Conference Call #7

Sub-group 4
Pilots and capacity-building activities

Cotton blockchain pilot

Pilot core team, Andrea Redaelli and secretariat

23 I 09 I 2020, WebEx teleconference

AGENDA 23.09.2020

15:30-15:35 - Update of the procurement action for the development of the supporting blockchain solution

Olga Kharitonova

15:35-16:30 - Overview of progress on ongoing work with partners

Andrea Redaelli, Olivia Chassot

- User stories collection and “fil rouge”: the story running behind the blockchain solution
- Experts’ consultation - Claims to enable transparency and due diligence
- Next steps for pilot’s implementation

16:30-16:45 - Legal aspects to be considered in the development of the blockchain solution

Claudia di Bernardino

16:45-17:00 - Next steps, experts’ subgroup input, Q&A

Maria Teresa Pisani

Background documents CUE SPACE	– Project document for a pilot on blockchain for traceability and due diligence in the cotton value chain and progress report (draft April 2020) – Minutes of Virtual conference #6 meeting 01.07.2020 – “Fil Rouge” Storytelling document & Compilation of User Stories for the Cotton Blockchain Pilot

1. Update on the procurement action for the development of the supporting blockchain solution

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

- UNOG procurement action through United Nations Global Marketplace
- 7 bids received
- Technical evaluation, with support from Andrea Redaelli, Marco Ricchetti and Heinz Zeller, by a committee formed of UN staff members: UNECE + UNOG IT Security
- Commercial evaluation by the Procurement department

SELECTED TECHNOLOGY SOLUTION PROVIDER

Scuola universitaria professionale
della Svizzera italiana
SUPSI

Overview of progress on ongoing work with partners

- **User stories collection and "fil rouge":** the story running behind the blockchain solution (Draft Sept. 2020)
- **Claims** to enable **transparency and due diligence**
- **Timeline & Next steps** for pilot's implementation

Andrea Redaelli, Olivia Chassot

2. Overview of progress on ongoing work with partners

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

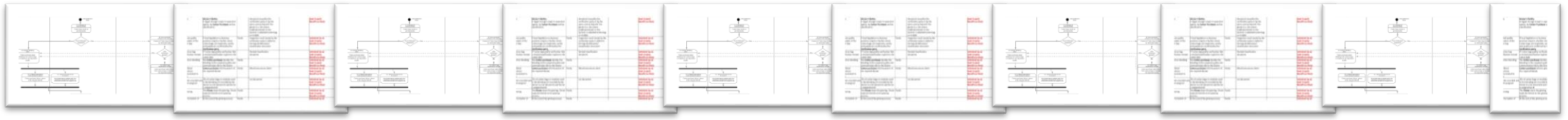
UPSTREAM

DOWNSTREAM

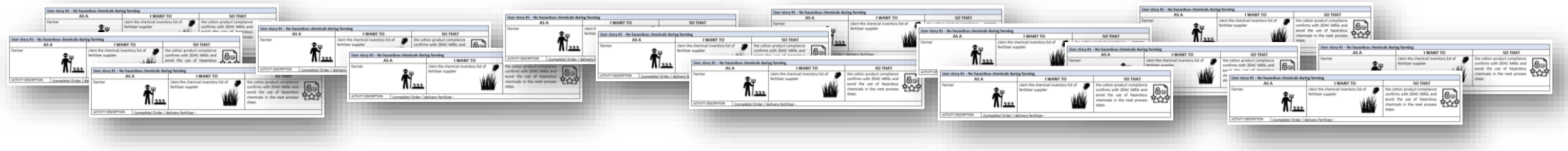
VALUE CHAIN

1. Planting and cultivation of cotton
2. Cotton harvest identification & transfer from farmer to ginner
3. Ginning & transfer to spinner
4. Spinning & transfer to dyer, bleacher, washer
5. Dyeing, bleaching, washing & transfer to weaver
6. Weaving & transfer to fabric finisher
7. Fabric finishing, other treatments & transfer to manufacturer
8. Garment or product production & transfer to enablement
9. Product Enablement & packaging and transfer to "retailer"
10. Placement of product in stores or on-line for sale
11. Consumption and disposal
12. Post consumption recycling

BUSINESS PROCESS DESCRIPTION



USER STORIES



SUSTAINABILITY (RISKS)

ENVIRONMENT | SOCIAL | ETHICS | ECONOMIC | MANAGEMENT | QUALITY

CLAIMS

1 2 3 4 5 6 7 8 9 … … …

BUSINESS REQUIREMENTS SPECIFICATION / DATA MODEL

(…) (…) (…) (…) (…) (…) (…) (…)

FIL ROUGE

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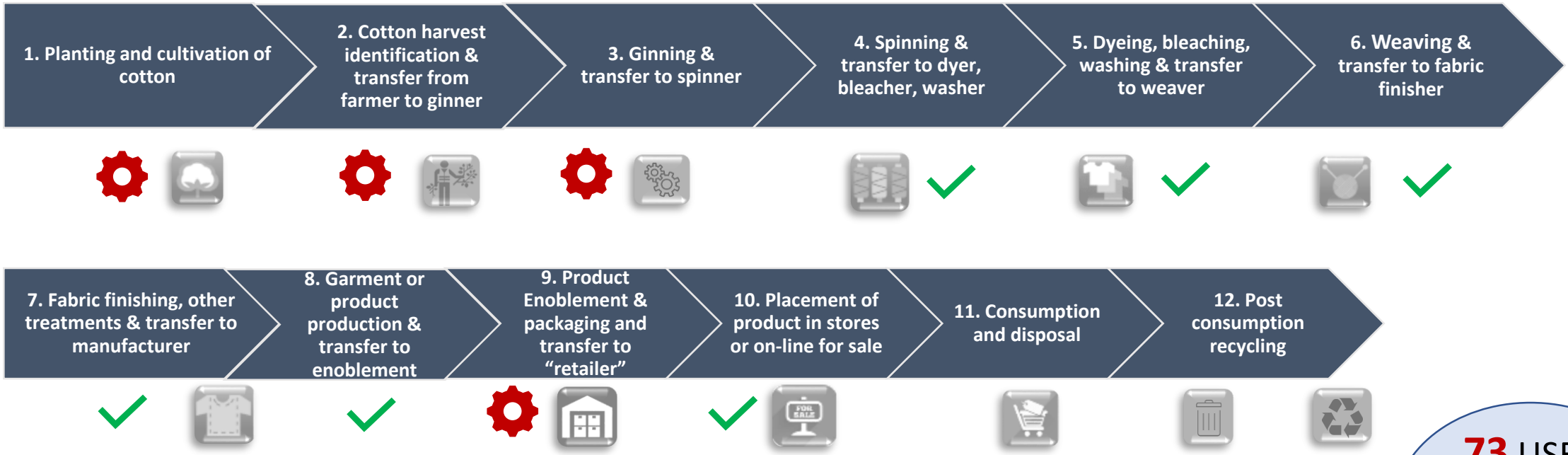
User Stories Collection - Update

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

FILMAR NETWORK · elvy · WEBA Switzerland · Albini GROUP · ZDHC · GOTS · OEKO-TEX® CONFIDENCE IN TEXTILES · Haelixa · Vivienne Westwood · BURBERRY LONDON · STELLA McCARTNEY · HUGO BOSS



73 USER STORIES *(Sept. 2020)*

✓ *User stories collected from the Business Process Analysis*

⚙ *User stories to be collected*

"Fil rouge" storytelling document – the Story running behind the Blockchain Solution

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

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"Fil Rouge" document – Cotton Blockchain Pilot Storytelling

As part of UNECE-UN/CEFACT project *Enhancing Transparency and Traceability for Sustainable Value Chains in the Garment and Footwear Industry* and in the context of the first pilot, this document aims at i) describing the story behind the value chain actors' needs for the blockchain solution supporting the pilot project and, ii) identifying which are the documents and data that need to be registered and exchanged on the blockchain system.

The story follows the sequencing of business processes mapped on the basis of the methodology outlined in the Explanatory note for Business Process Analysis (BPA) for the value chain and data model for traceability of information exchange (draft September 2020) (see ANNEX 2 – Generic Use Case – Cotton Value Chain).

Each chapter refers to a specific business process related the production and transformation of cotton. It includes a description of the activity and its periodicity, the documents exchanged between identified actors, and their roles in enabling traceability throughout the value chain.

This work draws upon the collection of the business process descriptions for the cotton value chain and of user stories provided by the partners of the pilot project. The user stories associated to a specific business process activity are included in the description phase. The user stories "standing-alone" are featured in a dedicated box "USE CASES", at the end of the relevant business process.

Reference document: Project document for a pilot on blockchain for traceability and due diligence in the cotton value chain and progress report (draft April 2020)

Colour coding: Red: timing to be adjusted with pilot's timeframe. Green: elements for the blockchain platform

Table of contents

"Fil Rouge" document – Cotton Blockchain Pilot Storytelling

Chapter 01 - Planting and Cultivation of Cotton

The process participants are cotton farm, farm supplier, farm cooperative. The process can begin when information for crop planning is available.

1.1

From the outset, the farmer plans the cotton crop and plans initial seed and fertilizer orders once a year, in January most likely. The farmer registers on the blockchain system the plan of crop and potential additional documents.

1.2.1

The order/delivery seed order is sent by the farm to the farm supplier delivering the seed, once a year, in February most likely. The farm registers on the blockchain system the order from farmer to farm supplier, and the invoice from farm supplier to farmer. Additional documents can be uploaded on the system in regard to the availability of the seed, the delivery date from farm supplier to farmer, and delivery location from farmer to farm supplier (e.g. SMS). US/Claim: put the orders of crops in the system

1.2.2

The order/delivery fertilizer order is sent by farm to farm supplier who delivers the fertilizer, three times a year in March, May and July. The farmers registers on the blockchain system the order from farmer to farm supplier and the invoice from farm supplier to farmer. Additional documents can be uploaded on the system in regard to the availability of fertilizer, delivery date from farm supplier to farmer and the delivery location from farmer to farm supplier (e.g. SMS). Claim: List of chemicals used for fertilizing (put the orders of crops and list of chemicals in the blockchain system)

User story 01 Planting and Cultivation of Cotton: In order to avoid using hazardous chemicals during farming, *as a* farmer, *I want to* claim the chemical inventory list of fertilizer supplier, *so that* the cotton product compliance conforms with ZDHC MRSL, and avoids the use of hazardous chemicals in the next process steps.

1.2.3

The order/delivery crop protection appliance order is sent by the farm to the farm supplier who delivers the crop protection appliance, once a year in May or June, most likely. The farmer registers on the blockchain system the order from farmer to farm supplier and the invoice from farm supplier to farmer. Additional documents can be uploaded on the system in regard to the availability of crop protection appliance and delivery date from farm supplier to farmer, the delivery location from farmer to farm supplier (e.g. SMS).

1.3

USE CASES

User story 67 Product Placement of Product in Stores or On-line for Sale: *As a* retailer, *I want to* know the water consumption used during all the processes before obtaining the garment, *so that* I know the water consumption.

User story 68 Product Placement of Product in Stores or On-line for Sale: *As a* retailer, *I want to* know the impact of the carbon footprint used during all the processes after obtaining the fabric, *so that* I know the water consumption.

User story 69 Product Placement of Product in Stores or On-line for Sale: *As a* retailer, *I want to* know the impact of the carbon footprint used during all the processes before obtaining the garment, *so that* I know the carbon footprint impact on the environment.

User story 70 Product Placement of Product in Stores or On-line for Sale: *As a* retailer, *I want to* know the impact of the carbon footprint used during all the processes after obtaining the fabric, *so that* I know the carbon footprint impact on the environment.

User story 71 Product Placement of Product in Stores or On-line for Sale: *As a* retailer, *I want to* know the impact of the carbon footprint used during the transport carried out to obtain the final garment, *so that* I know the carbon footprint impact on the environment.

Chapter 11: Consumption and Disposal (TBC)

This business process is not covered in the pilot's scope

User story 72 Consumption and Disposal: *As a* consumer, *I want to* be able to trace a product and have information about its safety and sustainability by the label MADE IN GREEN by OEKO-TEX® *so that*, I can be sure that the products have been tested for harmful substances and are produced in a sustainable manner, i.e. in an environmentally friendly and socially responsible manner. MADE IN GREEN by OEKO-TEX® additionally offers the transparency of all textile production processes within a supply chain through an OEKO-TEX® internal traceability system. To that effect, the production facilities or materials used in production must be certified by OEKO-TEX®. The certification for textiles is STANDARD 100 by OEKO-TEX®. The certification for textile production facilities is STeP by OEKO-TEX®.

Chapter 12: Post-Consumption Recycling (TBC)

This business process is not covered in the pilot's scope

User story 73 Post-Consumption Recycling: *As a* sorting/recycling company, *I want to* know the composition and recyclability information and the certificates (pe. Organic Cotton, REACH, Higgs ….) linked to the product (at sorting point), *so that* the clothing/footwear can be re-used/recycled to the highest value in full compliance to legal requirements (pe. REACH).

Experts' consultation - Claims to enable transparency and due diligence

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

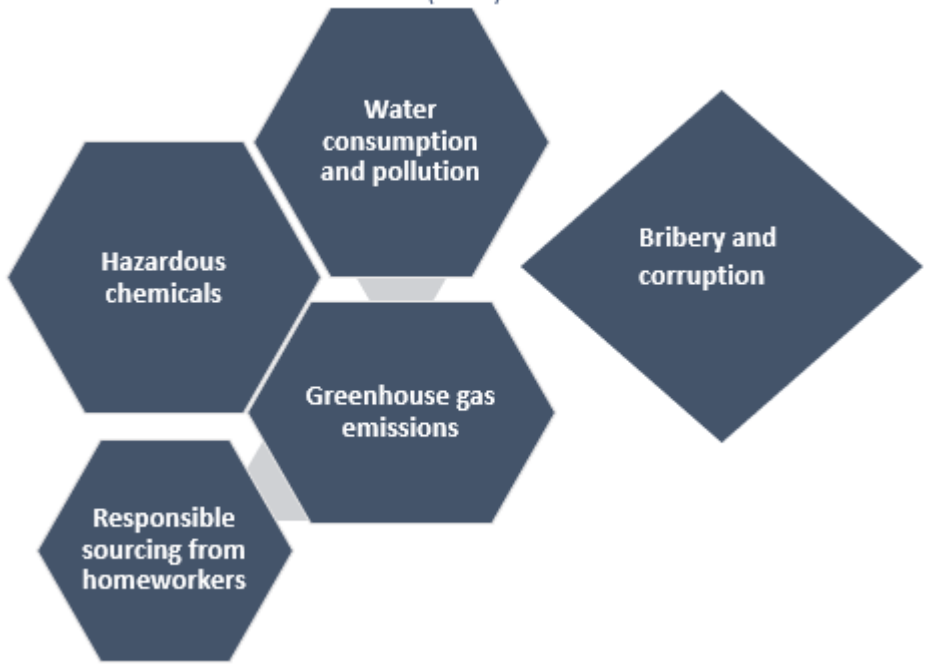
Origin

Chemical content

Organic content

OECD due diligence requirements

OECD - DUE DILIGENCE GUIDANCE FOR RESPONSIBLE SUPPLY CHAINS IN THE GARMENT AND FOOTWEAR SECTOR (2018)



Legal aspects to consider in the development of the blockchain

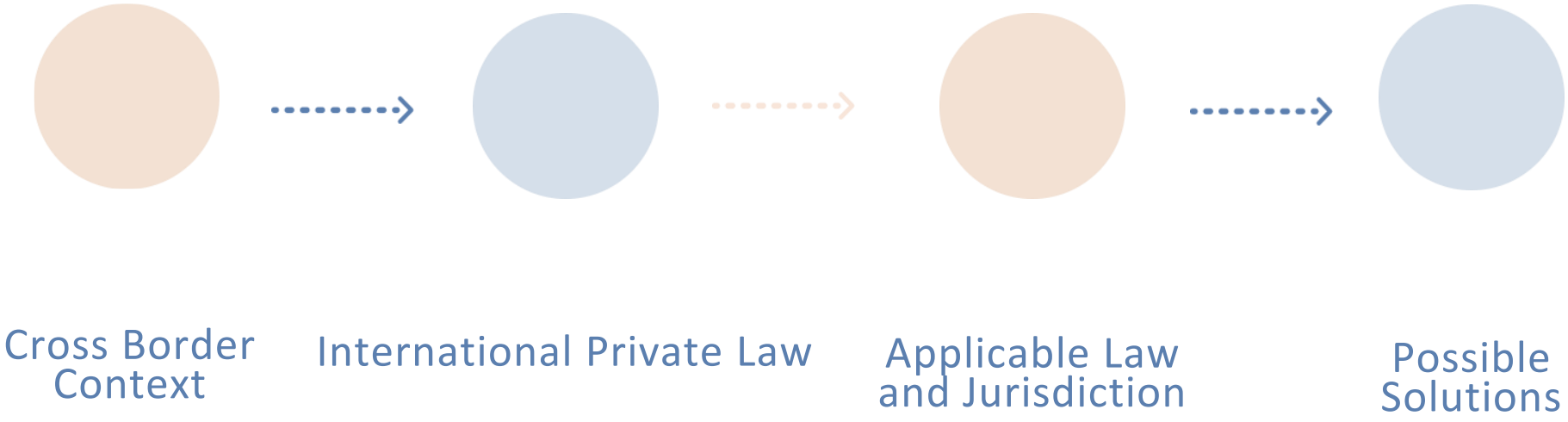
Claudia Di Bernardino, Lawyer (Italy)

Which are the challenges for blockchains participants?

Legal ramifications of the solution including
public law, private law, criminal law, financial and regulatory law

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

GOVERNING LAW AND JURISDICTION

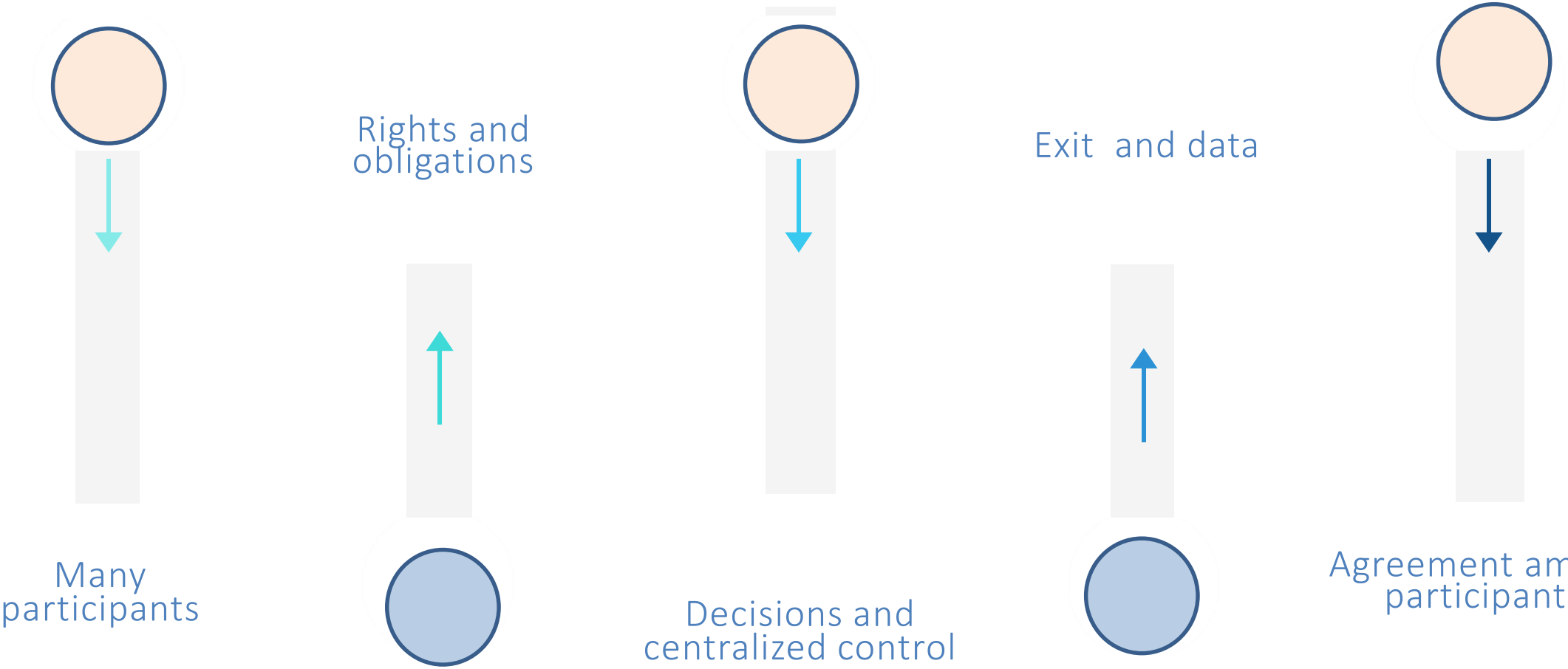


DATA PROTECTION AND DATA PRIVACY

- Personal Data
- Data Controller
- Right to be Forgotten
- Data Confidentiality

Privacy by design

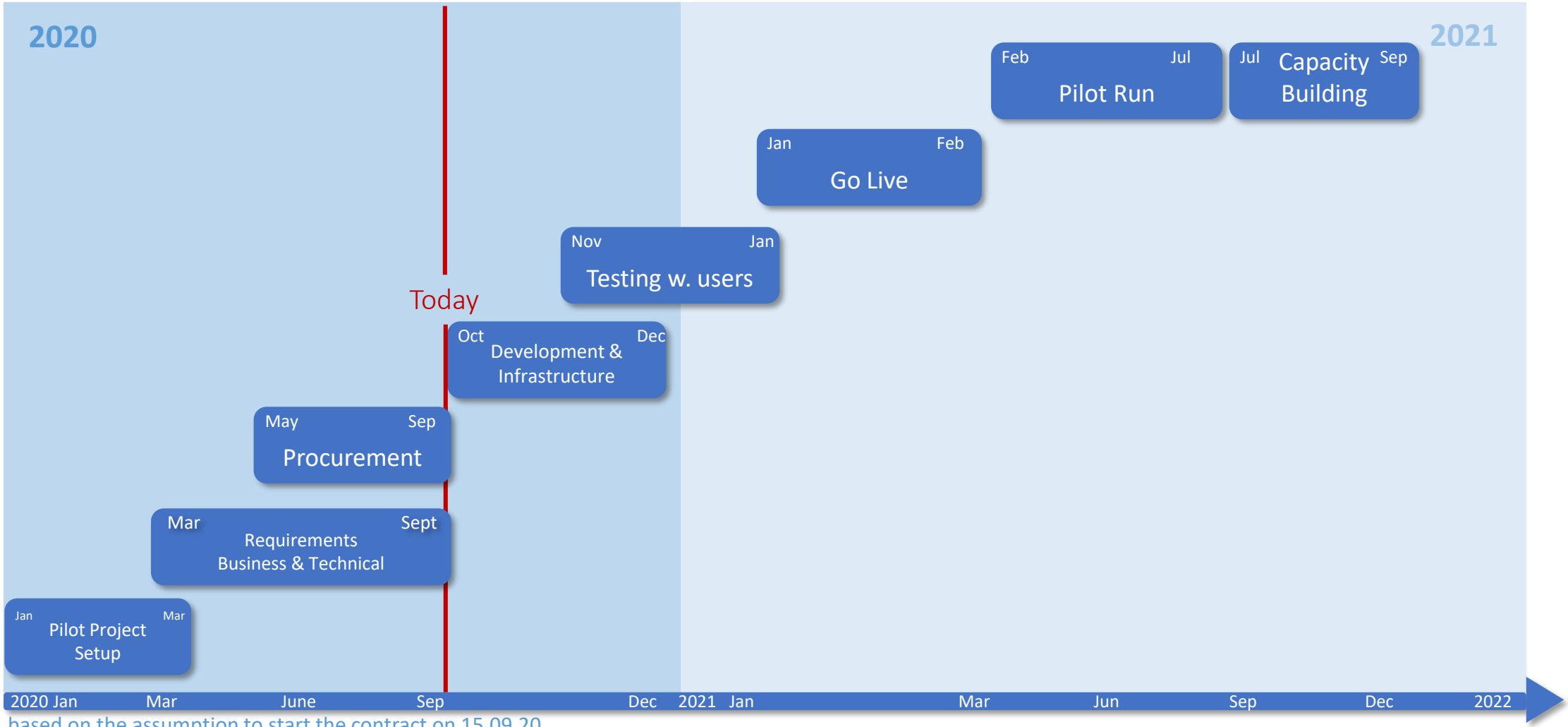
GOVERNANCE FRAMEWORK



Timeline & Next steps

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

"COTTON VALUE CHAIN PILOT"

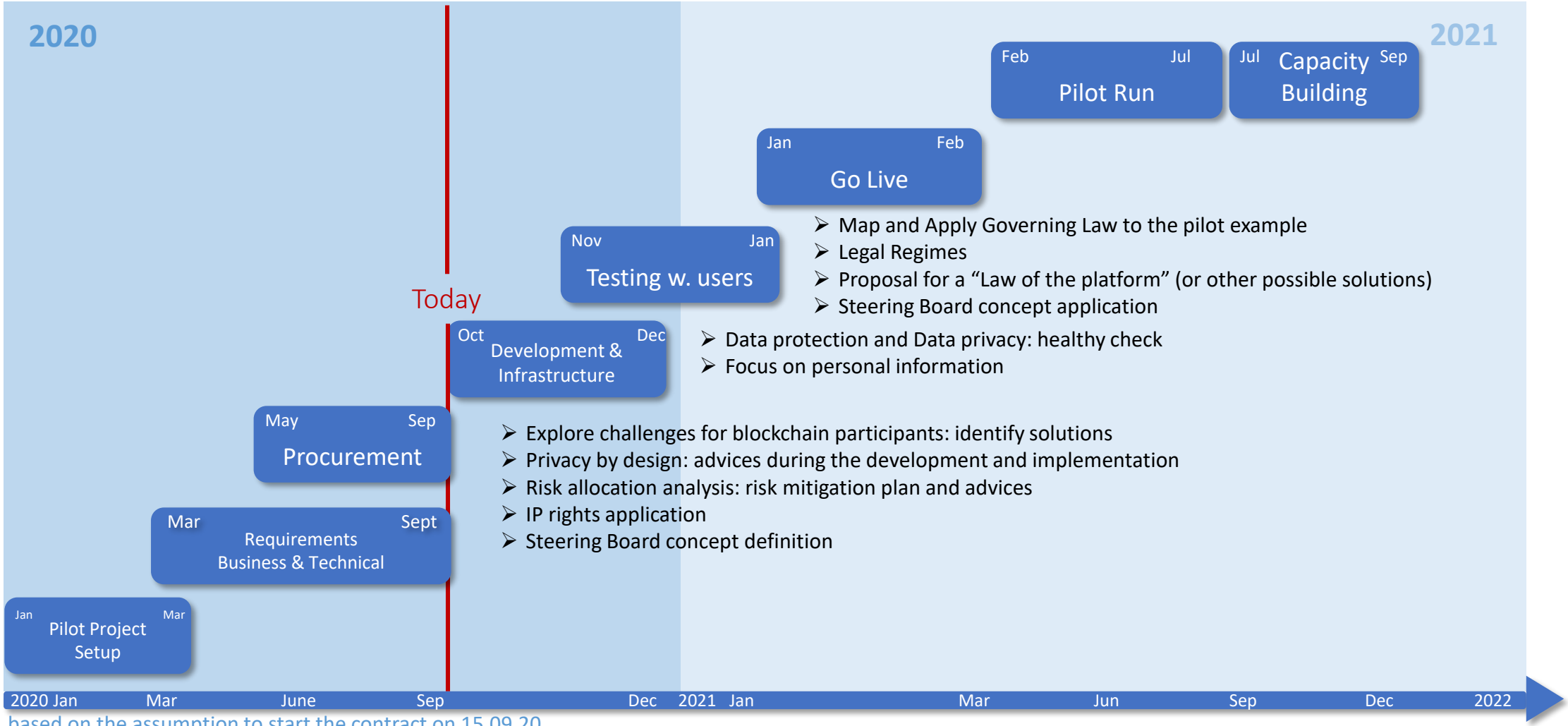


based on the assumption to start the contract on 15.09.20

Timeline & Next steps

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

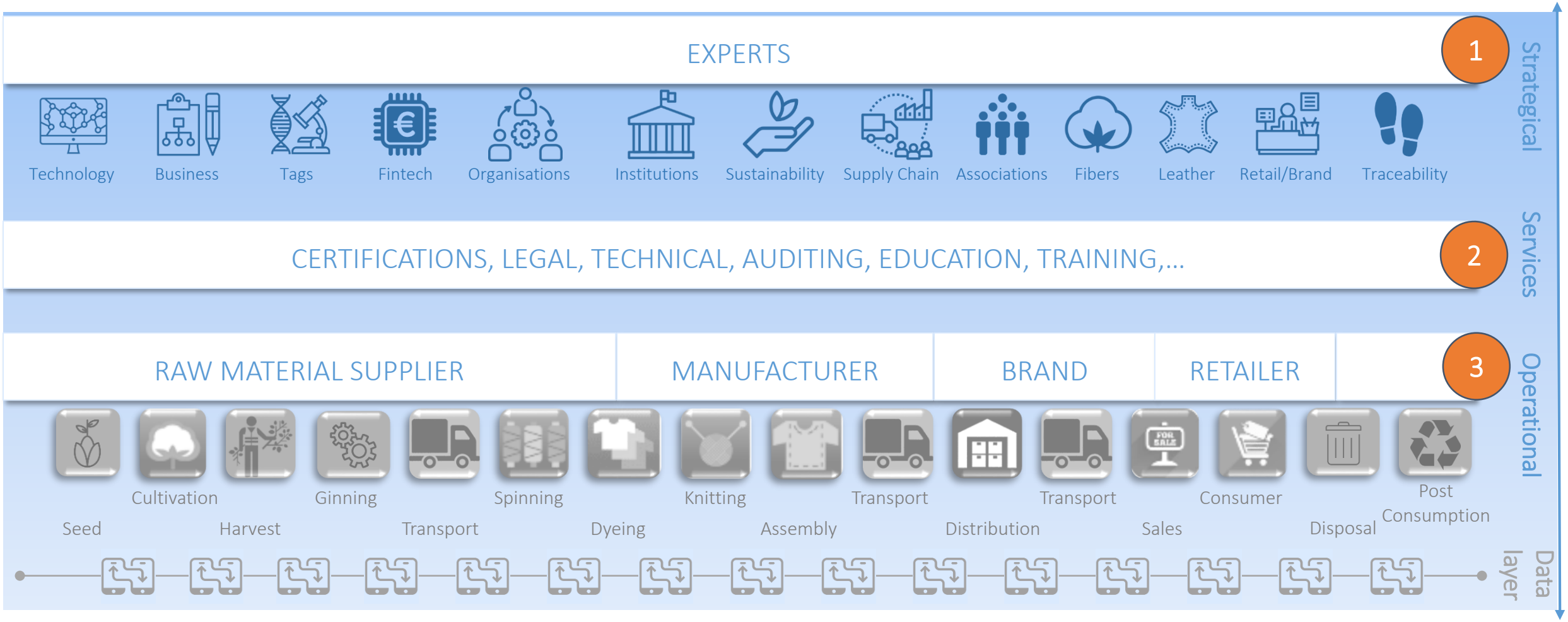
"COTTON VALUE CHAIN PILOT"



based on the assumption to start the contract on 15.09.20

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

Different Roles to contribute in the pilot project



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4. Next steps and experts' subgroup input, Q&A

Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy

NEXT STEPS

SOLUTION PROCUREMENT ACTION	*Completed*
«FIL ROUGE»: STORY RUNNING BEHIND THE PILOT	*Draft Sept. 2020*
BUSINESS PROCESS ANALYSIS (BPA) – SUBGROUPS 2 & 3 Collection of inputs for all 12 business processes of the value chain	*Ongoing*
USER STORIES DEFINITION with piloting partners for the technology-solution provider	*Ongoing*
WORKSHOP W/ Technology-solution provider	*Ongoing planning*

Project's Subgroups Conference Calls – September 2020

SUB-GROUP 1 POLICY RECOMMENDATION	**Friday 25/09 AT 15:30 CET** link to the WebEx call
SUB-GROUPS 2 & 3 TECHNICAL STANDARD FOR TRACEABILITY TEXTILE & LEATHER	**Tuesday 29/09 AT 15:30 CET** link to the WebEx call

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Upcoming

- **Virtual conference meeting #8 – Capacity-Building and Pilots**

  Monthly conference call

  SAVE THE DATE 27 October 2020

- **UNECE Multi-stakeholder Policy Dialogue III**

  Virtual and on-site

  SAVE THE DATE 23-24 November 2020

  back to back with the UN/CEFACT Plenary