

## Conference Call #5

### Sub-group 4 Pilots and capacity-building activities



## Cotton blockchain pilot

Pilot core team, Andrea Redaelli and secretariat

03 | 06 | 2020, WebEx teleconference



## AGENDA – Wednesday 3 June 2020

- **15:30 –15:45 | 1. Update on the procurement and pilot project timeline**

*Maria Teresa Pisani, Andrea Redaelli*

- **15:45 – 16:15 | 2. User stories' definition as part of the Business Process Analysis: milestones**

*Andrea Redaelli*

- **16:15–16:30 | 3. Elements of the communication plan**

*Maria Teresa Pisani*

- **16:30-16:45 | 4. Follow-up to Virtual Policy Dialogue April – Experts feedbacks**

*Olivia Chassot*

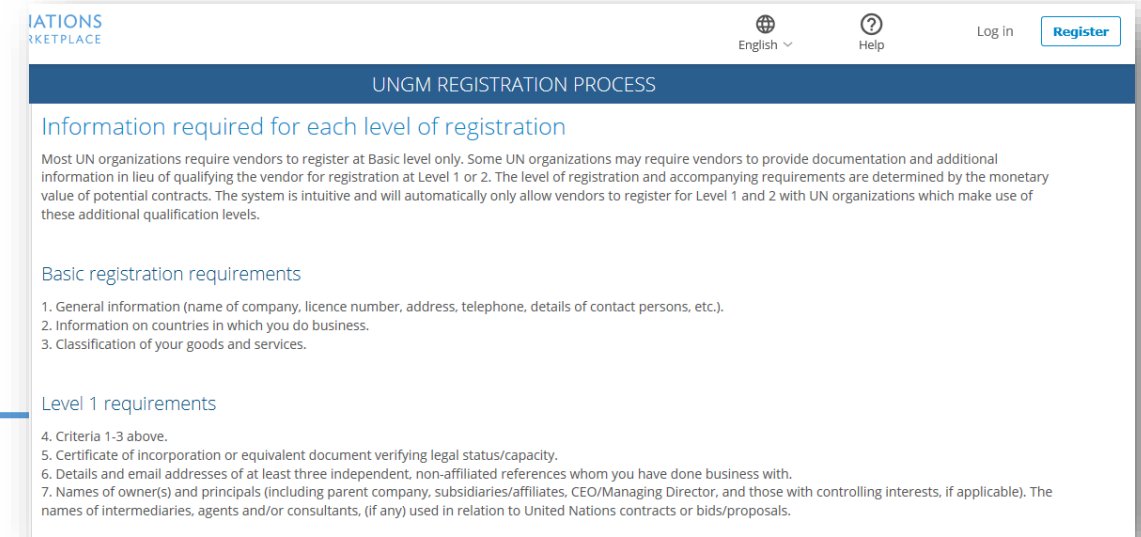
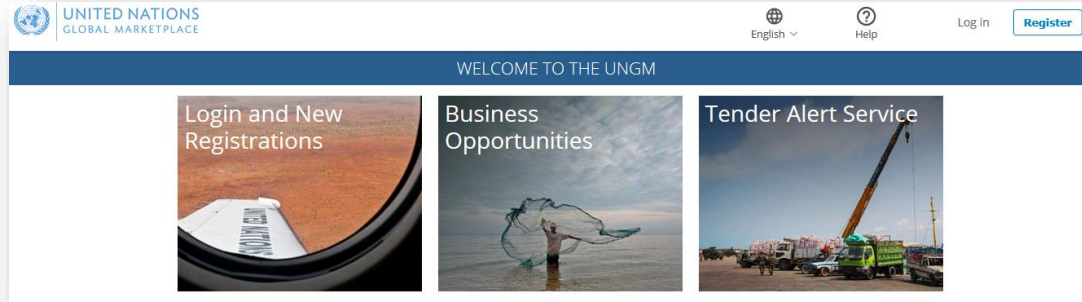
- **16:45–17:00 | Next steps and experts' subgroup input**

*Maria Teresa Pisani*

### **Background documents**

- 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 #4 meeting 25.03.2020
- Report of Virtual Policy Dialogue (27-28 April 2020)

# 1. Update on the procurement and pilot project timeline



## UNECE

- Secretariat procurement procedure

Status: *completed*

- UNOG procurement posting on [United Nations Global Marketplace](#)

Status: *upcoming*

## TECHNOLOGY-SOLUTION PROVIDERS

- [Register](#) on United Nations Global Marketplace

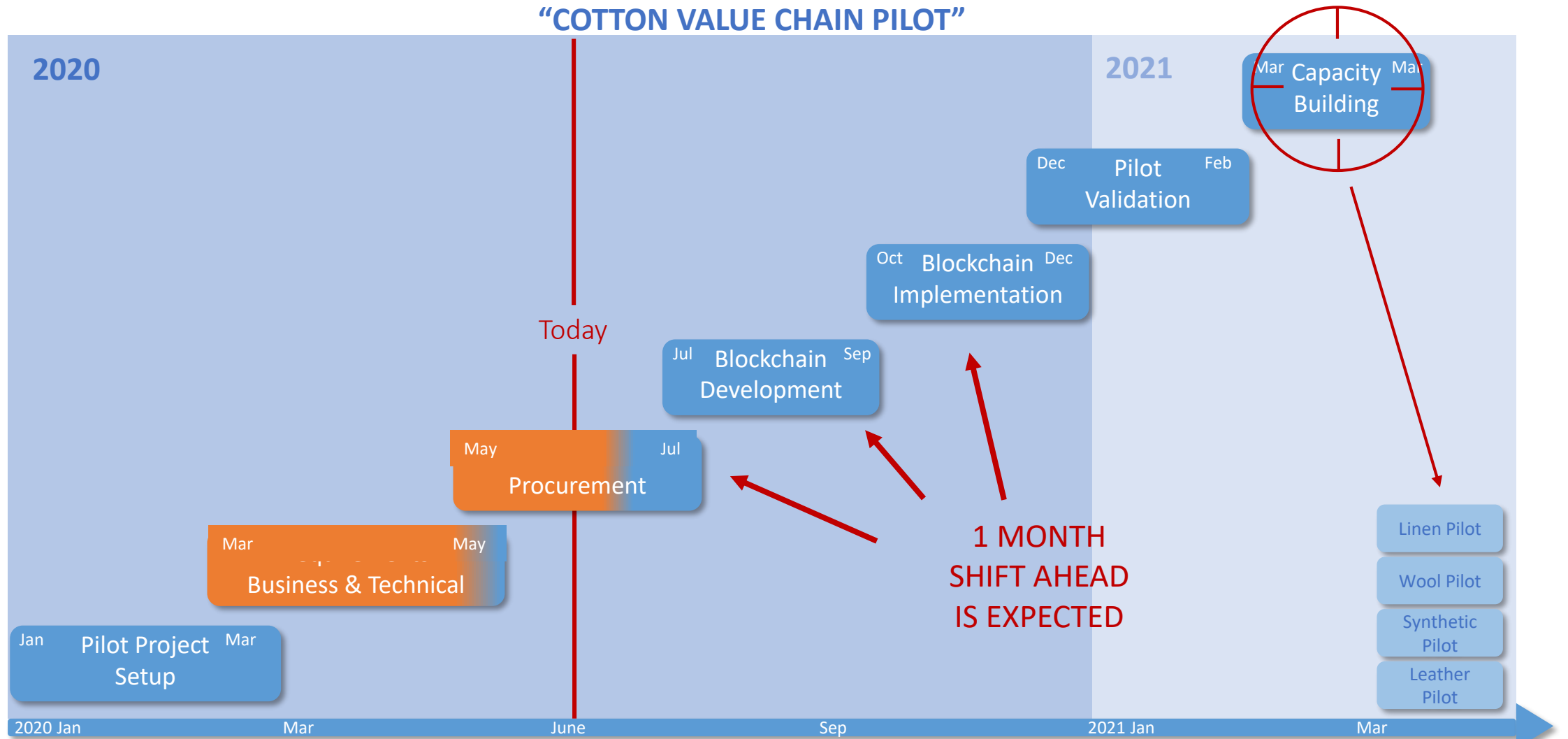
Status: *ongoing*

- Notification from the secretariat when procurement action is posted

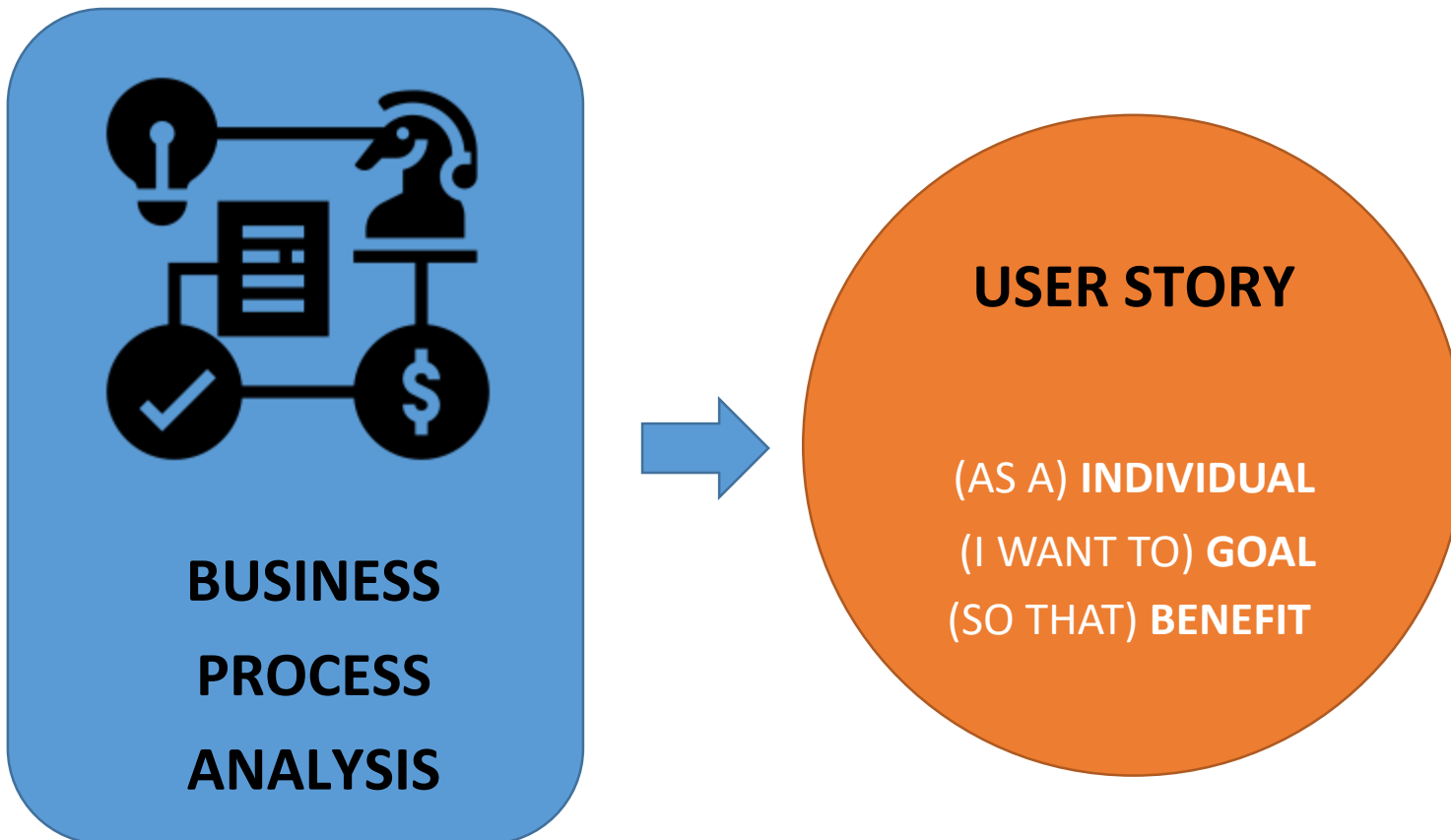
- Procurement time frame :**
- Approx. 2 weeks before the launch of the call
  - Approx. 2 weeks to receive quotations
  - Approx. 1-1.5 week for evaluation
  - 1 week for finalizing the PO etc.

# 1. Update on the procurement and pilot project timeline

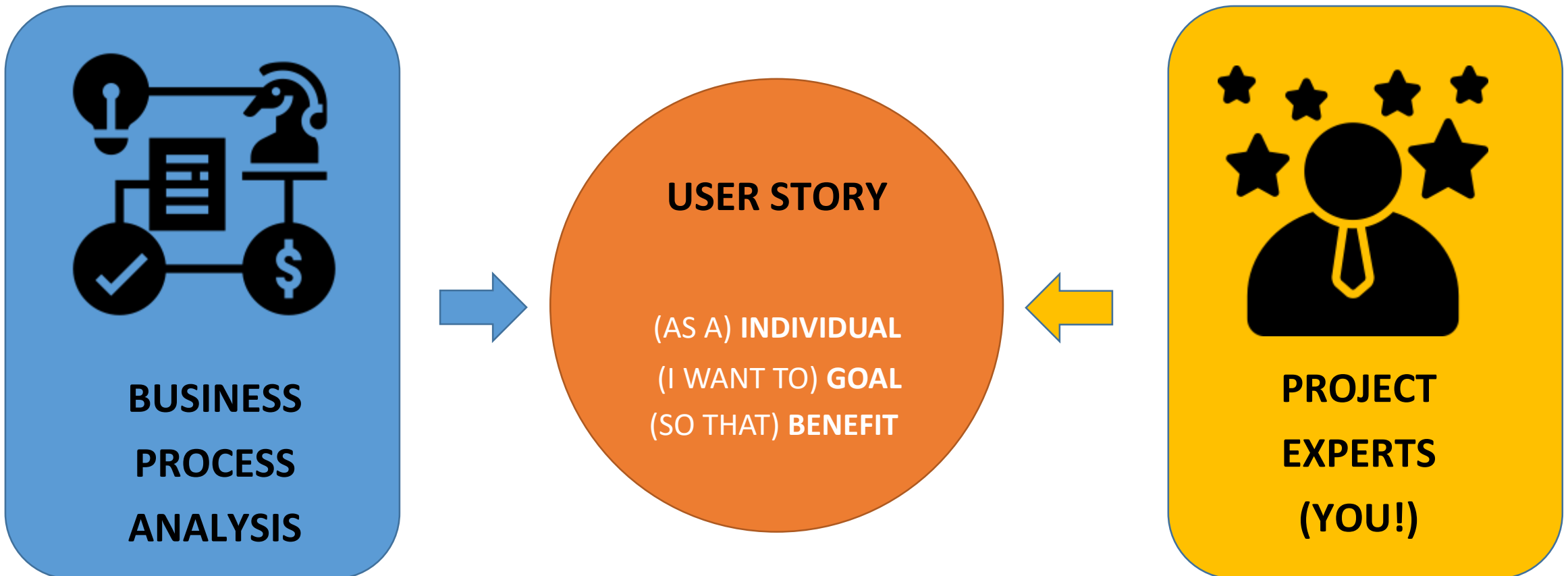
Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy



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



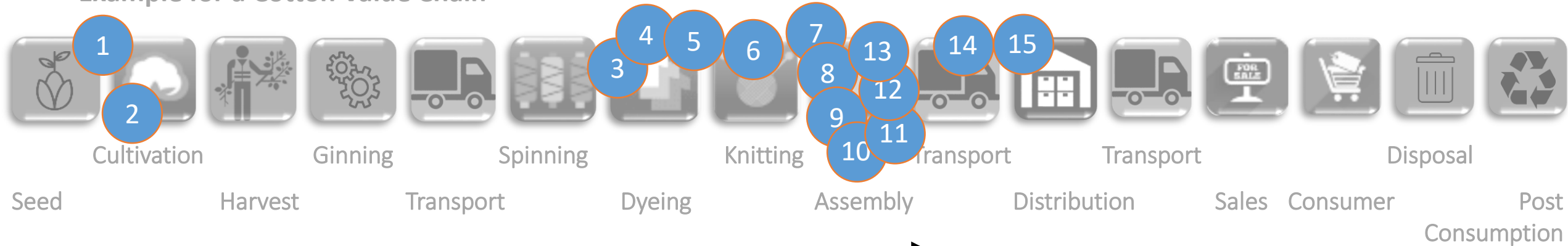
Pilot #1 - Implementing a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy



## 2. User stories' definition as part of the Business Process Analysis: milestones

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

### Example for a Cotton Value Chain



(...)



(...)



STELLA MCCARTNEY



HUGO BOSS



(...)



UNECE

## 2. User story – Business Process Analysis (12 BPA on going)

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

### 1. Planting and Cultivation of Cotton

 + Pesticides ✓



### 2. Cotton Harvest, Identification & transfer from Farmer to Ginner



### 3. Ginning & transfer to Spinner



### 4. Spinning and transfer to Weaver



### 5. Bleaching, dyeing, washing & transfer to Weaver ✓ + Chemicals



### 6. Weaving & transfer to Fabric Finisher(s) ✓

+ Chemicals 



### 7. Fabric finishing and other treatments & transfer to Manufacturer“

 + Chemicals

### 8. Garment or Product Production and transfer to Enoblement ✓



### 9. Product Enoblement and Packaging and transfer to "retailer“



### 10. Placement of Product in Stores or On-line for Sale



### 11. Consumption and Disposal



### 12. Post-Consumption Recycling





## 2. User story 1 - No Hazardous Chemicals during farming

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



**FARMER**

**TO CLAIM THE CHEMICAL  
INVENTORY LIST OF  
FERTILIZER SUPPLIER**

**THE COTTON PRODUCT COMPLIANCE  
CONFIRMS WITH ZDHC MRSL AND AVOID  
THE USE OF HAZARDOUS CHEMICALS IN  
THE NEXT PROCESS STEPS.**

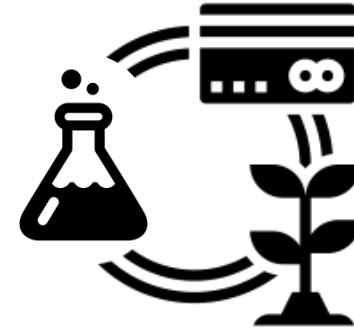
(AS A)  
INDIVIDUAL

(I WANT TO)  
GOAL

(SO THAT)  
BENEFIT

## 2. User story **2** - No Hazardous Chemicals during farming

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



**FARMER**

**TO PROVIDE AN INCHECK  
REPORT OF MY CHEMICAL  
INVENTORY LIST (CIL),**

**I CAN PROOF MY CHEMICAL  
MANAGEMENT PERFORMANCE**

(AS A)  
INDIVIDUAL

(I WANT TO)  
GOAL

(SO THAT)  
BENEFIT

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



**WORKERS**

**TO SAVE DYEING STUFF  
AND WATER**

**REDUCE ENVIRONMENTAL RISK  
(WATER POLLUTION)**

(AS A)  
INDIVIDUAL

(I WANT TO)  
GOAL

(SO THAT)  
BENEFIT

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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**LABORATORY  
TECHNICIAN**

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(AS A)  
INDIVIDUAL

(I WANT TO)  
GOAL

(SO THAT)  
BENEFIT

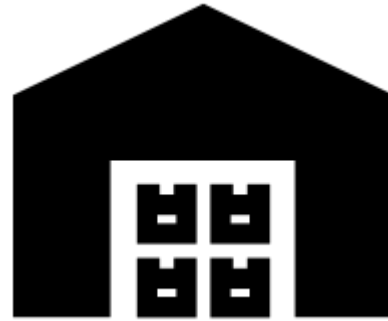
## 2. User story **7** - Material Management during Transformation

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



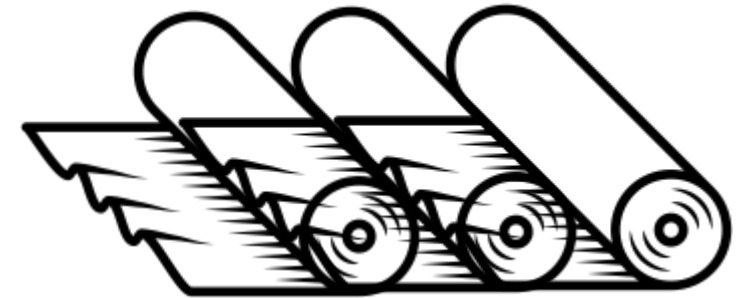
**WAREHOUSE  
MANAGER**

(AS A)  
INDIVIDUAL



**TO HAVE AN ACCURATE PICTURE OF  
EXISTING INVENTORY AND  
COMMUNICATE DIRECTLY WITH THE  
BRAND THE LEVEL OF STOCK  
AUTOMATICALLY VIA SYSTEM**

(I WANT TO)  
GOAL



**THE FACTORY FACILITY IS  
ADEQUATELY SUPPLIED WITH FABRICS  
AND THE FABRIC TEAM IS PROMPTLY  
INFORMED IF ADDITIONAL ORDERS  
ARE NEEDED**

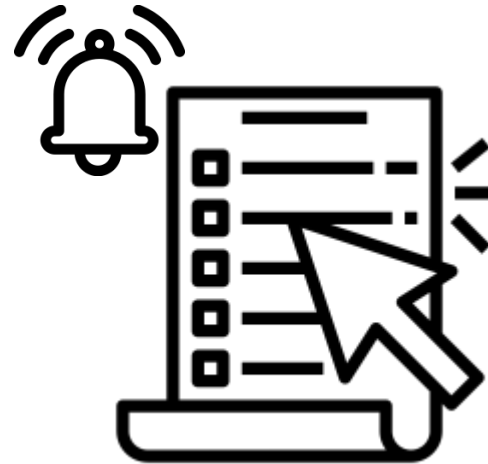
(SO THAT)  
BENEFIT

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



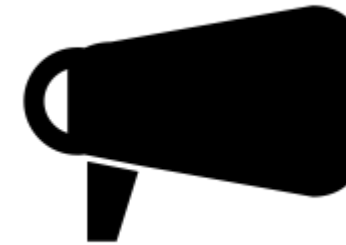
**PRODUCT  
DEVELOPER/  
PRODUCTION  
MANAGER**

(AS A)  
INDIVIDUAL



**THE CUTTING ORDER TO BE  
ASSEMBLED ON TIME FOLLOWING  
THE SCHEDULE AND TO BE ADVISED  
ON STATUS OF THE ORDER**

(I WANT THAT)  
GOAL



**I CAN BE ADVISED EARLY  
ON ANY EXPECTED DELAYS**

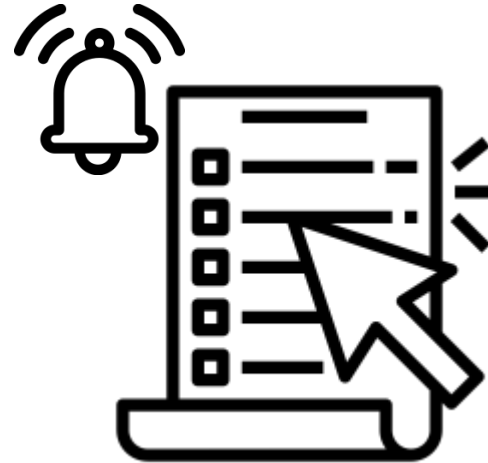
(SO THAT)  
BENEFIT

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



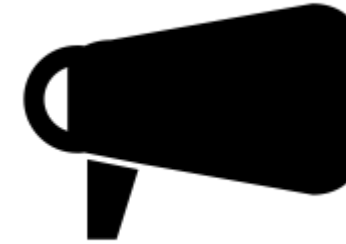
**PRODUCT  
DEVELOPER/  
PRODUCTION  
MANAGER**

(AS A)  
INDIVIDUAL



**THE ENOBLEMENT ORDER TO BE  
PERFORMED ON TIME FOLLOWING  
THE SCHEDULE AND TO BE ADVISED  
ON STATUS OF THE ORDER**

(I WANT)  
GOAL



**I CAN BE ADVISED EARLY  
ON ANY EXPECTED DELAYS**

(SO THAT)  
BENEFIT

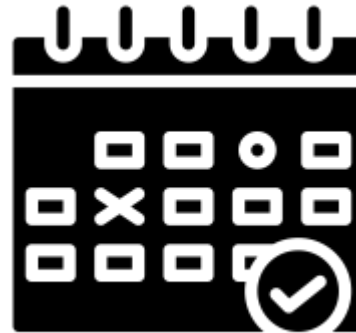
## 2. User story 10 - Order Management during Transformation

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



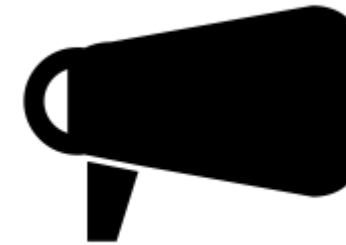
**PRODUCT  
DEVELOPER/  
PRODUCTION  
MANAGER**

(AS A)  
INDIVIDUAL



**THE SAMPLE AND PRODUCTION  
ORDER TO BE FINISHED ON TIME  
FOLLOWING THE SCHEDULE AND TO  
BE ADVISED ON STATUS OF THE ORDER**

(I WANT THAT)  
GOAL



**I CAN BE ADVISED EARLY  
ON ANY EXPECTED DELAYS**

(SO THAT)  
BENEFIT



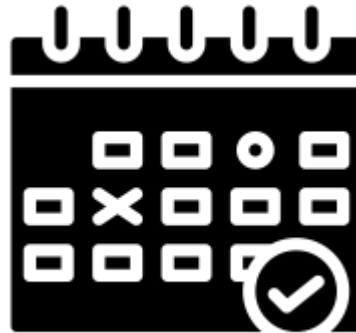
## 2. User story 11 - Order Management during Transformation

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



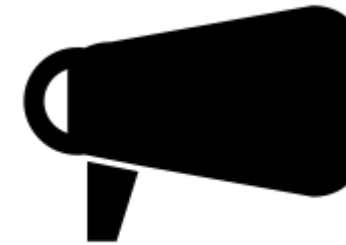
**PRODUCT  
DEVELOPER/  
PRODUCTION  
MANAGER**

(AS A)  
INDIVIDUAL



**THE ENOBLEMENT ORDER TO BE  
PERFORMED ON TIME FOLLOWING  
THE SCHEDULE AND TO BE ADVISED  
ON STATUS OF THE ORDER**

(I WANT)  
GOAL



**I CAN BE ADVISED EARLY  
ON ANY EXPECTED DELAYS**

(SO THAT)  
BENEFIT

## 2. User story 12 - Order Management during Transformation

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



**QUALITY  
CONTROLLER**

(AS A)  
INDIVIDUAL



**ASSESS AS EARLY AS POSSIBLE  
DEFECTS DURING THE PRODUCTION  
PHASES**

(I WANT TO)  
GOAL



**I CAN SHORTEN THE DELIVERY  
AND REDUCE THE LEVEL OF  
DEFECTS ON FINAL PRODUCTS**

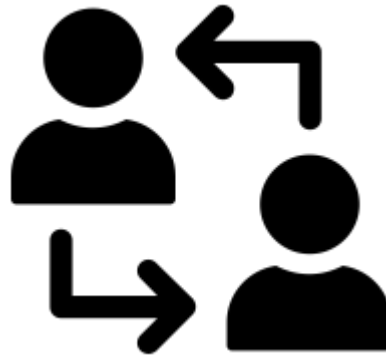
(SO THAT)  
BENEFIT

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



**PRODUCT  
DEVELOPER/  
PRODUCTION  
MANAGER**

(AS A)  
INDIVIDUAL



**THE MANUFACTURER TO SPEAK  
MY OWN CODING LANGUAGE**

(I WANT)  
GOAL



**THERE IS NO DISCREPANCY ON  
DOCUMENTS OR CONFUSION  
DURING PURCHASE ORDERS  
AND DEVELOPMENTS**

(SO THAT)  
BENEFIT

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



**LOGISTIC  
MANAGER**

(AS A)  
INDIVIDUAL



**GOODS TO ARRIVE PROPERLY PACKED  
AND WITH THE CORRECT DOCUMENTS  
AND COMPLETE INFORMATION AT  
WAREHOUSE**

(I WANT)  
GOAL



**THE INCOMING IS SMOOTH  
AND QUICK**

(SO THAT)  
BENEFIT

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



**CUSTOMER  
SERVICE MANAGER**

(AS A)  
INDIVIDUAL



**SHIPMENT OF UNDAMAGED GOODS  
THAT MEET CUSTOMERS'  
REQUIREMENTS AND THE DELIVERY  
PLANNED WITH THE CUSTOMER**

(I WANT)  
GOAL



**MY SERVICE IS EXCELLENT  
AND I CAN OBTAIN THE  
HIGHEST LEVEL OF CUSTOMER  
SATISFACTION**

(SO THAT)  
BENEFIT

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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(AS A)  
INDIVIDUAL



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(I WANT TO)  
GOAL



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(SO THAT)  
BENEFIT

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



**FINE TUNING AND CONTINUOUS INPUT FROM  
BUSINESS PROCESS ANALYSIS (SG2 & SG3)**

**BILATERAL SESSIONS TO GO DEEP WITH  
IMPLEMENTING PARTNERS: UPCOMING**

**BILATERAL SESSIONS WITH EXPERTS WHO  
WANT TO CONTRIBUTE WITH NEW USER  
STORIES: DON'T MISS THE OPPORTUNITY NOW!**

(A  
INDIVID

(I WANT TO  
GOAL

(SO THAT)  
BENEFIT

## UNECE communication

Upcoming soon: dedicated webpage for pilots & capacity-building activities

- *News pieces and tweets for each milestone of the pilot implementation phase on [UNECE webpage](#)*

## Partners communication: website and social medias

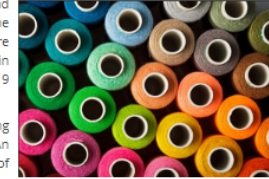
- *Use of UNECE project logo, as soon as available*
- *Mention of participation in UNECE project*
- *Mention of the funding partner, European Commission*
- *Compliance with:*
  - [UN/CEFACT Code of Conduct](#)
  - [Draft revised mandate, terms of reference and procedures for UN/CEFACT](#)
- *Call for proposal Pilot #1 visual Identity (in-kind)*

## 3. ELEMENTS OF THE COMMUNICATION PLAN



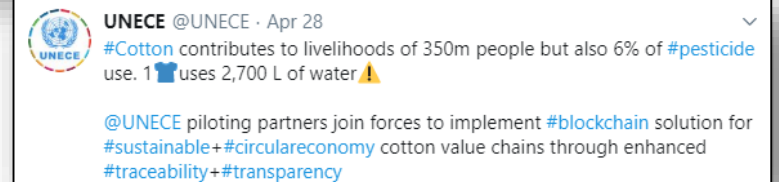
### Transparent value chains can help make the fashion industry's post-COVID recovery more resilient and sustainable

Accelerating the transition to more sustainable and transparent global value chains needs to be at the heart of the fashion industry's response to the severe socio-economic challenges and supply chain disruptions caused by the ongoing COVID-19 pandemic.

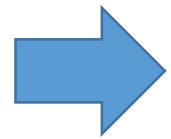


According to the ILO, the COVID-19 crisis is affecting millions of jobs in the global garment industry. An International Textile Manufacturers (ITMF) survey of 700 companies worldwide revealed that globally, current orders dropped by 31 per cent on average. And in Bangladesh, where the garment industry accounts for more than 80 per cent of the country's annual exports, the crisis is putting at risk about 4 million workers, mostly women, with one million garment workers having already lost their jobs.

Embedding due diligence and sustainability considerations into COVID-19 crisis management is a chance to switch to more responsible business models. Transparency and traceability of the value chain can sustain such efforts and translate into value that will support the industry's recovery, bringing long-term benefits for their balance sheets and productivity, linked to factors such as: 1. Investors' increasing interest in a company's environmental, social performance and governance; 2. The need to manage legal risks, due to e.g. cancellation of orders, unilateral imposition of pay-cuts, and inadequate health and safety measures on the workplace; 3. The capacity to manage reputational risks vis a vis investors and consumers; 4. Access to emergency relief programs, remedy mechanisms and funding.







### Doc 07 Pilot project document

1. **Right technology:** consider other open-source solutions available
2. **Governance mechanisms** to foster confidence, ensure data quality, accuracy and system reliability through combination of contractual obligations and “classical” data security mechanisms responding to the needs and incentives of the actors in the supply chain. **Governance and maintenance** of the permissioned blockchain
3. **End-to-end traceability of a product type:** clarify the level (e.g. batch) and compliance problems that can occur. *e.g. Art. 33 REACH an Art. 9(1) Waste Framework Directive requires a reporting system on the article level*
4. **Validation of the authenticity of a certificate** - How do you validate the authenticity of a certificate if it is not verified against the scheme owners be it the national or the voluntary standards?
5. **POC scalability:** the solution will be scalable if fully adopted by the certification schemes



## NEXT STEPS

### PROCUREMENT PHASE

Publication [online](#) of the RFP for the blockchain solution  
Tender process

*Early June*

### BUSINESS PROCESS ANALYSIS (BPA)

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 to be completed end by the end of June*

### WORKSHOP W/ Technology-solution provider

Definition of the business & technical requirements based on collection of BPA and users' stories.

*Early August*





**UN / CEFAC**



Thank you for  
your attention

[maria-teresa.pisani@un.org](mailto:maria-teresa.pisani@un.org)  
[olivia.chassot@un.org](mailto:olivia.chassot@un.org)

In partnership with

