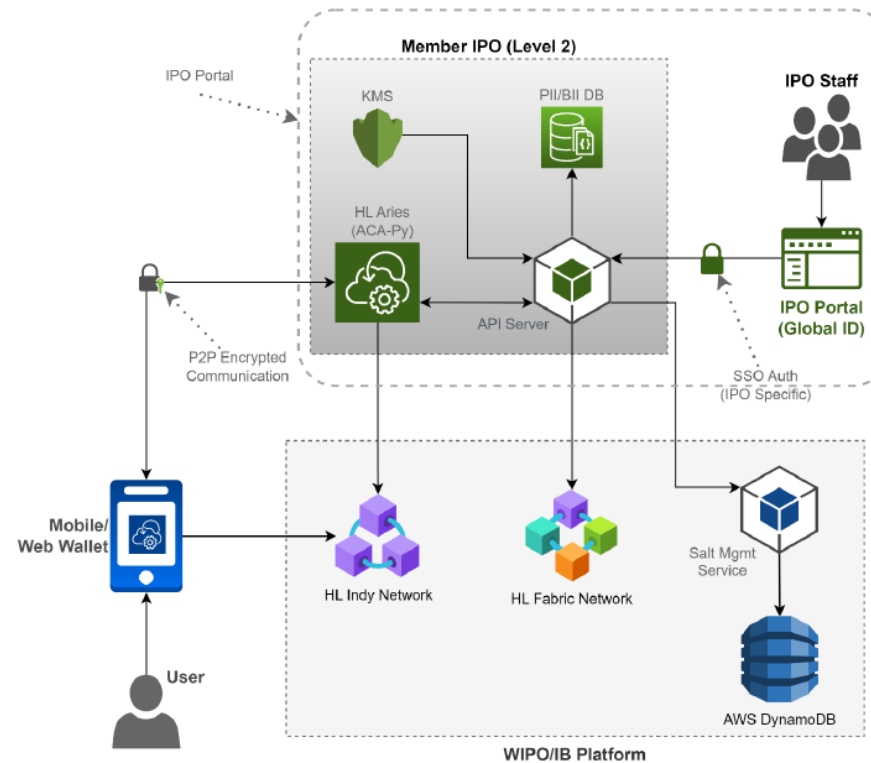


Figure 6 IPO - Level 2

# Legal governance scheme

- Privacy statements: data collecting, processing and sharing
  - Individuals: Name, date of birth, email and postal address
  - Businesses: Name, registration no., email and postal address
  - Data collected and used for identity proofing
  - Other optional data
- Terms and Conditions (Holders and IPOs/WIPO-IB)
- Agreements
  - Between Participant Authorities and Platform Provider
  - Between Participant Authorities/Platform Provider and Holders requesting, using, accessing, and managing GID Services
  - Between Platform Provider and Solution developers/operators

# Technical governance scheme

- Blockchain
  - Type of network: Private/permissioned network (centralized governance)
  - Frameworks: Hyperledger Fabric, Indy and Aries
- All mandatory data should be written using ASCII characters and encrypted in UTF-8
- GID Format Structure with 18 positions
- Security and system availability
- System and data interoperability through relevant industry standards (system) and WIPO Standards (data)
- Digital wallet following W3C DID Standard

# GID Format Structure

## - 18 positions

- **Positions 1 to 2:** Fixed value "WO" to indicate Global IDs for IP community, which are distinguished from identifiers used in other ID systems;
- **Position 3:** Type of Holders. Currently only two values are defined: '1' for Natural Person and '2' for Legal Entity. Other types may need to be defined in the future;
- **Positions 4 to 5:** The WIPO ST.3 two-letter code of the Office/Organization/Country that issues the Global ID such as 'IB' for the International Bureau of WIPO;
- **Positions 6 to 9:** Year of Global ID issued in YYYY date format;
- **Positions 10 to 17:** Unique Random string generated by a system per year. The 8 positions of alphanumeric string can result in more than 2 trillion unique sequence numbers per year so is considered sufficient to provide Global IDs for the world's population in a given year; and
- **Position 18:** Check digit for redundancy check and error detection. An algorithm will be used to generate check digit by using the first 17 positions.

# Types of Holders and Authorities

- Holders: Individuals (natural persons) vs. Businesses (legal entities)
- Digital Wallet Holders vs. Non-digital Wallet Holders
- Participating Offices vs. Accessing Offices
  - Participating Offices: Generating/Verifying/Maintaining GIDs
  - Accessing Offices: Use GIDs
- Level 1 (Light) vs. Level 2 (Complete) Offices
  - Level 1 (Light): full leverage GID solutions that the International Bureau provides via a common API
  - Level 2 (Complete): integrate some GID solutions in their IT infrastructure

# Key Considerations and Recommendations

- Global implementation - various legal, IT and business environments
  - Gradual and incremental changes
  - IT Infrastructure and Platform provided
- Governance and Data Protection
  - Governance to be established & Data protection to be agreed
- Different user experiences in digital identity
  - Support Digital Wallet Holders vs. Non-digital Wallet Holders
  - Training provided
- Operational readiness by IP offices
  - Guideline to be provided and experience to be shared

■ Thank You