



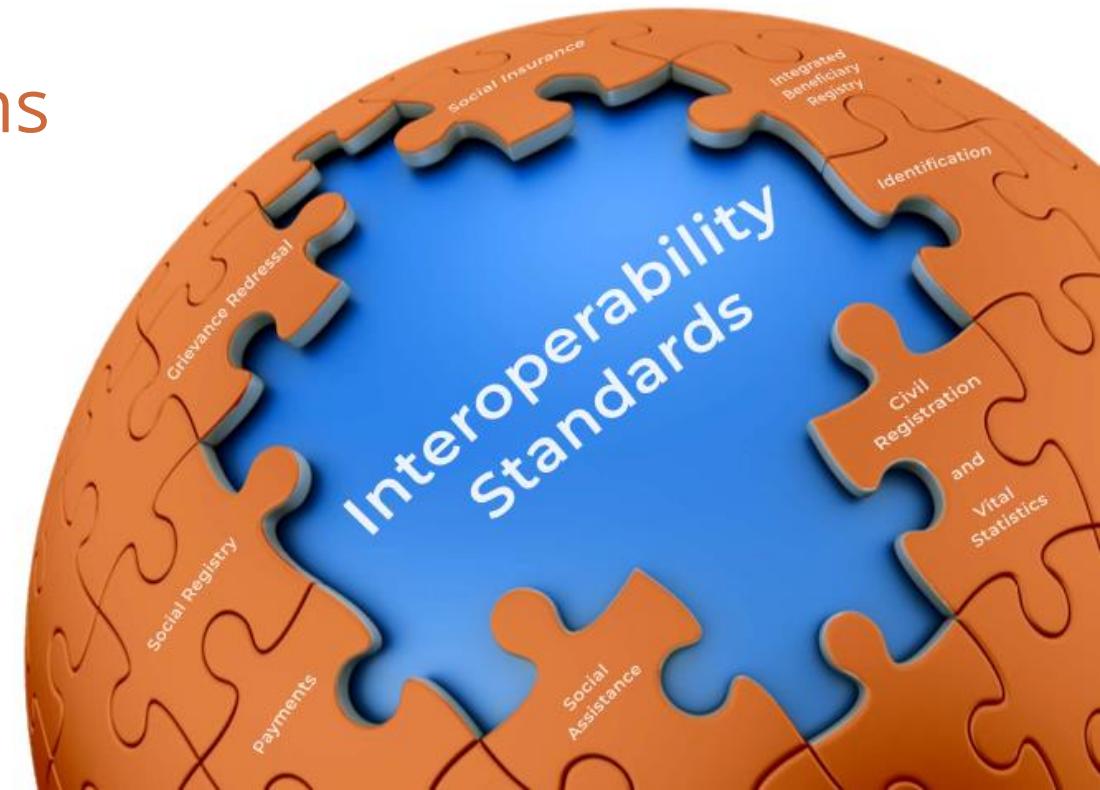
Digital Convergence

USP2030

Farmer Registry (FR) and SP-Systems Interoperability Standards

Public Review Webinar

25th February 2025



Agenda

14:00 - 14:05	Welcome and Agenda	Marco
14:05 - 14:10	DCI Introduction & Context Setting	Wanza
14:10 - 14:20	Standards Development Process Overview	Veronica
14:20 - 14:40	Standards Walkthrough	Aisha
14:40 - 14:50	Country case - Morocco	Faress
14:50 - 15:00	Open Discussions	Marco
15:00 - 15:05	Next Steps & Closing remarks	Marco

Housekeeping Rules

- Ask your questions in the chat
- Share any comments or resources in the chat
- Session will be recorded



To: Everyone ▾



Your text can be seen by panelists and other attendees



Speakers



Marco Knowles

Senior Social Protection Officer and Team
Leader – FAO
Committee Co-chair

Moderator



Wanza Mwathani

Technical Advisor, Digital Convergence
Initiative (DCI) – GIZ

**DCI Introduction & Context
Setting**



Verónica Achá-Alvarez

Head of the Social Information Division, Ministry
of Social Development and Family – Chile
Committee Co-chair

Standards Development Process

Speakers



Aisha Hassan

Standards Repository Manager, Digital
Convergence Initiative (DCI) – GIZ

Standards Walkthrough



Faress Yahya

Head of the Farmers' Social Protection
Division,
Ministry of Agriculture, Morocco

Morocco Country Case

About DCI

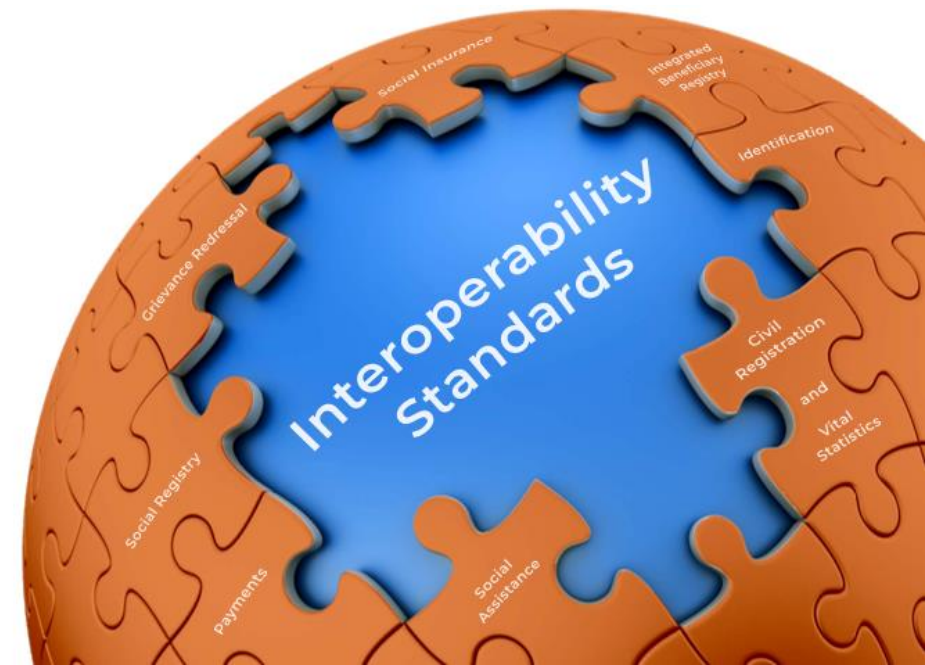


The Digital Convergence Initiative (DCI)

Joint effort by [USP2030](#) members and non-members, governments, development partners and private sector towards

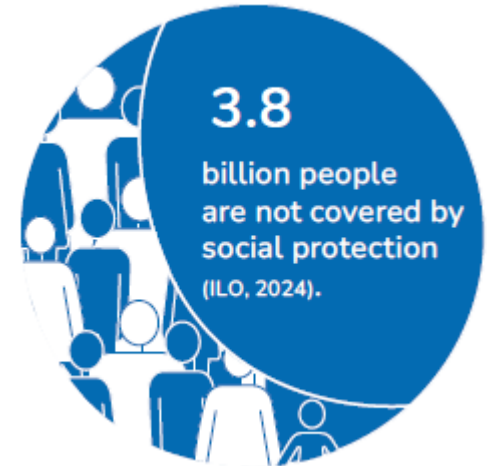
- creating a **harmonized and interoperable digital ecosystem** for social protection
- improving the **efficiency** of social protection programmes
- supporting the **digital transformation** of social protection systems and enhancing **social protection outcomes**

USP2030



Challenge that DCI strives to address

A robust digital ecosystem is essential for social protection, but current systems still lack capacity to deliver.



State of social protection digitalization:

Multiple fragmented systems

Lack of common standards

Weak data sharing

Manual processes



Impact on social protection delivery:

Slow and inefficient delivery

Exclusion of beneficiaries

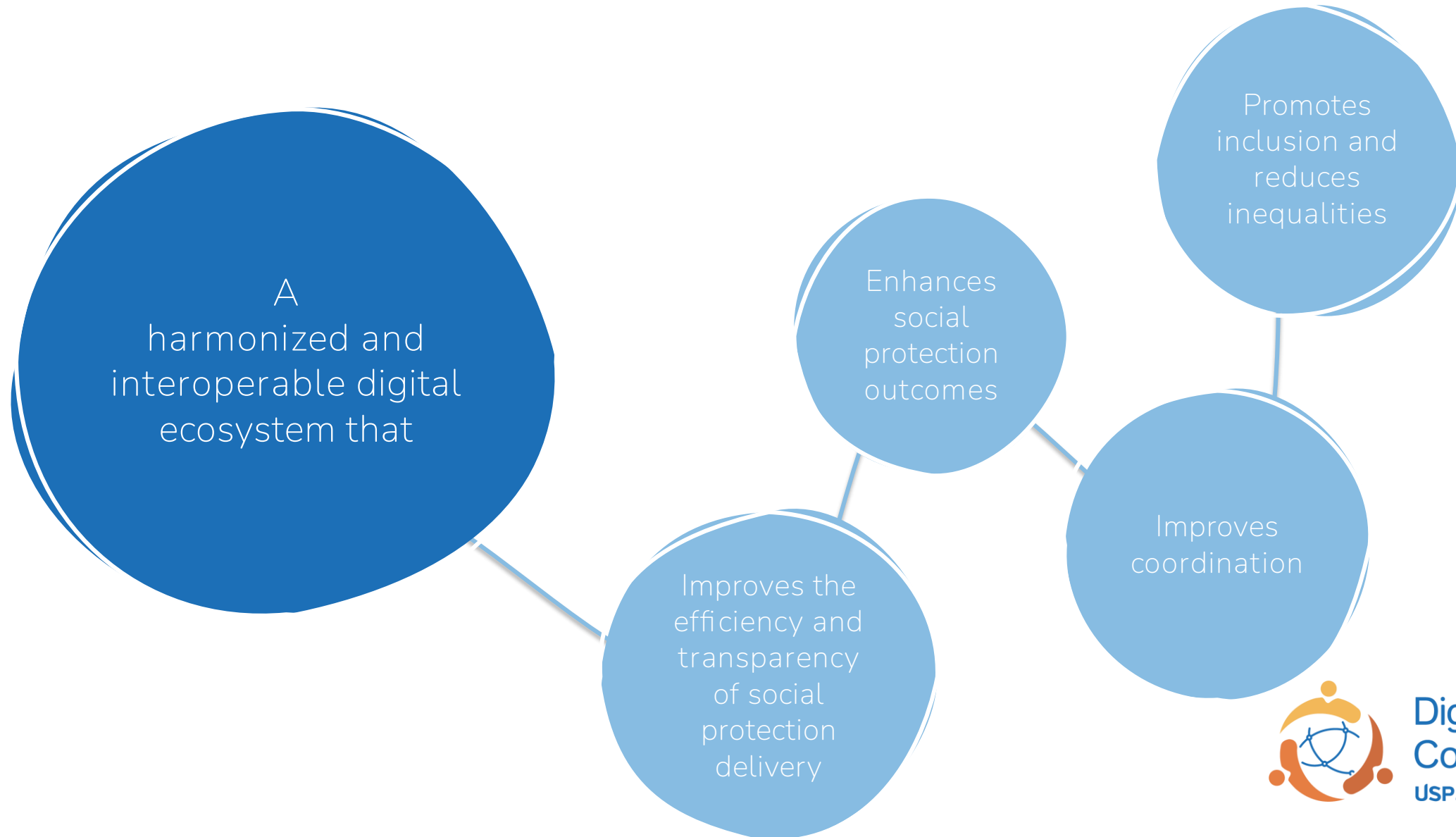
Higher risks of errors and fraud

Wasted public resources



**Digital
Convergence**
USP2030

Consensus-based standards for interoperability



Our approach

1. Knowledge sharing

Facilitation, development of guidelines and evidence generation on global level.

17 webinars

4 blogs

1 AI workshop (112 participants / 22 countries)

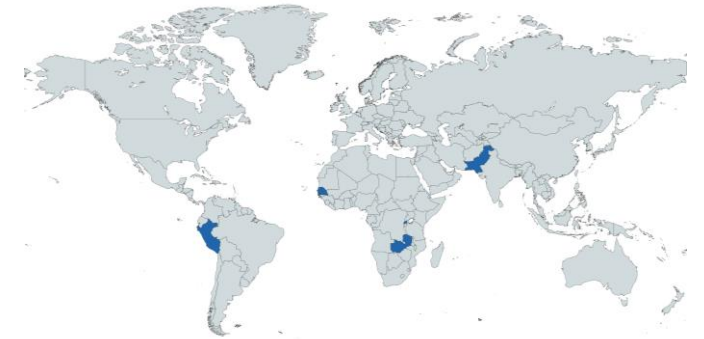
1 [Knowledge base spdc.org](https://spdc.org)

2. Standards development

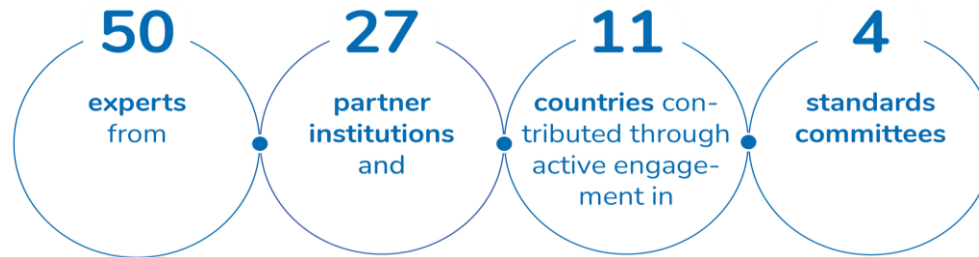
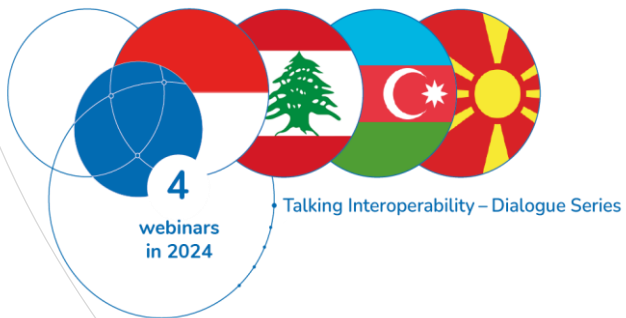


3. Country support

Digital transformation and interoperability support in 10+ countries. Selected so far: Pakistan, Peru, Rwanda, Senegal, Zambia



Additionally, a “Helpdesk for Digital Transformation” as a light touch approach for expanded outreach to more countries.



Co-funded by

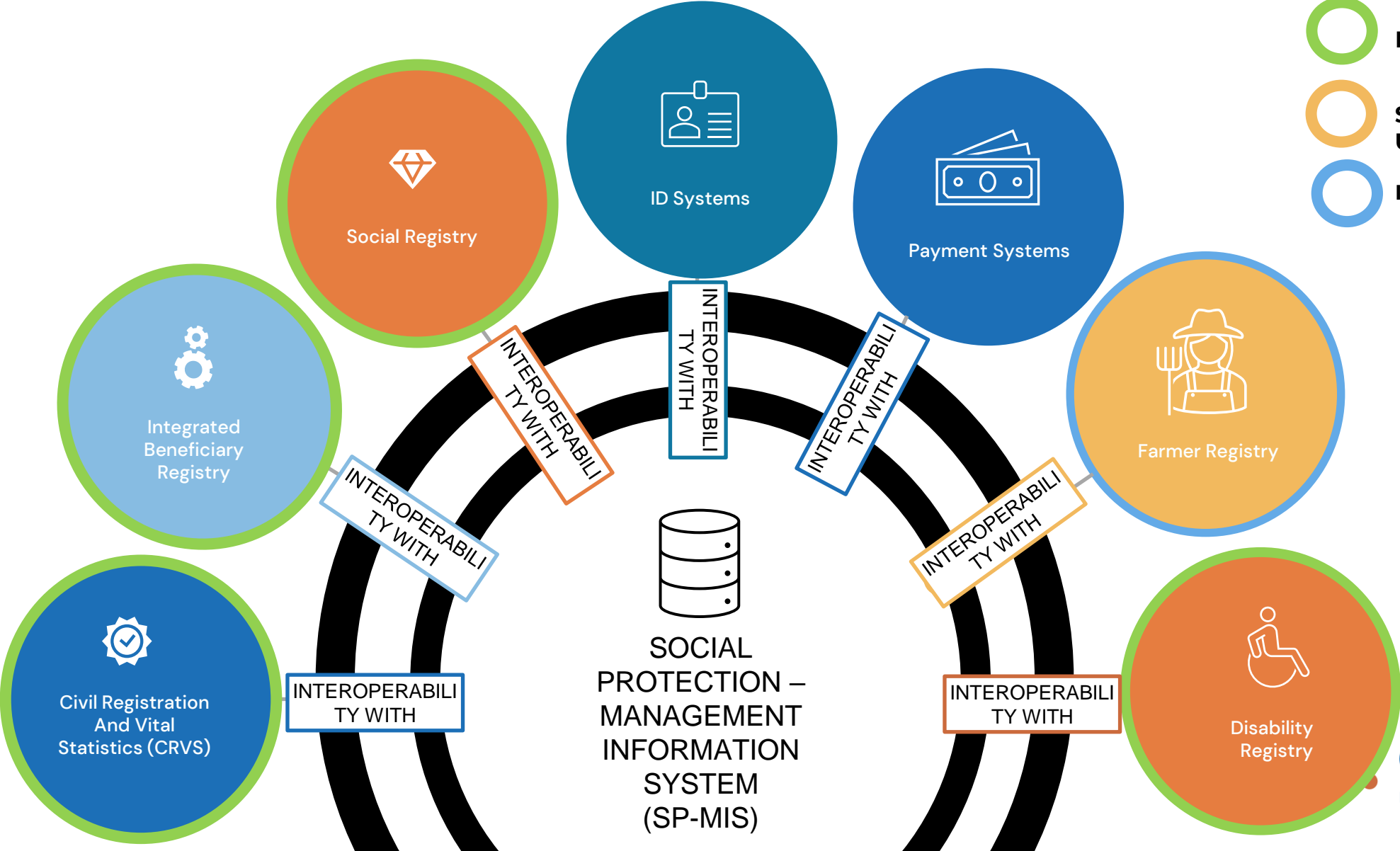


Implemented by



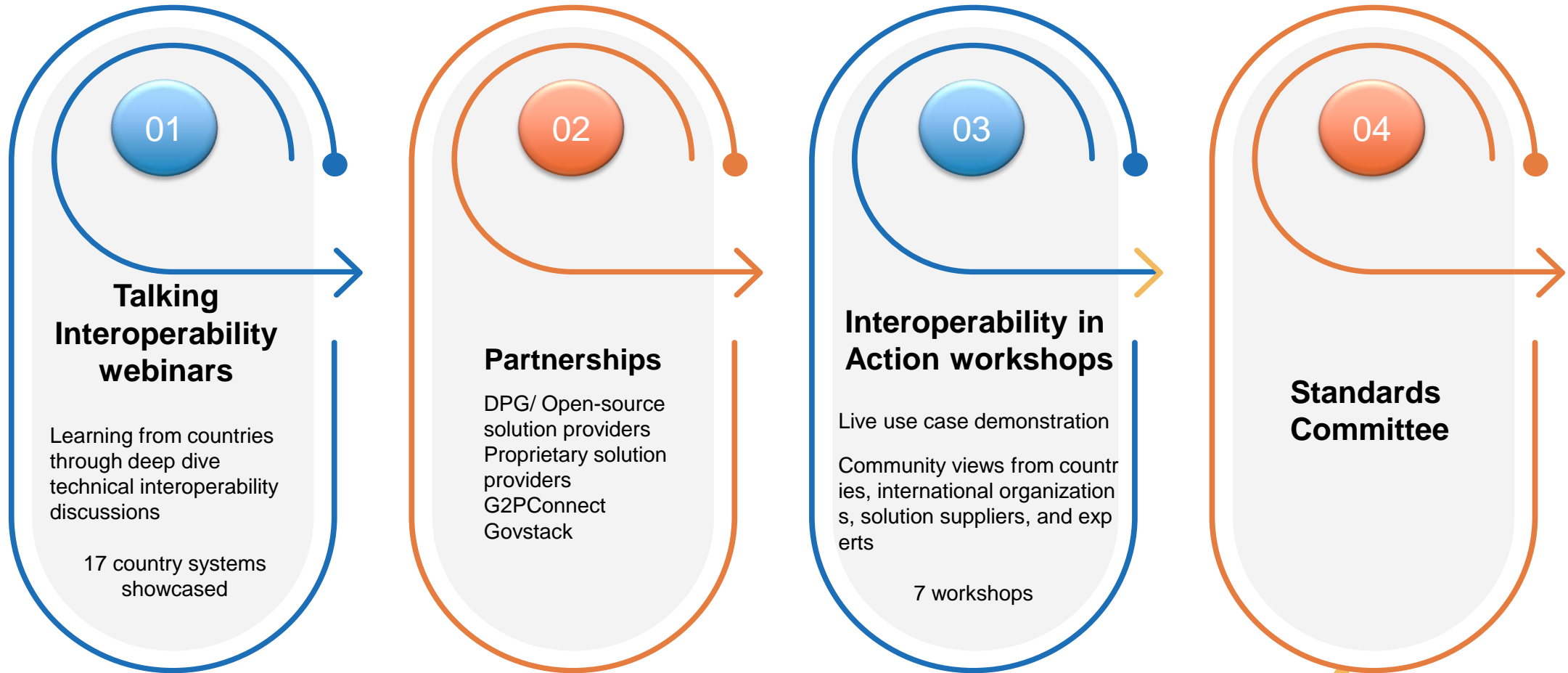
Standards for Interoperability of SP-MIS with other systems

-  Released Standards
-  Submitted to USP20230
-  In-progress

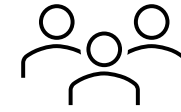


Standards Development Process

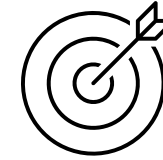
DCI Approach



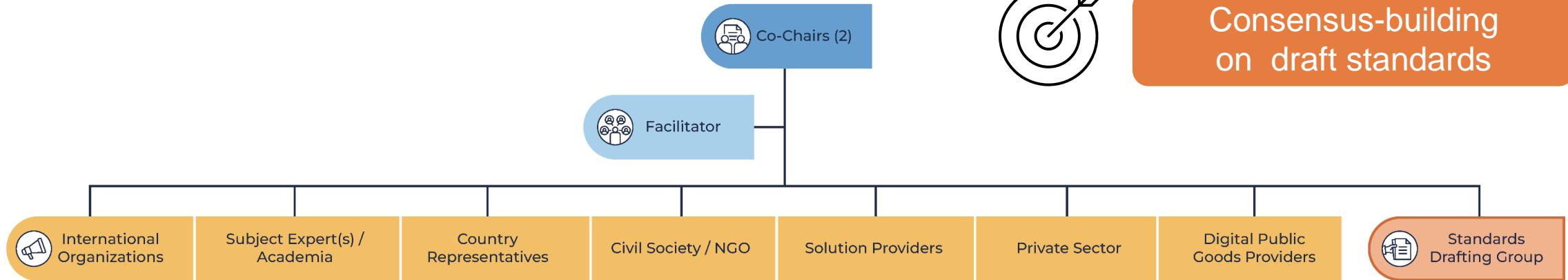
Standards Committee



Group of experts



Consensus-building
on draft standards



Role



Co-Chairs

- Preside over the standards committee meetings and lead the review process to of the draft standard
- Submit final draft to the DCI steering group



Facilitator

- Coordinate and facilitate meetings
- Manage documentation of feedback and action items from meetings



Standards Committee Members

- Review submitted standards and provide feedback
- Invite experts as coopted members / guests to the committee meetings.
- Work with Standards drafting group



Standards Drafting Group

- Prepare draft standards for review and endorsement
- Participate in meetings and incorporate feedback



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Farmer Registry and SP-Systems Interoperability Standards Committee: Kicked off November 14th 2024

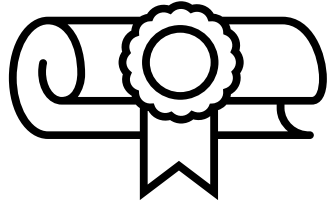
15 Organizations, 17 members

Standards Committee for the Interoperability of Farmer Registry and Social Protection Systems

Standards Committee for the Interoperability of Farmer Registry and Social Protection Systems

Co-Chairs		Facilitators			
Marco Knowles FAO	Veronica Acha Chile	Anita Mittal GIZ	Wanza Mwachani GIZ		
Alejandro Erinspan Independent Expert	Beatriz Burattini IPCid	Faress Yahya Morocco	Jeremi Joslin OpenSPP	Lars Kahnert DIASCA	Lubasi Musambo Zambia
Mitul Thepkiyal MicroSave Consulting	Naseer Uddin Khan WorldBank	Tom Dienya Kenya	Shibu Narayanan openG2P	Kavinda Gunasekera Sri Lanka (FAO)	Uwe Wotzer openIMIS

DCI-Interoperability Standards



3 Main Parts

Description

Process (Workflows)

Use cases showcasing interoperability between Farmer Registry and SP-Systems to efficiently exchange information and collaborate effectively.

Data Standards

Data Objects, attributes, and Code directories

API-Standards

A comprehensive guide that outlines the methods and protocols that the systems can use to communicate



Standard Documentation on

Broader audience



<https://standards.spdci.org>

More technical



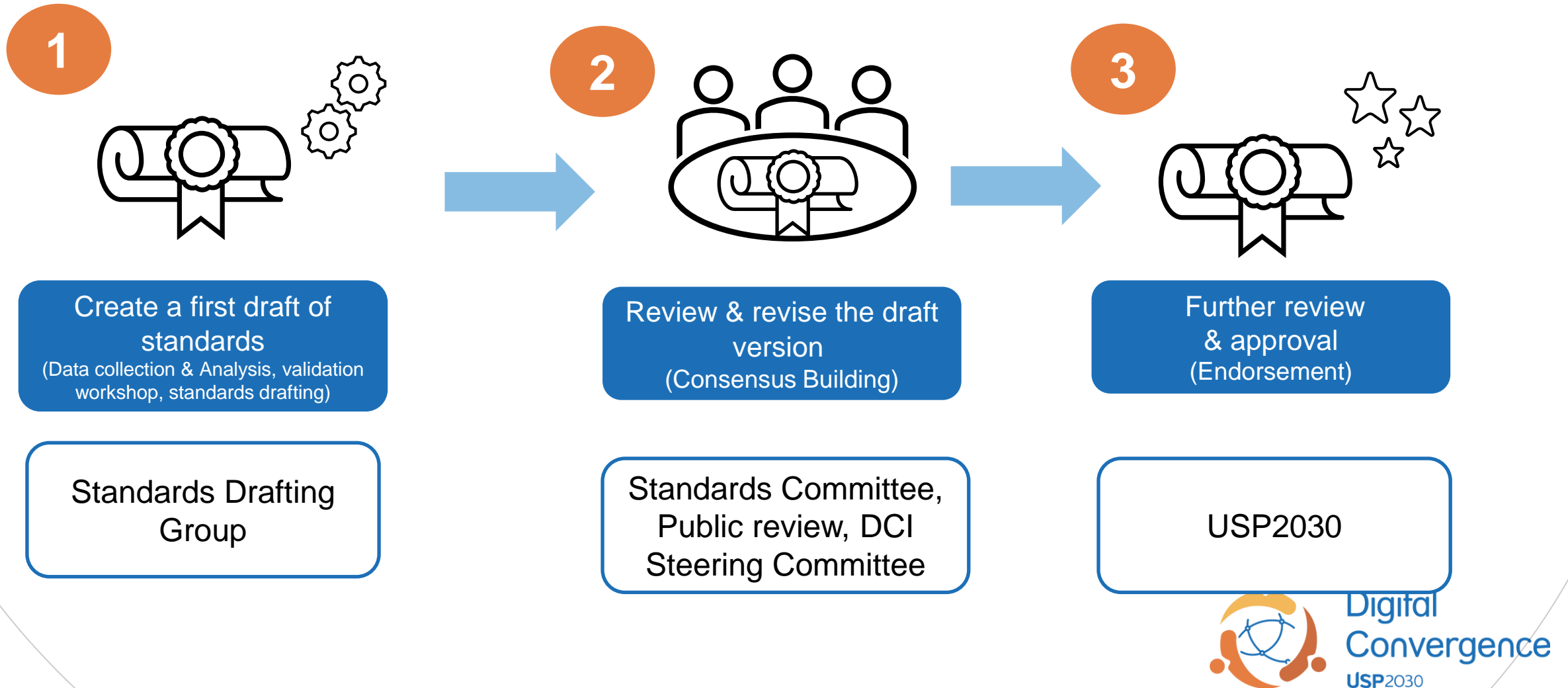
<https://github.com/spdci>

* DCI Interoperability framework : Based on EU Interoperability framework

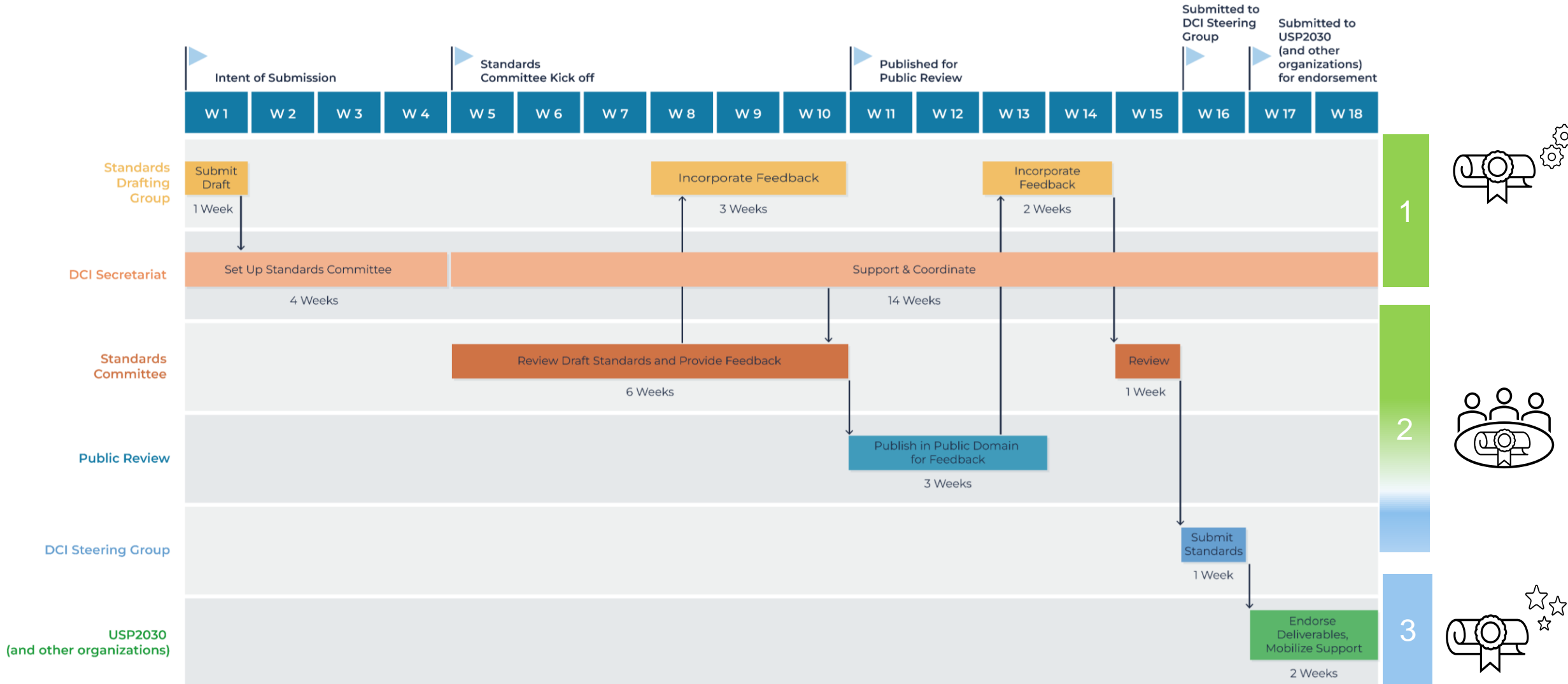


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Interoperability Standards Process – 3 Main Steps



Timelines – work done so far





Standards Walkthrough

Interoperability Framework – 5 building blocks

Legal

Legal, policy and regulatory issues related to identity, data privacy and protection

Governance & Management

Usability, security, privacy and performance, including contractual and commercial (e.g., Service Level Agreement – SLA)

Process Interoperability

Process guidelines around business workflows, trust frameworks and mutual recognition, including federations (e.g., eIDAS)

Semantic Interoperability

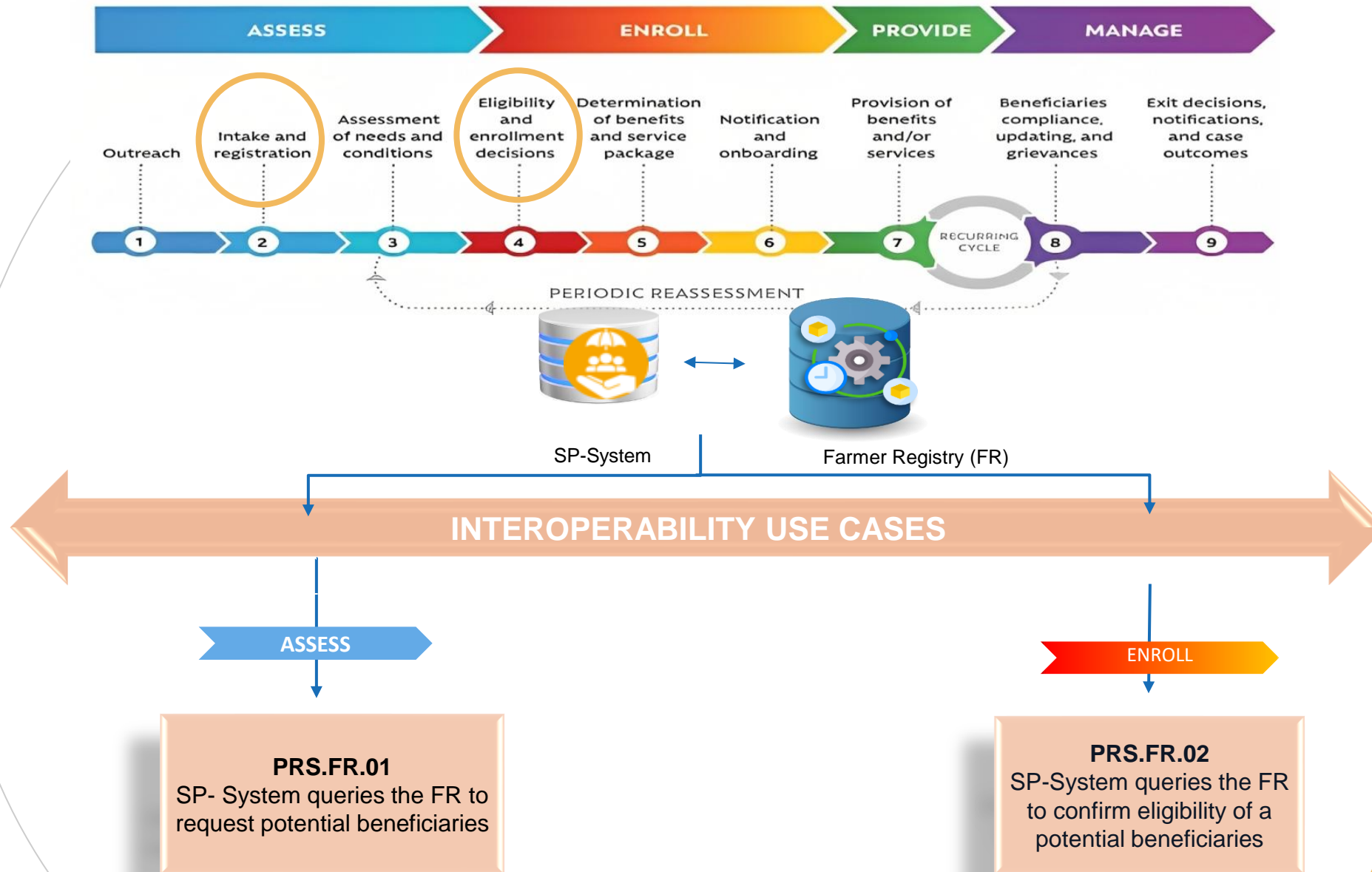
Data standards, and data dictionaries ensuring that the meaning of exchanged data and information is consistent

Technology Interoperability

Standards around software & physical hardware components, systems & platforms which enable machine-to-machine communication

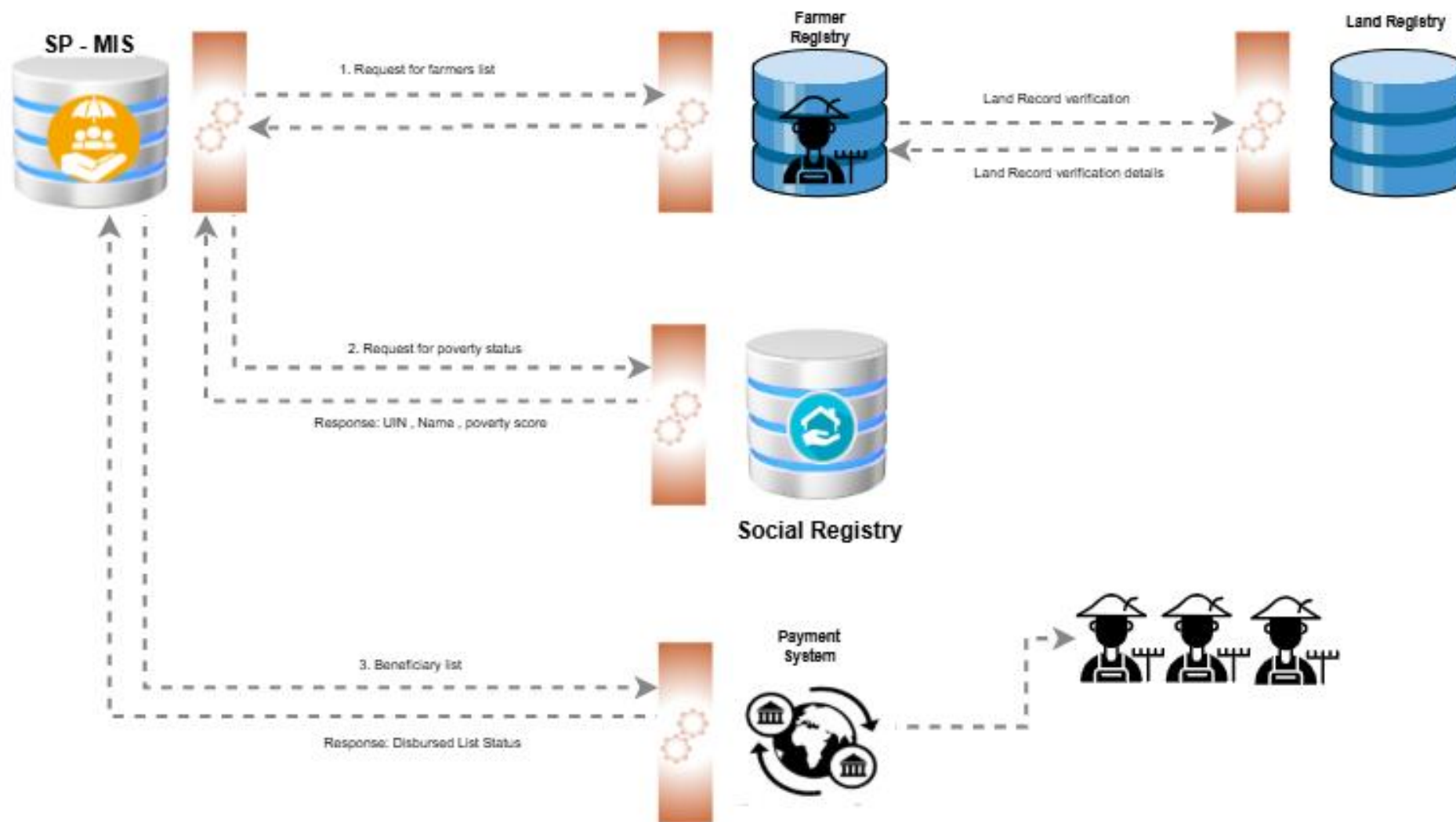


FR and SP-MIS Interoperability – Processes



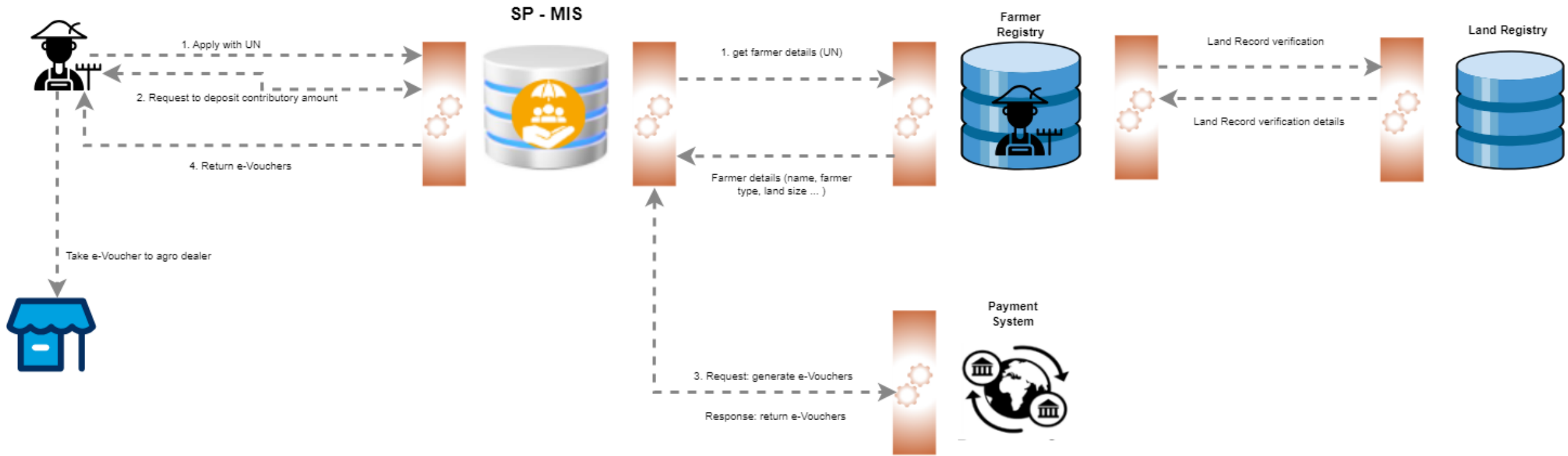
PRS.FR.01: SP-System queries the FR to request potential beneficiaries for program enrolment

Example 1: Farmer Shock Relief Program



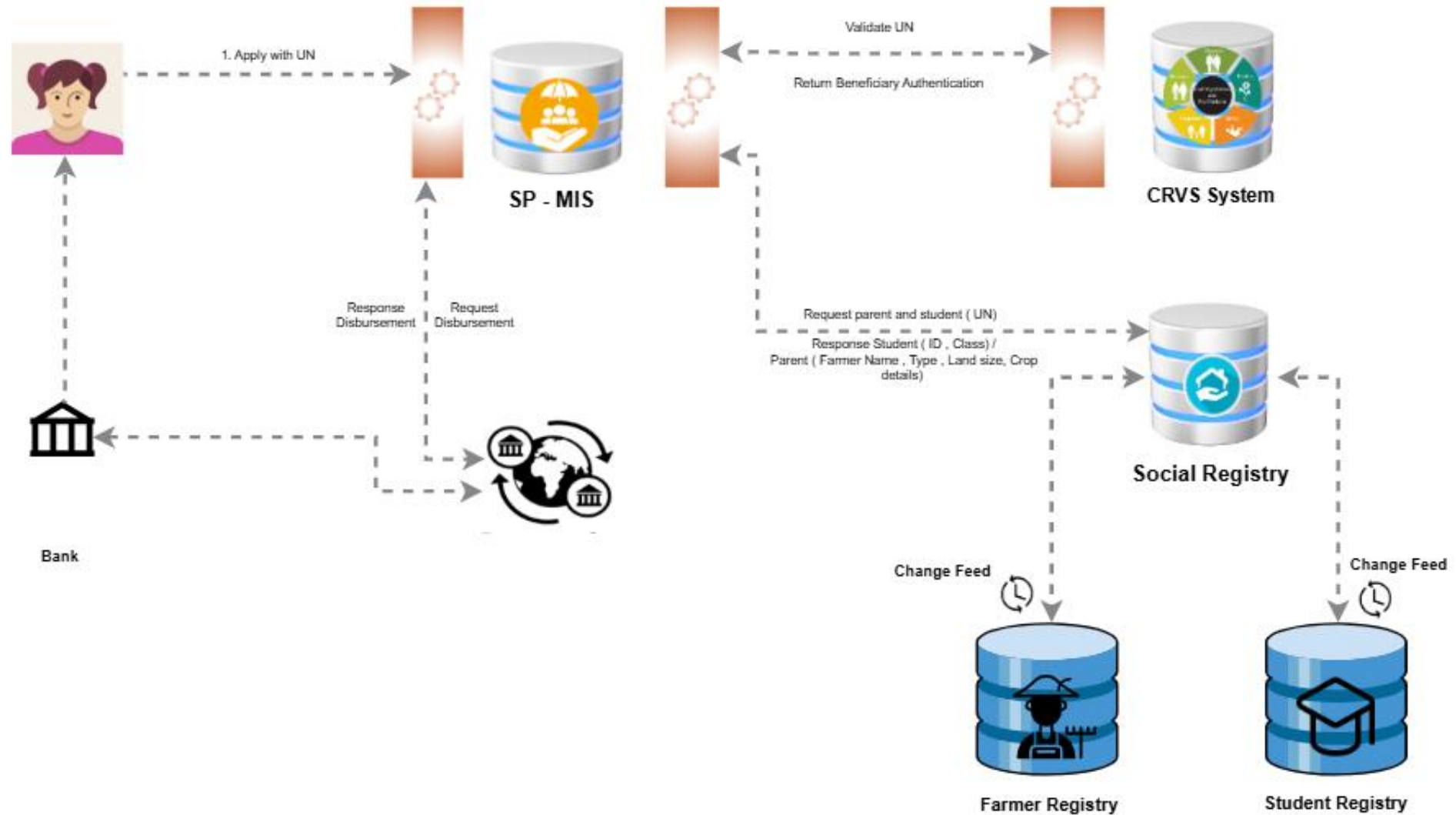
PRS.FR.01: SP-System queries the FR to request potential beneficiaries for program enrolment

Example 2: Farmer Voucher Issuance programs



PRS.FR.02: SP-System connect to the Farmer Registry to confirm eligibility

Example 1: Farmer Child Scholarship Program



Interoperability – Data Standards

Data

As described in the [Structure & Versioning of the Standards](#), the data standards are split into three parts

[Data Objects](#)

[Code Directory](#)

[Data Types and
Formats](#)

Data Objects

 **DO.FR.01 Farmer**

 **DO.FR.02 FarmInfo**

 **DO.FR.03 FarmingActivities**

 **DO.FR.04 CropDetails**


 **DO.FR.05 LivestockDetails**

 **DO.FR.06 Machineries**

 **DO.SR.03 Member**

 **DO.SR.02 Group**

Farmer data object

Attribute	Type	Cardinality	Description
farmer_personal_details	 DO.SR.03 Member	0..1	Personal identification details of the farmer
family_details	 DO.SR.02 Group	0..1	Family/household information of the farmer
farm_details	 DO.FR.02 FarmInfo	0..*	The details of the farmers farm
machineries_details	 DO.FR.06 Machineries	0..*	The details of machineries owned by farmer
additional_attributes	 DT.COM.05 array	0..*	Additional context/country specific attributes
registration_date	 DF.COM.STRING.01 date_time	0..1	The date the farmer was registered in the FR
last_updated	 DF.COM.STRING.01 date_time	0..1	The date the farmer record was last updated

Data Objects

 DO.FR.01 Farmer

 DO.FR.02 FarmInfo

 DO.FR.03 FarmingActivities

 DO.FR.04 CropDetails










 DO.FR.05 LivestockDetails

 DO.FR.06 Machineries

 DO.SR.03 Member

 DO.SR.02 Group

Farm information data object

Attribute	Type	Cardinality	Description
farm_type	 CD.FR.05 FarmTypeEnum	0..1	The main purpose of farming
location	 DO.COM.07 Place	0..1	The location of the land.
land_tenure	 CD.FR.03 LandTenureEnum	0..1	The type of ownership of the farmer
land_size	 DT.COM.04 decimal	0..1	The size of the land
unit	 CD.FR.04 MeasurementUnitEnum	0..1	The unit of measuring the farm size
farming_activities	 DO.FR.03 FarmingActivities	0..*	The farming activities on practiced on the land
additional_attributes	 DT.COM.05 array	0..*	Additional context/country specific attributes
registration_date	 DF.COM.STRING.01 date_time	0..1	The land registration date
last_updated	 DF.COM.STRING.01 date_time	0..1	The date record was updated

API example



- Search...
- API DEFINITIONS
 - Async >
 - Sync >
- SCHEMA OBJECTS
 - SearchRequest
 - SearchResponse**
 - SubscribeRequest
 - SubscribeResponse
 - UnSubscribeRequest
 - UnSubscribeResponse
 - EncryptedMessage

transaction_id required	string (TransactionId) <= 99 characters 1. transaction_id set by txn initiating system (i.e sender) to co-relate all related requests in the context of a business transaction. 2. transaction_id should be same across processing systems/service end points. 3. transaction_id uniqueness is ensured by txn initiating system (i.e sender)
correlation_id required	string <= 99 characters 1. correlation_id acknowledged by end txn processing system (i.e receiver) to co-relate all related requests in the context of a business transaction. 2. correlation_id uniqueness is ensured by txn processing system (i.e receiver)
search_response required	Array of objects
Array [
reference_id required	string (ReferenceId) Unique reference_id set by txn initiating system for each request in a batch
timestamp required	string <date-time> (DateTime) 1. All dates and timestamps are represented in ISO 8601 format including timezone - e.g 2022-12-04T17:20:07-04:00.

```
Copy Expand all Collapse all
{
  "transaction_id": 123456789,
  "correlation_id": "9876543210",
  - "search_response": [
    - {
      "reference_id": "1234567890123456789",
      "timestamp": "",
      "status": "rcvd",
      "status_reason_code": "rjct.reference",
      "status_reason_message": "string",
      - "data": {
        "version": "1.0.0",
        "reg_type": "ns:org:RegistryType",
        "reg_event_type": "spdc-common:",
        "reg_record_type": "spdc-extens",
        - "reg_records": {
          "type": "object",
          "description": "1. Attribute",
          - "example": {
            + "famer_personal_details",
            + "family_details": { ... },
            + "farm_details": [ ... ],
            + "machineries_details": [
              "registration_date": "2023-09",
              "last_updated": "2023-09"
            ]
          }
        }
      }
    }
  ]
}
```

The background is a solid blue color with several large, semi-transparent, light blue abstract shapes and thin white curved lines scattered across it, creating a modern, geometric aesthetic.

Morocco

Farmer Registry and SP-Systems

Interoperability Overview



المملكة المغربية
Royaume du Maroc



وزارة الفلاحة والصيد البحري
والتنمية القروية والمياه والغابات
Ministère de l'Agriculture, de la Pêche Maritime,
du Développement Rural et des Eaux et Forêts



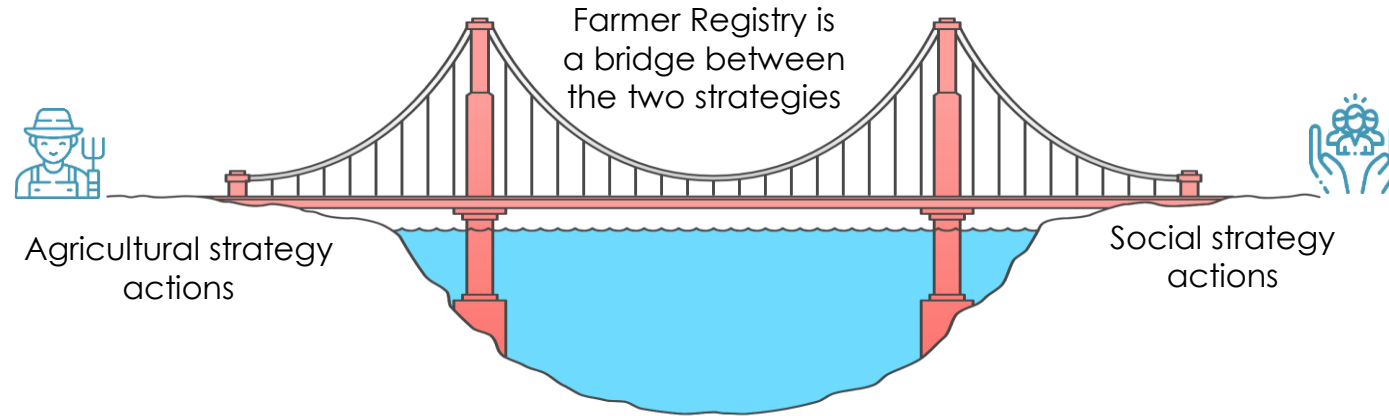
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Farmer Registry and Social Protection Systems

FARESS Yahya
Farmers' Social Protection Division,
Ministry of Agriculture, Morocco

Integrating Agricultural and Social Protection Strategies for Rural Development

- ▶ In Morocco, the agricultural sector is the crossroads of two important strategies: agricultural and social. Both of these strategies have one main goal – to improve the lives of farmers.



- ▶ Make sure the two strategies work together well to reduce poverty in rural areas.
- ▶ Connect the farmers' register and the social protection systems completely to help target farmers better.
- ▶ Give better and more useful services to farmers by improving how the two systems work together.

Steps and Parts of the Social Protection Strategy in Morocco



2021-2022:

Expand basic medical coverage.

Ensure everyone, including farmers, can access healthcare.



2023-2024:

Introduce family allowances.

Provide direct financial support to vulnerable families.



2025:

Expand retirement benefits.

Create a broader pension system for self-employed workers, including farmers.



2025:

Extend unemployment benefits.

Set up a system to protect self-employed workers from job loss.

Steps in the Creation of the National Agricultural Registry (NAR)

2014-2015:

Technical and legal feasibility studies for the NAR.

2018-2021:

Develop and adapt the law for the creation of the RNA.

2023-2024:

Update the law to expand the NAR & Start the new legal framework for the registry.

2016-2017:

Conduct the General Agricultural Census and create the first reference using the collected data.

2021-2022:

Update part of the "farmers" reference as part of the social protection expansion projects.

Content of the National Agricultural Registry References

National Agricultural Registry

Farmers Reference:

- Name & First name
- National ID (CIN)
- Phone number
- Address
- Date of birth
- Household information



Each farmer is assigned a unique ID.

Geo-Referenced Farms Reference:

- Region, Province, and Commune
- Land size
- Animals
- Geographic data
- Crop types and irrigation systems
- Legal status



Each farm is mapped and given a unique ID.

The Role of Farmer Registry and Social Protection Systems in Supporting Farmer

Farmer Registry

Farmer Registration: Collecting key information about farmers, including their full names and national ID numbers, to create a reliable registry.

Resource Identification: Recording the resources and tools used in farming to better understand production capacities.

Income Estimation: Assessing the income levels of farmers to support targeted social protection measures.

Status Updates: Keeping track of changes in farm operations, such as adjustments in farm size or pauses and resumptions in farming activities.

Social Protection

Farmer Registration: Registering farmers in the social protection system.

Providing Benefits: Offering services like mandatory health insurance and family allowances.

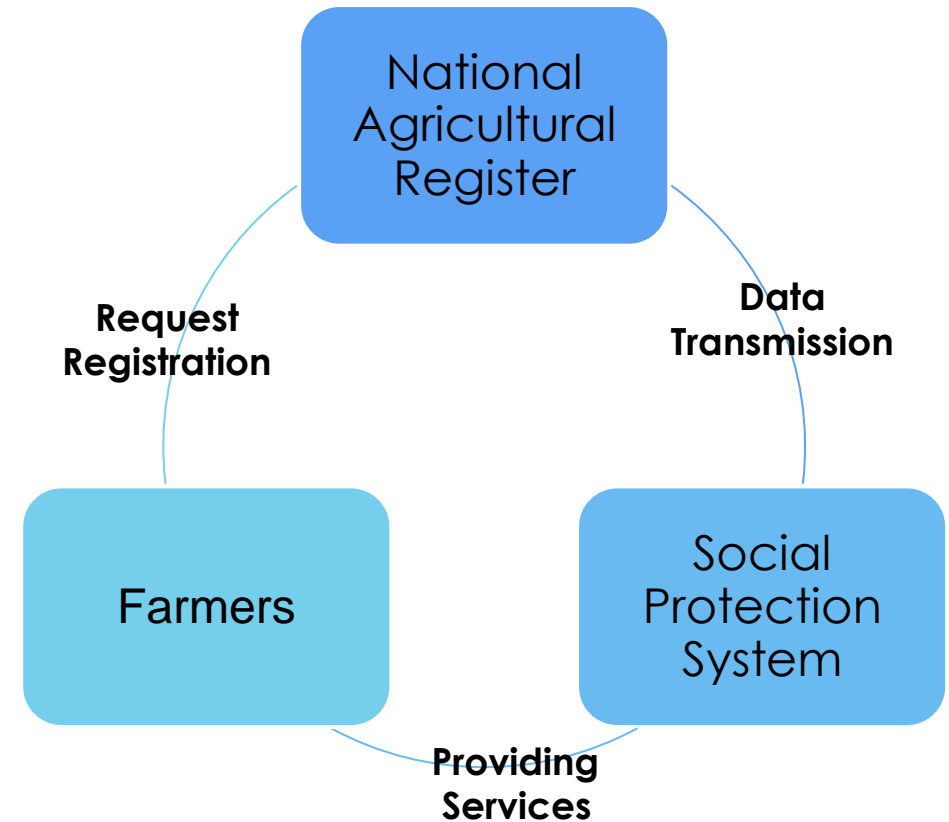
Collecting Contributions: Managing the collection of contributions linked to the system.

Updating Farmer Status: Regularly updating farmers' information, such as changes in income or stopping agricultural activities.

Data Exchange Between the Farmer Registry and the Social Protection System

The Farmer Registry provides the necessary data for the identification and registration of farmers in the social protection system. Data includes:

1. **Name and surname** of the farmer.
2. **National ID number.**
3. **Start date** of agricultural activity.
4. **Income category**

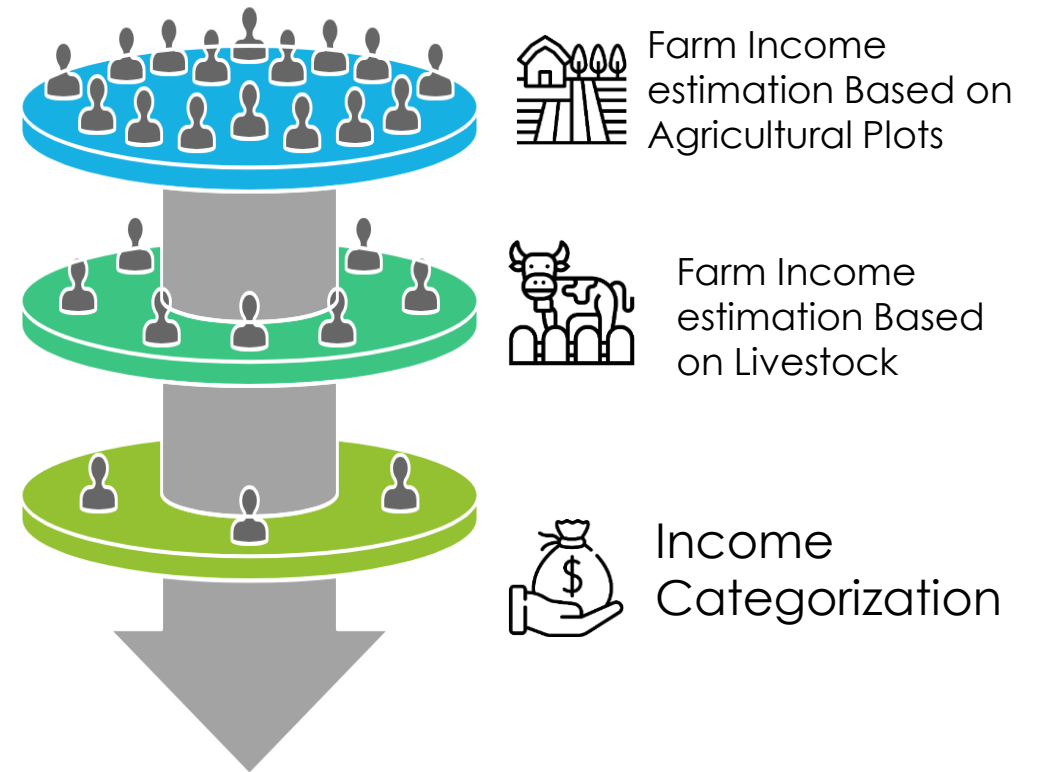


Classification of Farmers by Income

Classifying farmers by income is a primary task of the National Agricultural Register. This process involves analyzing the production assets of each farm, focusing on:

- The type of irrigation used on plots
- Livestock activities on the farm

Based on this analysis, farmers are grouped into ten income categories as defined by the regulations.





Thanks for your attention

Open Discussion

Next Steps

Support the Initiative

Your input matters

- Public Review is open till **March 12th**
- Come back and review the updates as we keep updating
- All Feedback to be incorporated by **March 21st**



Forms of participation

- **Contribute your expertise** by reviewing the standards and provide feedback through **discussion forums**
- **Spread awareness** about the public review of standards in your network
- **Support and Adopt the standards** in your Social Protection projects and share **feedback**

For further assistance or inquiries, reach out to contact@spdci.org

Public Review



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Call for Public Review

Your contribution matters

**Farmer Registry and Social Protection Systems
Interoperability Standards**



Public Review Webinar on
Tuesday, February 25, 2025

Review open until
March 12, 2025



Co-funded by



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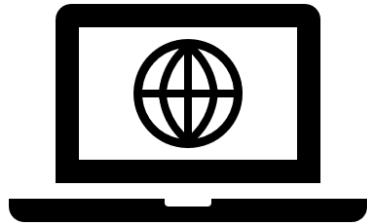
[Standards Draft](#)



[GitHub Discussions
Forum](#)



Connect with DCI



www.spdci.org



socialprotection-convergence.discourse.group



social-protection-convergence-initiative

Thankyou
