The cotton blockchain pilot progress

Multi-Stakeholder Policy Dialogue: Accelerating action for Sustainable and Circular Value Chains in Garment & Footwear
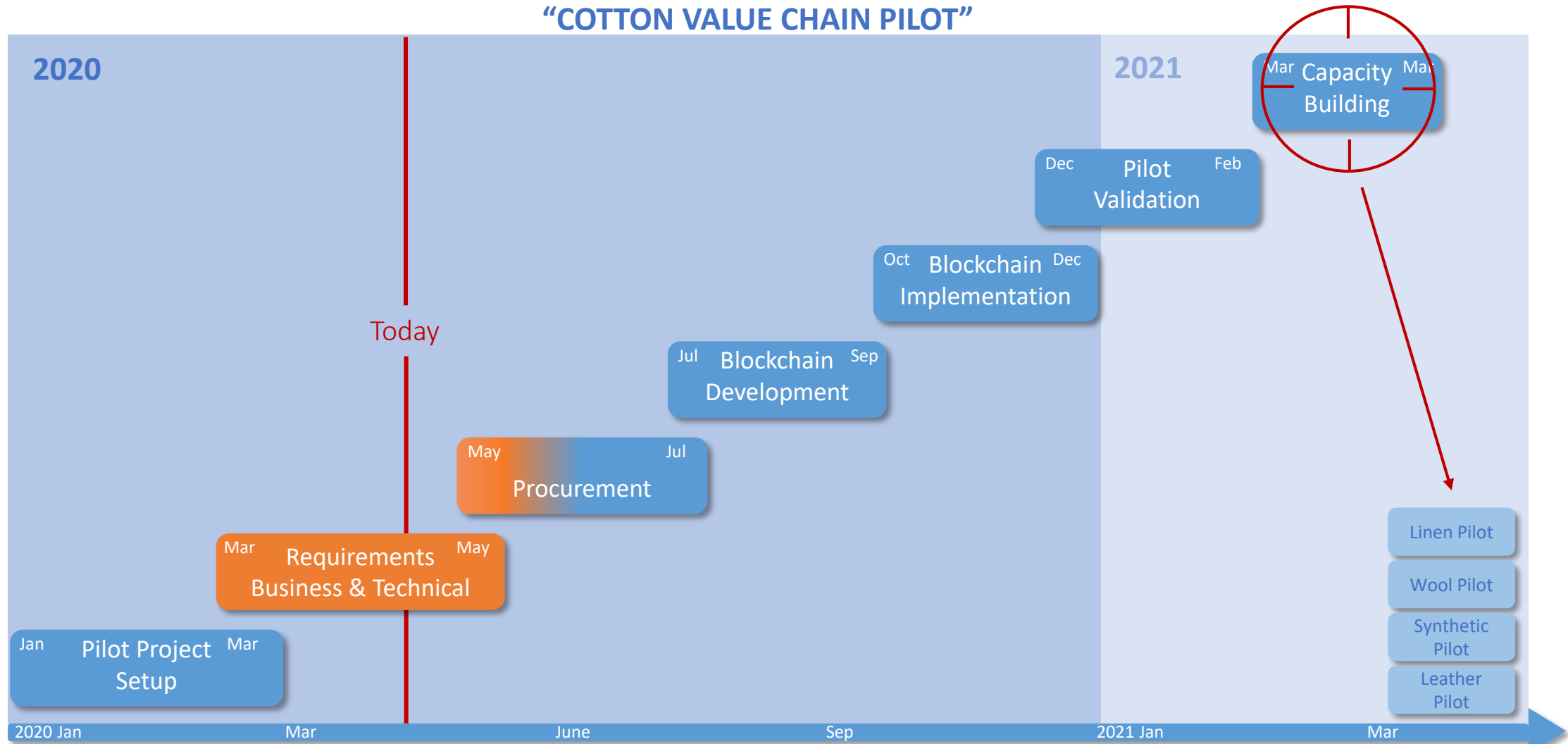
Andrea Redaelli

28 I 04 I 2020, WebEx-teleconference

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Progressive definition of needs and goals achievement

Idea → Concept → Requirements → Procurement → Development → Testing → Implementation → Consolidation → Validation → Results

Today

Pilot Project Goals

Waterfall Project Management   Agile Project Management   Waterfall Project Management
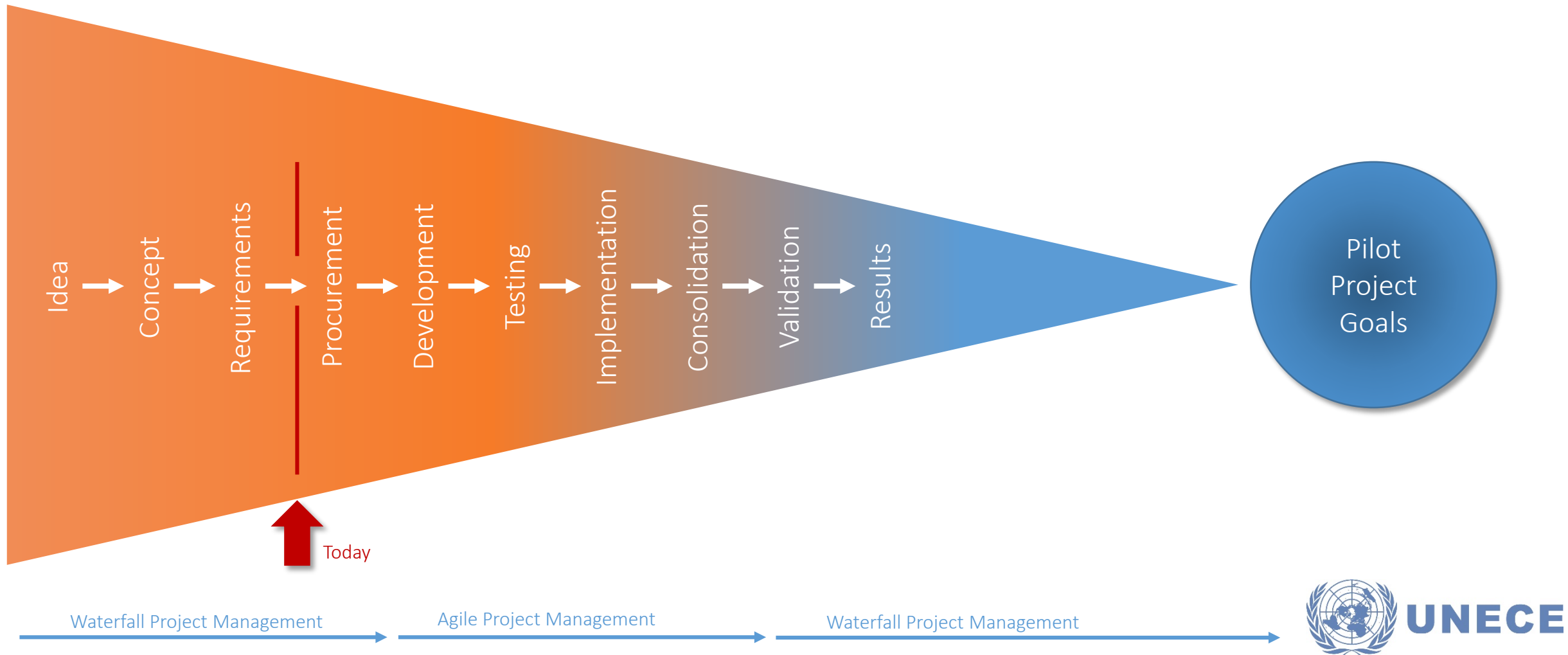
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QUESTIONNAIRE

Scoping the pilot

Lessons Learned

DEFINITION

Scope / Target

Stakeholders / Organization

Timeline

DATA VALUE CHAIN MODEL

Business process analysis for each supply chain stage

User stories

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Stages
Cotton field to Brands/Retailers

Blockchain characteristics
hybrid solution, open-source technology allowing permissioned but does not exclude permissioned-less in a later stage

Key actors
from farmers/cooperative, through suppliers, producers, brands/retailers and as well auditing and certification bodies

B2B Transactions Compliance claims via Certifications

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REQUIREMENTS FOR SUCCESS
(Pilot project document)

- Limited complexity
- Defined expert core team
- Short and clear communication
- Agile development
- Building on what exists
- Open-source
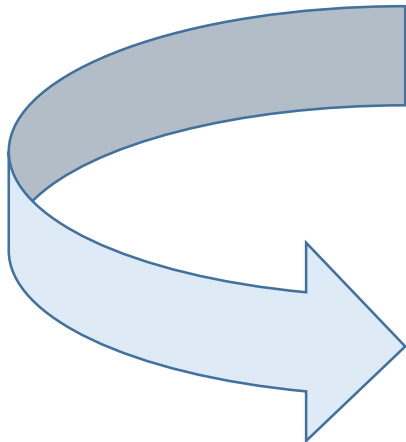
TARGETS / KPIs DEFINED BY THE EXPERTS

1. **End-to-end traceability** in line with relevant norms and standards for sustainability.

2. **A transferable Pilot** that can be used in the whole Textile sector and for any kind of sustainability claim

3. **Multi – claim solution** able to validate a wide range of sustainability for specific supply chain partners but also for the whole value chain

4. **A stand-alone Pilot** able to function independently and without a link to other projects or software

5. **Technological effectiveness and reliability**

6. Good understanding of the **modelling required** to build a blockchain application

7. Good understanding of **on-the-ground operating environments and constraints**

8. **Data collection points** within the supply-chain are clearly identified

9. **Testing of scenarios and hypotheses** during the roll out

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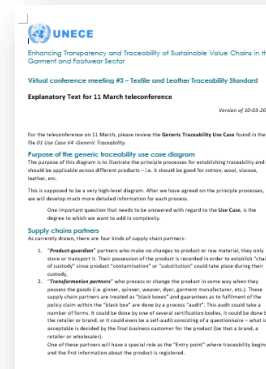# The Value Chain and Data Model from Sub-Group 2 & 3 (Textile & Leather) - status

Done ✓
- Discussion on the principle processes for traceability and level of complexity to achieve
- Presentation of the Business Process Analysis Activity
- Presentation of the Generic Traceability Use Case Diagram

WHY USER STORY
*In software development and product management, a **user story** is an informal, natural language description of one or more features of a software system. User stories are often written from the perspective of an end user or user of a system. They are often recorded on index cards, on Post-it notes, or digitally in project management software*

Work in Progress
- ❑ A high-level generic approach for traceability to identify common data model for traceability and transparency throughout the SC

+ Looking at the linkage between the products & sustainability criteria
- ❑ A detailed supply chain analysis for individual product types starting with cotton

As a <user role>
I want <goal>
so that <benefit>.

Explanatory note *Business Process Analysis Activity and the Generic Traceability Model*

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(TORs) TERMS OF REFERENCES AS BASIS FOR THE PROCUREMENT PHASE

(…)

1.7 Requirements

      1.7.1 Business Concept   → Value Chain and Data Model

      1.7.2 Technological Partner   → Categories

      1.7.3 Blockchain Solution   → List of general requirements

      1.7.4 IT Security   → Cloud and Data Security

      1.7.5 Core Elements   → Partners, B2B transactions, Traceability

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COORDINATE
REVIEW PROGRESS
ENSURE CONSISTENCY

UNECE Secretariat

RAW MATERIAL SUPPLIER
MANUFACTURER
BRAND / RETAILER

OPERATIONAL

STRATEGICAL

3

1

CERTIFICATIONS, LEGAL,
TECHNICAL, PRODUCT TRACKING,
AUDITING, EDUCATION,
TRAINING,…

**Pilot Project
Partners**

**Pilot Project Team
& Experts Sub-Group 4
(91 experts)**

MONTHLY VIRTUAL MEETING
- TECHNICAL INPUT & EXPERTISE
- CONSULTATION

2

SERVICES

**Technology Solution

Provider**

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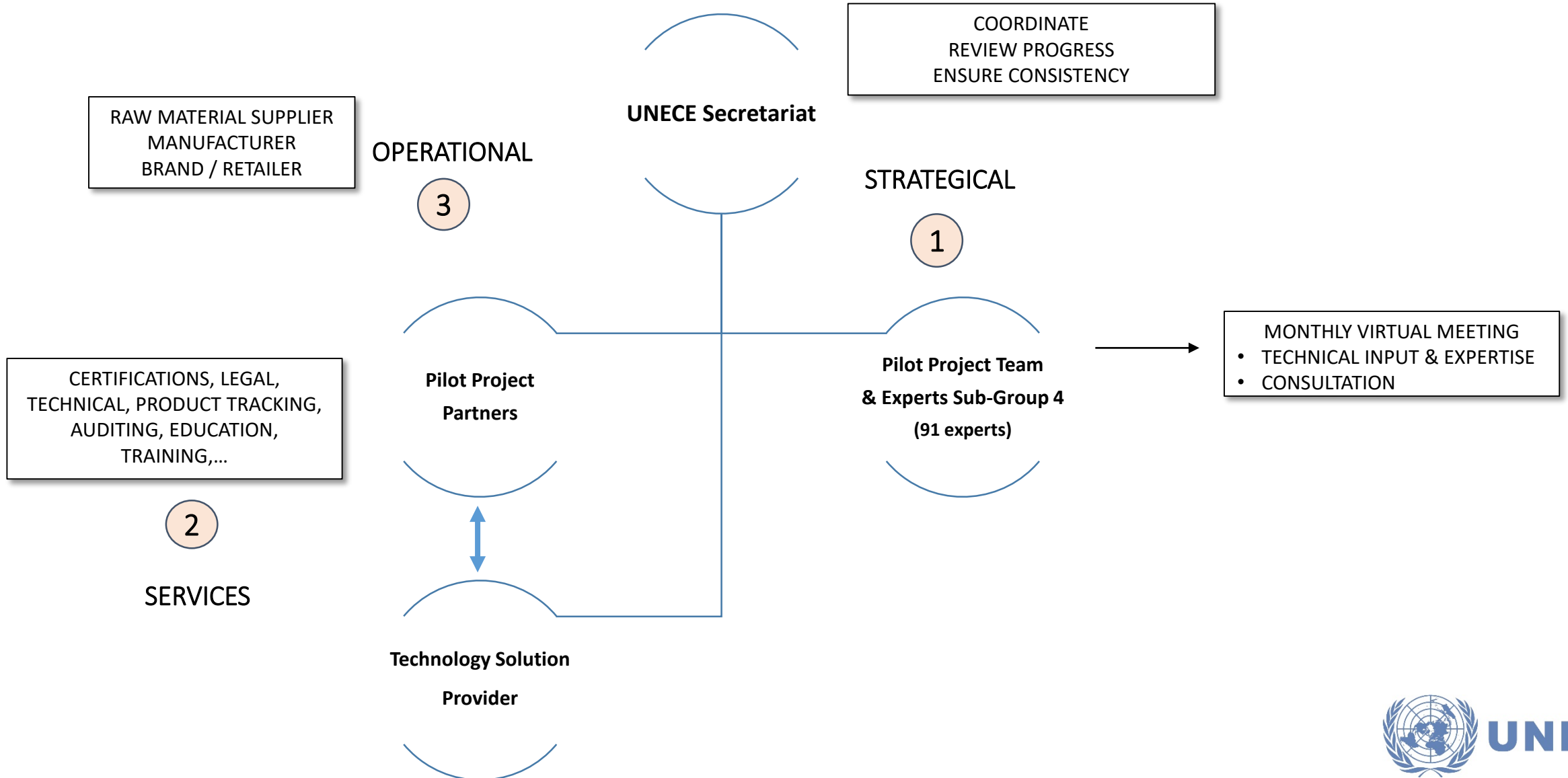
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Example for a Cotton Value Chain

Cultivation   Ginning   Spinning   Knitting   Transport   Transport   Disposal

Seed   Harvest   Transport   Dyeing   Assembly   Distribution   Sales   Consumer   Post Consumption

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NEXT STEPS		
Secretariat Project team	**TORs REVIEW** Feasibility along the value chain Evaluation matrix	*Ongoing*
Secretariat Project team Piloting partners	**BUSINESS PROCESS ANALYSIS & USER STORIES WITH PILOTING PARTNERS** First round - Collection of inputs for all business processes of the supply chain ■ Bilateral coordination ■ Alignment with partners Second round	*Ongoing* *Early May*
Secretariat	**PROCUREMENT PHASE** Publication online of the RFP for the blockchain solution Tender process	*Early May-July*

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Thank you for your attention

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