

**Meeting report**

34th UN/CEFACT Forum

Enhancing Transparency and Traceability of Sustainable Value Chains in the Garment and Footwear Sector  
30-31 October 2019 – International Maritime Organization, London**DAY 1 – WEDNESDAY 30 OCTOBER 2019**

## MORNING SESSION

**1. OPENING OF THE MEETING AND UPDATE ON PROJECT PROGRESS**

**Mrs. Maria Rosaria Ceccarelli – Director (OiC), Economic Cooperation and Trade Division, UNECE** welcomed participants to the meeting for the UNECE project [Enhancing transparency and traceability of sustainable value chain in the garment and footwear sector](#) during [34th Forum of the UN Centre for Trade Facilitation and e-Business](#) (UN/CEFACT). She emphasized that enhancing the transparency of complex value chains is paramount to shifting the corporate secrecy about conditions in overseas factories, improving trust and due diligence and enabling informed consumer choices. The [UNECE study](#) (2019) demonstrates that only 34% of companies have a traceability approach in place, of which half have visibility up to the immediate suppliers only. In line with Sustainable Development Goals 8 on decent work and 12 on responsible production and consumption (UN 2030 Agenda for Sustainable Development), UNECE, in collaboration with ITC and ILO, and with the support of the European Commission, is engaging with key industry players to develop new approaches and innovative solutions to foster sustainability in the garment and footwear sector.

**Mrs. Maria-Teresa Pisani – UNECE Secretariat** laid out the meeting objectives which were to engage with the experts that have joined the project, discuss the detailed work plan and identify the key elements for the project deliverables: the policy recommendation, the technical standard and the pilots and capacity building activities to be implemented over the three years' timeframe (July 2019-June 2022). She underlined that this first project meeting since the signature of the Agreement with the European Commission in July 2019, was an important milestone, designed to collect views and inputs from both experts that had already engaged in the scoping of the project, and newcomers. Thereafter she gave an update on the project progress and drew upon the project governance, the Terms of References for the Experts Groups, the implementing timeframe as well as UN/CEFACT rules of procedures concerning the modus operandi of the Experts Groups and the development and adoption of the project outputs. She concluded that the support and active engagement of the experts from key industry players was key to the achievements of the project's ambitious goals and impact.

**Harm Jan van Burg – UN/CEFACT vice-chair** complemented by a few introductory remarks highlighting that this project builds upon the [UN/CEFACT](#) extensive experience in working alongside other industries, such as the agri-food or fisheries, to develop policies, standards and tools for more efficient and simple business processes, allowing efficient information exchange and visibility along the entire value chain, from farm to consumer.

Currently more than **110 experts** have expressed interest to join the four project subgroups as follows: 53 experts for the policy recommendation, 42 experts for the textile standard, 24 experts for the leather standard, 34 experts for pilots, communication and awareness-raising. The project has also already outreached to **230** other experts from key industry players, and the participation to the Groups of Experts remains open.

*Reference documents: project document, group of experts' ToRs, UN/CEFACT rules of procedures. All the reference documents are available on the online project the [CUE space](#).*

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## 2. THE POLICY RECOMMENDATION ON TRANSPARENCY AND TRACEABILITY FOR SUSTAINABLE VALUE CHAINS

*Reference document: Draft Outline of the Policy Recommendation*

The first key project outcome is the development of the Policy Recommendation, and the objective of this session was to brainstorm on its target audience, scope and key elements, based on the annotated outline made available to the project experts.

**Dr. Francesca Romana Rinaldi – Bocconi University** gave a presentation about the vision and scope of the policy recommendation that will be developed under the project. She emphasised the key role that policy and regulatory action play in driving private sector efforts to relate to international initiatives and standards for due diligence, as well as in supporting small industry actors in such effort, particularly from emerging economies. Some sector-specific regulations have addressed traceability and transparency as key issues to tackle sustainability hotspots (EU Timber regulation, EU Agriculture regulation, EU Conflict Minerals regulation). The four main areas identified in [UNECE study](#) (2019) to foster policy approaches for sustainable garment value chains are regulation, fiscal incentives, skills development, and R&D support. The UNECE Policy Recommendation's backbone would be the Recommendation itself and the guidelines for its scoping the key steps to set-up a traceability architecture for sustainable value chains in the industry.

### GROUPS DISCUSSION – POLICY RECOMMENDATION

Roundtable #1

*Q1 Who are all the stakeholders for such policy recommendation? How can they be effectively integrated into traceability systems including those from Developing Countries and groups at risk?*

The groups identified four categories of stakeholders: 1). The value chain including end users and businesses (retailers, brands, producers, suppliers), 2). Governmental bodies (governments, inter-governmental bodies, international organisations such EU, UN, OECD, ILO, customs and taxation authorities), 3). Service providers (IT industry, certification and standardisation bodies, insurance companies, logistic providers, multi-stakeholder initiatives (MSIs) and technology providers) and, 4). Civil society (NGOs, labour unions, trade unions, media, cultural sector). Other stakeholders identified were trade associations, farmers and farm workers, (local) NGOs, Exporting Processing Zones (EPZs) actors. There are several ways to involve groups at risk (through local NGOs, labour unions). However, the societal case must be turned into a business case. It is critical to prevent the fragmentation risk entailed by digital solutions with vulnerable groups through capacity-building activities. It is also essential to building systems of representation, getting people involved in an ecosystem of appropriate technologies where information is decentralised and distributed.

*Q2 How can governments support the implementation of sustainability, traceability and transparency in supply chains?*

Governments can support the implementation of sustainability, traceability and transparency in supply chains through different approaches, including regulations and incentives leading to financial benefits entailed by traceability schemes, e.g. a European (incentivizing) Fund. Moreover, the idea that governments shall 'lead by example' was raised (e.g. EU Green Public Procurement directive enforcement, which covers also the textile sector). Regulations and framework provided by governments shall be grounded on science, consensus and evidence. Smaller players must not be left out and to prevent that, governments may provide them with support for training, skills development and certification. On the institutional side, it would be key to identify the institutional entity leading on sustainability, transparency and traceability issues and set-up a platform to engage all key stakeholders, including for policy dialogue and awareness raising. Eventually, governments can support the incentivization of traceability schemes by providing financial support to cover the cost of sustainability, traceability and transparency incurred by companies' willing to disclose information and meet the multiple relevant standards. Policy makers and regulators engagement in ensuring the harmonisation of sustainability standards and certification schemes, e.g. through the identification of minimum common criteria, was also emphasised. Several national initiatives underway were mentioned

e.g. Green Button for sustainable textiles initiative, 2019 (GE); Anti-waste law for a circular economy on the disposal of textile-based product, 2019 (FR); Due diligence law, 2017(FR)

Matrix of offers and needs per stakeholders:

STAKEHOLDERS	OFFERS	NEEDS
The Value chain	<ul style="list-style-type: none"> <li>- adaptation &amp; dissemination</li> <li>- transparency of data</li> <li>- industry know-how and communication</li> </ul>	<ul style="list-style-type: none"> <li>- common tools</li> <li>- common taxonomy</li> <li>- trust</li> <li>- standards</li> <li>- incentives</li> <li>- capacity building</li> </ul>
Governmental	<ul style="list-style-type: none"> <li>- regulation</li> <li>- compliance</li> <li>- enforcement</li> <li>- incentives</li> <li>- education</li> <li>- facilitation</li> </ul>	<ul style="list-style-type: none"> <li>- definitions/standards</li> <li>- trust</li> <li>- stakeholders' input</li> <li>- transparency/reliable data</li> </ul>
Service provider	<ul style="list-style-type: none"> <li>- facilitation</li> <li>- tools and platforms, know-how</li> <li>- data quality/interpretation</li> <li>- trust</li> </ul>	<ul style="list-style-type: none"> <li>- data access</li> <li>- standard</li> <li>- taxonomy</li> <li>- governance</li> <li>- trust/incentives</li> <li>- interoperability</li> </ul>
Civil society	<ul style="list-style-type: none"> <li>- trust</li> <li>- incentives (activism)</li> <li>- data</li> </ul>	<ul style="list-style-type: none"> <li>- transparency</li> <li>- reliable data</li> <li>- facilitation/infrastructure</li> <li>- trust</li> <li>- incentives</li> <li>- support</li> </ul>

#### Roundtable #2

Q5-Q6 *The architecture of a traceability framework: entry and exit points; traceability conditions and rules:*

The main entry and exit points, traceability conditions and rules are enabled by data interoperability, verification and accuracy. Then, the processing of confidential information (logistics, customs) offer others entry and exit points. Lastly, the data (product, societal, commercial, environmental-related) itself is another entry/exit point to sustain a traceability claim.

Q7-Q8 *Data collection methodology and indicators, data analysis and recommendations*

The data collection methodology depends upon the value chain's stage (raw material, product): at the raw material level, data collection can be achieved through passports and IDs assigned to a batch. Lower tiers suppliers must be thoroughly involved; data collection must capture both positive and negative supply chain events. At the product level, data must be collected and sorted per materials and processes; data must be standardised, valid and available via open access. Data collection must be risk-based, and the market benefits must be put forward for companies.

Q9-Q10 *Implementing a traceability framework*

The main impediments identified to the implementation of a traceability framework are costs, information disclosure and different standards. Indeed, costs will increase the costs of labour, of infrastructures, of capabilities, of data accuracy and integrity. Additionally, the financial benefits stemming from traceability are critical to drive towards information disclosure. The idea of a European fund was brought up again to back up the costs generated by transparency and traceability for companies. Eventually, the plurality of standards is another strong impediment which calls for a level-playing field through a harmonised regulation and common agreements on key performance indicators for the sustainability criteria.

**NEXT STEPS** are the sharing of the policy recommendation detailed outline whereby experts can fill in the part(s) they want to contribute to (circulation by email and on the [CUE space](#)). The conference calls will take place on Fridays once a month and will be displayed on the [CUE space](#)'s calendar. The first call will be on **Friday 13<sup>th</sup> December 2019** at **15.30** (Geneva Time).

#### AFTERNOON SESSION

#### POLICY INITIATIVES (EU, GE, FR)

**Mrs. Ebba Aurell – DG International Cooperation and Development (DEVCO) European Commission** gave a brief overview of DEVCO activities in the field on sustainable garment value chains. DEVCO has been strongly committed to foster sustainable garment value chains providing financial support to several programmes (G7 Vision Zero Fund addressing work-related deaths and injuries, Better Work programme tackling forced and child labour, Ethical Fashion Initiative spurred by the ITC). The [Staff Working Document](#) (2017) outlines the EU response towards more sustainable garment value chains by identifying three priorities: 1). economic empowerment of women, 2). decent work, 3). transparency and traceability in the value chain. The UNECE project mainly respond to the 3<sup>rd</sup> priority and is being funded under the Development Cooperation Instrument of the thematic programme Global Public Goods and Challenges.

**Mrs. Franziska Markschlaeger – GIZ** delved into the German multi-stakeholder partnership for sustainable textiles established in 2014 by the Minister for Economic Cooperation and Development. It has taken on board 75% of the German retail market (121 members) and aims at improving due diligence in textile value chains. This initiative is a leading public private partnership which sets social goals and the obligation to comply with them through a monitoring system led by the partnership, and through the facilitation of the dialogue between national authorities of garment producing countries and companies. Building upon 8 strategic cooperation partners<sup>1</sup>, the prioritised actions involve the improvement of working conditions in South India and sustainable chemical management in Asia. The partnership also plans to engage into waste water management, complaint mechanism and organic cotton initiatives.

**Mr. Stéphane Popescu – COSE | 361** introduced the French Fashion & Luxury Strategic Committee spearheaded by the French Ministry of the Economy, which brings together the sector (textile, apparel, leather) and the industry (trade federations, luxury groups and SMEs). One of the four working group 'Traceability & Sustainable Performances' aims at developing requirement specifications for traceability and sustainable performance tools, a policy recommendation and identify solution providers. Similarly to the UNECE project, one of the objectives of the committee is to develop a traceability system relevant to the sector as well as stimulating a virtuous circular economy by setting up two textile recycling demonstrators. Improving SMEs' competitiveness and supporting their transformation within the digital revolution is another core objective. The recommendations and guidelines for the French administration will be presented in June 2020 with the purpose of advancing the sustainability performance across the industry.

### 3. THE VALUE CHAIN MODEL FOR THE TRACEABILITY STANDARD FOR SUSTAINABLE VALUE CHAINS IN THE GARMENT AND FOOTWEAR SECTOR

*Reference document: Draft Business Requirements Specification (BRS) document for traceability of textile and leather value chains (zero draft)*

The second key project deliverable is the development of a traceability standard for the textile and leather value chains. This will involve developing the value chain model and the data model for the standard, to be able to prepare the UN/CEFACT Business Requirements Specifications and Requirements Specification Mapping, followed by the corresponding electronic messages (XML/EDIFACT) for the exchange of data and information among parties of the traceability scheme, with implementation guidelines for the standard. The purpose is to support real time data exchange, visibility of supply chains actors and processes, prevent fraud and achieve cost efficiency. Developing a standard value chain model and data model together with the governance model discussed in the previous session are the basis, provided this builds upon and does not duplicate existing efforts. The next step is to look at the technology solutions. This was also one of the key conclusions at the OECD Blockchain Policy Forum at the beginning of September this year. Data quality and credibility, asset digitization to connect the physical asset and the digital asset, and have the physical assets travelling with their certificates,

interoperability, data transparency vs privacy, inclusion of informal actors, are all important aspects that need to be considered and addressed.

**Mrs. Evonne Tan – Textile Exchange** gave an overview of preferred fibers and materials resulting in improved environmental and social sustainability outcomes in comparison with conventional production. Textile Exchange portfolio comprises 4 plant fibers (cotton, linen, hemp, man-made cellulosic), animal fibers (wool, down, leather, silk, regenerated fibers) and synthetic fibers (polyester, nylon). In 2018, the global fiber production was 107 million mt with a noticeable increase of 2 million in the 2017. Fiber production has more than doubled in the last 20 years and is expected to reach 145 million mt in 2030. The main takeaways are that 1. Polyester dominates the fiber market 2. The annual production of cotton is steady although the share is shrinking 3. Manmade cellulosic fiber is predominantly viscose. Cotton accounts for the second most important fiber in terms of volume after synthetic fibers (62% of the global fiber production in 2018) with an approximate market share of 24.3% and of 3% for organic cotton (2018). While manmade cellulosic fibers (MMCFs) account for 6.4% (2018), wool represents 1% and silk/down less than 1% of the market. Textile Exchange has mapped the value chains of cotton, polyester, MMCFs, down, wool and identified applicable standards (i.e. certified cotton with Organic Content Standard providing third party assurance to trace to the source, complementarily with Global Organic Textile Standard (GOTS) to ensure the product is socially and sustainably processed).

**Dr. Hakan Karaosman – Politecnico di Milano** delved into the leather value chain. Among the main critical sustainability hotspots identified, there are at Tier 4 animal welfare and deforestation, at Tier 3 health and safety, salt use and effluent control, at Tier 2 salt removal, water consumption/pollution, waste management and at Tier 1 supply chain safety, compliance and traceability. Social sustainability risks are particularly concentrated at the lower-tier suppliers end (human rights, poor working conditions, occupational health & safety). There are measures and standards in place which intend to reduce the negative impact, (e.g. the EU REACH regulation on the use of dangerous substances, the multilateral treaty CITES on endangered species). Although there is a set of voluntarily measures available (ISO, BSCI, SA 8000), there is a dire need to reach out to animal farms. There are a few identified encouraging practices spurring action for traceability led by Kering (animal welfare standards and open source methodologies), Litehide (traceability through salt-free hides), Stahl (DNA marking) and Textile Exchange (credit rating system).

#### **VALUE CHAIN MODEL – GROUP DISCUSSION**

*Q1 Which are the key fibers within each sub-group of identified fibers to be covered under the project?*

*Q2 For each type of fiber value chain, which are the key stages of the value chain (value chain mapping) and which are the key government and business parties?*

*Q3 What are the key sustainability hotspots, KPIs and relevant standards and certificates?*

##### Natural plant-based fibers (cotton, linen)

The sustainability hotspots identified are social, occupational health & safety and environmental related. Natural plant-based fibers need common requirements with a set of minimum sustainability threshold values, along with targeted standards. The Product Environmental Footprint (PEF) framework currently being developed by the European Commission is an interesting work to consider and integrate under the UNECE project. The [call for volunteers](#) issued in 2019 selected Sustainable Apparel Coalition to coordinate the Apparel product category.

##### Synthetic fibers

The sustainability hotspots are located at the extraction, processing, manufacturing, consumption and disposal levels. The hotspot definition is conditional upon polyester processing (i.e. linear or circular supply chain), microplastic use and chemical management. Synthetic fibers require to find a good balance comprising economic, societal and environmental KPIs. There are opportunities to harmonise existing standards (GRS/RCS, ITC Standards, Bluesign, ZDHC). Eventually, defining polyester sustainability hotspots requires a circular approach.

##### Manmade cellulosic and bio-synthetic fibers, natural animal-based fibers (wool)

The complexity of the MMCF's value chain makes it highly complex to find common hotspots and KPIs. It is unlikely to establish a common standard due to the differing sustainability hotspots, although a common standard could be elaborated about recyclability - operating with a chain of custody (volume, location, name) and a level of verification (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> parties). A mapping of existing standards is highly needed to look at the several criteria (SDGs, PEF, life-cycle assessment (LCA)) and further environmental, societal, animal welfare-related criteria. The integrity of data sourcing and the role of standard-certification bodies is paramount to ensure the origin of the information for the fiber or the fabric. Again, EU PEF was mentioned as an interesting work to consider for the UNECE project.

#### Exotic, livestock animal-based and innovative leather

The sustainability hotspots identified are animal welfare, ethics, deforestation and pollution. Social issues also include bribery, corruption and monopoly activities. Leather is intrinsically sourced from the animal according to the ISO definition (15 115: 2019). The difference between livestock and wild/exotic animals must be considered as it entails an ethical complexity i.e. authorizations and licenses to operate with endangered species. Therefore, a risk-based approach on the product origin must be considered. The mitigation of sustainability hotspots can be partially addressed with the PEFCR (Product Environment Footprint Category Rules) currently being developed. (e.g. Cotance pilot ongoing). It was advised to integrate private sustainability schemes (i.e. ISO, SA) into the UNECE standard. As brought up in the audience by **Sabrina Frontini – ICEC**, the UNECE project shall scope more accurately whether all leather types and goods are integrated into the traceability standard (animals, certifications and directions).

**NEXT STEP** to start the subgroups' work with conference calls which will take place on Tuesdays (textile subgroup) and Thursdays (leather subgroup) once a month and will be displayed on the [CUE space](#)'s calendar. The first calls for the textile group will be on **Tuesday 03<sup>rd</sup> December 2019** at **15.30** and for the leather group on **Thursday 12 December 2019** at **15.30** (Geneva Time).

### **DAY 2 – THURSDAY 31 OCTOBER 2019**

#### MORNING SESSION

#### **4. THE DATA MODEL FOR DUE DILIGENCE IN GARMENT AND FOOTWEAR VALUE CHAINS**

*Reference document: Draft Business Requirements Specification (BRS) document for traceability of textile and leather value chains (zero draft)*

The previous session had looked into the elements of the value chain model and the key information entities of the data model for the main groups of fibers, along with sustainability hotspots. These elements include: 1). business information entities (party, location, product/material type and attributes, production/processing step and attributes, storage and transport), 2). sustainability information entities (environmental, social, ethical), related KPIs, standards and certifications.

The aim of this session was to look at how value chain parties identify this information, record/maintain it, and retrieve and exchange it with partners (XML schemas, code lists, identifiers, certification).

**Mrs. Niki Dieckmann – RVO, The Netherlands** elaborated on the process of mapping of information required to ensure a consistent tracking and tracing of the garment and footwear value chains. She discussed the four key steps (identification, recording, retrieving, exchanging), and mentioned that the event registration must answer the Who/What/Where/When/Why for the information exchange. For instance, the product information can be sorted per product type, instance (batch or piece), location, installation facility or domain characteristics. Building upon traceability schemes previously developed by UN/CEFACT in the agri-food and fishery domains, she also presented possible sources of information entities for the UNECE standard 1). eCROP 2). Track and Trace of plants and animals derived products 3). EPCIS (electronic certificates, SPS (eCERT), e-Quality, e-Certificate of origin). The UN/CEFACT class diagrams standard messages were showcased to demonstrate the functioning of the traceability scheme (raw plant fibers from the farm, transport information, Euratex eBIZ TexSheet message).

**Mrs. Lena Coulibaly – GS1 Global Office** went through the GS1 set of standards and solutions (e.g. GS1 barcode) and collaborations with high-profile policy institutions (EU, ISO, UN, OECD, ITC,

WCO amongst others). GS1 is currently working on developing a discovery app, which will support users to understand consumer-driven markets by identifying, synchronising, tracking, sharing product data throughout the supply chains.

**Mr. Jean Merckx – GS1 Belgium & Luxembourg**, further made the point by explaining the global sectorial standardization process underway at GS1. The Global Data Model aims at defining an agreed set of attributes need to list, store, move and sell a product, business names and definitions for brand owners. The attribution will go through four different layers to capture the data from core product categories (GS1 verified attributes), to the global layer for a specific product category, the regional and the local category layers. In order to achieve traceability, GS1 recommendations include data interoperability, standardised data definitions and building upon the existing.

**Mr. Piero de Sabbata – Tecnopolo ENEA<sup>2</sup> Bologna** drew upon the potentialities to unlock from eBIZ-4.0 (Euratex) and RFIDs technologies in order to enhance the traceability of textile and of the clothing sector. He underscored that a traceability scheme essentially must bring value to companies, particularly SMEs which will need to put extra efforts due to the cost of traceability. At the policy level, the work may start by encompassing the existing standards and identifying the missing elements. UN/CEFACT and eBIZ standard efforts could be combined and integrated as complementary under UNECE standard.

**Mr. Thomas Mason – Organic Cotton Accelerator (OCA)** elaborated upon the potential to unlock from the use of innovative marker technologies throughout the supply chain. As a QR code is easily readable and processable by customers, it can also be tampered with, which cannot be the case with a crypto tag. Another type of digital identifier is the synthetic DNA, which bears a great deal of potential particularly for organic cotton, as it can survive all the production steps of the value chain. As per the technical feasibility of marker technologies, the main stake is to find which marker will live on the supply chain using a centralised data system (i.e. blockchain). The uptake of marker technologies should be a sector wide movement although the business case must be found for each company type and size, notably for SMEs. He concluded by highlighting that there is a strong business case for organic cotton, rather than for conventionally-grown cotton due to the sustainability risks perceived.

**Mr. Merckx – GS1** mentioned that GS1 is already working with the Belgian textile association on the use of QR codes. **Mr. Scalia – Euratex** emphasized the need to keep working on the way information is exchanged and simplify it, which will make a substantial difference in taking the work forward. **Karl Flowers – Authenticae Ltd** raised a question about the potential for the use of innovative marker technologies in other use cases (e.g. leather) to which **Thomas Mason – OCA** replied that there is not a single solution providing full farm-to-retail traceability. One solution would encompass a portfolio of technologies providing coverage of specific parts of the supply chain or relating to the geographic origin or the organic claim. The limitation which hamper a single technology from covering the entire supply chain results from the logistics and feasibility due to costs and operations throughout the supply chain, not so much from the technical limit of the market itself.

#### **DATA MODEL - GROUP DISCUSSION**

*Q. What information travels with the product, what information remains in the database of the issuing agency of the certificate, and what information remains in the database of the business party to be retrieved on request?*

The information which travels with the product is the legally required information such as the 'birth certificate' comprising location and name, fiber content, certification (origin, GRS), final product ID (origin, quality, sourcing) to prevent counterfeiting, the owner's claim and the facility information (performance). Other elements to consider are data confidentiality, verifiability, 3rd party audit. In order to constitute a valuable data collection, collaboration and trust throughout the supply chain are paramount, as well as the customer's demand. Noticeably, there is an information gap after the manufacturing level. The type of information will differ upon the production step and accordingly the data type, format and accessibility. A strong linkage must be established between the product narrative and the information type shared. Other information cannot be publicly shared (trade, cost/price, IP). The information appealing to the

consumer and important to take an informed choice is related to quality and sustainability performance.

Indeed, there are several levels of information (internal; publicly shared) to differentiate to satisfy claims. Two key challenges to overcome are commercial abuse (c.f. information disclosure) and the fear of information sharing and distribution out of specific circles (cost, product origin, etc.). Nowadays, the information includes ingredients/components, existence of certificate, compliance/legal (1, 2, 3). Ideally, it would encompass costs, quality, sustainability ranking.

Besides, there is a differentiation to be made between the information that needs to be practically on the product versus the information saved on a database (sustainability certificates, social components, origin: materials and 'made in') and the information that is not shared (i.e. cost, price, IP, quality, sourcing). In fact, not all information is necessarily needed at a product level, minimum qualitative data should be prioritised over quantitative data.

Matrix of data type

Final product data	importer, fibre content, REACH, CHC, factory, supplier, full fibre mix, fiber COO, ingredients and processes, chemicals usage, manufacturing, social and labour information
Manufacturer data	fabric source, contract, production
Civil society data	depending on the value chain nature (e.g. linear or relational) publicly available data format.
Consumer data	product value chain, sustainability information (labour, environmental footprint), narrative as well.
End of life / disposal instructions / circularity	

**NEXT STEPS** as laid out by **Mrs. Niki Dieckmann – RVO, The Netherlands** jointly with **Mr. Frans van Diepen – RVO, The Netherlands** are the definition of use cases, information collaboration processes, information data set specifications and other available information sets (i.e. UN/CEFACT Core Component Library, eBIZ). It will also be paramount to complete the information sets for the missing requirements (especially on sustainability information entities). At a later stage, UN/CEFACT and eBIZ entities will be merged and harmonised and the sustainable textile information exchange message specifications defined.

#### AFTERNOON SESSION

### 5.THE BLOCKCHAIN PILOT FOR TRACEABILITY AND SUSTAINABILITY IN COTTON VALUE CHAINS

*Reference document: Project document for a pilot on blockchain for traceability and due diligence in the cotton value chain (zero draft)*

The aim of this session was to look into the technology model supporting a traceability and transparency of sustainable value chains in the industry, with a particular focus on Blockchain.

**Mr. Heinz Zeller – Head of Sustainability & Logistics HUGO BOSS Ticino** emphasized that blockchain technology was an enabler for transparent and efficient business practice being adopted at HUGO BOSS. The ecosystem upon which HUGO BOSS is working improves traceability through three key components as follows: distributed ledger technology, smart contracts and tokens. The blockchain ecosystem can foster traceability, digital consumer engagement and circular economy by storing on one immutable system compliance and business information currently scattered in several proprietary systems. He also laid out the key features of the blockchain pilot for due diligence in cotton value chains in support of a circular economy to be started early 2020. Blockchain provides an opportunity to increase traceability and, accordingly, sustainability through the creation of a common source of verifiable knowledge about transactions that is accessible to all stakeholders regardless of their location. Under UNECE project, the first pilot coordinated by UNECE Secretariat intends to be a Proof-of-Concept for a



transparency and traceability blockchain-based system for sustainable cotton value chains, covering all the production steps from seed provider to final consumer with relevant business and sustainability data elements. The piloting partners identified (Hugo Boss, Weba, Albin, Filmar, GOTS, OEKO-TEX, ZDHC) have mapped the relevant business data, sustainability data elements and selected sustainability hotspots certificates to be assessed (origin, organic cotton, harmful chemicals use) through a blockchain solution.

### **BLOCKCHAIN PILOT – GROUP DISCUSSION**

**Fabian Vogelsteller – LUKSO Blockchain** pointed out that incentives and the access to incentives were critical to implement a blockchain solution. The two incentivization features stemming from the use of a blockchain solution are reputation and origin. Since the accessibility to cryptocurrency is limited, the use of a tangible coupon would facilitate the way incentives are provided. **Karl Flowers – Authenticae Ltd** added that the information put onto the coupon must be prioritised depending on the supply chain level. **Nathan Williams – Minespider** highlighted that incentives could certainly not be apprehended with a one-size fits-all-approach.

**Heinz Zeller – Head of Sustainability & Logistics, HUGO BOSS Ticino** underlined that a blockchain solution would gather and unify the various claims into one single system and that setting-up a consortium is well-advised to carry out the implementation. **Debbie Shakspeare – Avery Dennison** emphasized that blockchain would not solve everything but should be taken as a use case to ensure transparency claims, brand authentication and from a supply chain's viewpoint a tool to complete visibility.

**Hakan Karaosman – PhD Politecnico di Milano** highlighted the risk of overlooking the human aspect when considering the application of advanced technologies solutions, meaning implementing a solution encompassing the downstream part of the value chain (Tier 4, Tier 3).

Some issues were raised by the audience notably the accessibility to this type of advanced technologies solutions for SMEs in developed and developing countries and smallholders. As per the pilot scope, UNECE Secretariat reiterated that this first small-scale project would draw lessons before considering its extension and scalability.

**Maria Teresa Pisani – UNECE Secretariat** reported that the World Food Programme (WFP) had implemented a successful food assistance [pilot](#) in Jordan which enabled the Syrian refugees' beneficiaries to choose assistance redeeming through e-vouchers in WFP shops or unconditional cash transfers. The scaling solution carried out in 2018 has demonstrated that innovations and smart programming provided valuable solutions to meet efficiently the basic food and nutrition needs of vulnerable groups.

**NEXT STEPS** are the launch of the pilot project in January 2020 with the piloting partners identified to date (Hugo Boss, Weba, Albin, Filmar, GOTS, OEKO-TEX, ZDHC) to pursue the definition of the value chain, data and technology models. The pilot is opened to get on board additional partners. A call for proposal will be launched early 2020 by UNECE Secretariat identify a technology solution provider, which will ensure the system development (IT data base model incl. on- & off-chain concept). The pilot document has been circulated and is open to comment and inputs from the experts. The first call for the capacity-building and pilots' subgroup will be on **Wednesday 04<sup>th</sup> December 2019** at **15.30** (Geneva Time).

### **CLOSING REMARKS AND NEXT STEPS**

**Mrs. Maria Teresa Pisani – UNECE Secretariat** summarised the next steps for the project which are the launch of the work of the four experts' groups through four sessions of conference calls, to be set up by UNECE Secretariat on a monthly basis. UNECE Secretariat will keep on setting up the project team and detailing the implementation work plan. Additionally, one or two subgroup leaders will be appointed per groups to support the UNECE Secretariat and the experts. All the conference calls' dates and times, as well as the physical meetings will be displayed on the [CUE space](#). For the experts that have not yet access to the CUE space, a tentative calendar of dates will be circulated by email shortly after the dissemination of the meeting report.

**Mr. Harm Jan van Burg – UN/CEFACT Bureau** concluded the meeting by highlighting that the discussions held for two days were significantly productive due to the variety of expertise and

the interactive format of the discussions. The meeting combined knowledge sharing sessions as well as group discussions which ensured to give all the participants a strong hands-on on UN/CEFACT activities and the project deliverables to be achieved. The meeting also enabled the project team to get valuable insights from the experts and it has overall given a strong impetus to work collectively at the achievement of the project deliverables.

#### UPCOMING MEETINGS AND EVENTS

- *OECD Forum on Due Diligence in the Garment and Footwear Sector (11-13 February 2020, Paris)*
- *UN, 35<sup>th</sup> UN/CEFACT Forum (27 April - 1<sup>st</sup> May 2020, Geneva)*
- *European Development Days (June 2020, Brussels)*
- *UNECE \* OCA (June 2020, Amsterdam, TBC)*
- *UNECE Project meeting (September 2020, Milan, TBC)*

#### ANNEXES

##### CUE SPACE

Reference documents available on the online project working [CUE space](#), presented by **Olivia Chassot, UNECE Secretariat**.

The CUE space is a private working area for the participants who have been officially accredited by their Head of Delegation UN/CEFACT expert. It is a tool which aims at facilitating the work of the experts by saving all the project, background and meeting documents of past and planned meetings on a single platform. The CUE space's calendar will display the dates of project physical meetings and subgroups conference calls.

Project documents:

- [Project brochure](#)
- Description of Project Action
- Group of Experts Composition (to be constantly updated)
- Call for participation and Group of Experts' ToRs

Meetings documents:

- Meeting agenda
- Policy recommendation preliminary outline
- Pilot project document for the implementation of a blockchain technology for traceability and due diligence in the cotton value chain in support of a circular economy
- UN/CEFACT Business Requirement Specifications for animal and plant-based products.

Reports mentioned during the meeting:

- ['Trading for Development in the Age of Global Value Chains'](#), World Development Report, World Bank Group (2019)
- [A Background Analysis on Transparency and Traceability in the Garment Value Chain](#), DAI (2016)
- [Potential Eco-design Requirements for Textiles and Furniture](#), Nordic Council of Ministers (2018)

UNECE news piece, 08/11/2019,

- 'Transparency in fashion – UNECE mobilizing industry and experts to develop blockchain traceability tool and policy framework under EU-funded project' available at: <https://www.unece.org/index.php?id=52882>

Follow-up points shared by participants resulting from the meeting as the project will move forward:

1. Will the standard be a mark of quality or of integrity for traceability?
2. Can the standard be designed to be useful for multiple users? Blockchain providers will use it as a benchmark for their traceability programmes. Brands will use it for their in-house programmes. Will governments mandate or adopt the standard? What does

adoption would mean and how can it become common in the industry? Can the standard underpin trade agreements (e.g. EU General Scheme of Preferences Plus)? Will the endorsing process be similar to OECD Due Diligence guidelines?

3. Producer countries stakeholders: engaging with manufacturers associations is critical for the project to ensure the global success and uptake of UNECE standard (e.g. China and India as key worldwide textiles' exporters and importers).
4. Need to provide results and present data using robust scientific methods under the project. Rigorous research will support showcasing the advantages and disadvantages of existing transparency and traceability schemes. Both societal and business cases have to be balanced in this initiative and education, awareness, training and technology must go hand in hand.
5. Need to understand all the transparency and traceability schemes and to assess the rigour, the method and the usefulness of these schemes.
6. Need to hear from the voices of those most impacted in supply chains, at the worker level in agriculture, mining and manufacture, particularly in the developing world, and at the SME level both in developed and developing countries. If these groups are represented, the project will have a depth of knowledge and understanding that will help create a transformative and sustainable transparency and traceability system.

### Project deliverables 2019-2022

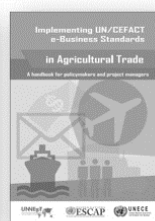
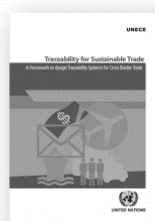
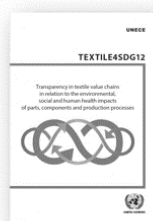


### The Project

The key project deliverables (Jul 2019- Jun 2022)

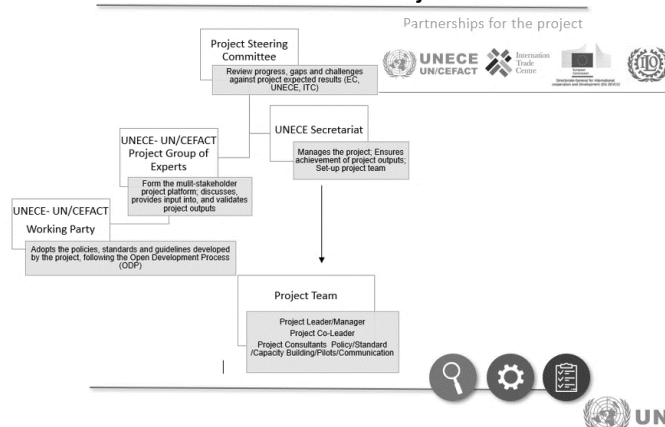


Relevant work and publications



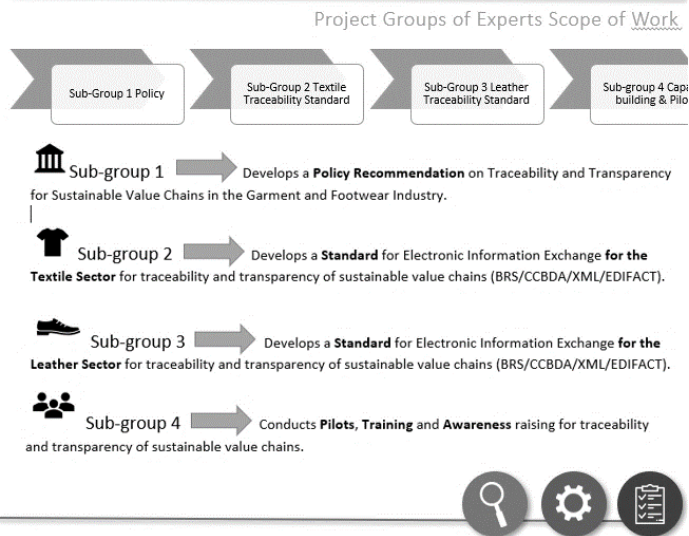
### Project governance

#### Project Governance



## Project Sub-Groups of work and type of expertise

### Project Governance



### Project Governance

Type of expertise

High level expertise on industry business and policies, and sustainability

1. Policy Group

Technical expertise on 1. Business requirements and information entities, 2. Mapping of the value chain, 4. Sustainability hot spots/KPIs/standards & certification

2. Technical Standard Group

Expertise in 1. knowledge development and sharing; 2. networking with and reaching out to practitioners on implementation of supply chain standards; 3 technology solutions for the pilot/s

3. Capacity Building & Pilots

### Project Implementation Timeframe

Project inception	01/01/2019
Requirements gathering and signature of project agreement	01/07/2019
<b>O1. Multi-Stakeholder Policy Dialogue Platform and Development of Policy recommendation</b>	01/04/2022
A1.1 Project Groups of Experts composition	31/10/2019
A1.2 Project stakeholders' identification and engagement	28/02/2020
A1.3 Development of Draft Policy Recommendation	01/06/2020
A1.4 Public review of Draft Policy Recommendation	01/09/2020
A1.5 Exit of Draft Policy Recommendation	01/11/2020
A1.6 Submission and adoption of Policy Recommendation by UN/CEFACT Plenary	01/04/2021
A1.7 Launch of the Call for Action	01/04/2021
A1.8 Multi-stakeholders Policy Dialogue Meetings (2 per year)	01/04/2022
<b>O2. Development of Transparency and Traceability Standard for the textile and Leather Value Chain</b>	01/12/2020
A2.1 Map the traceability requirements (business and sustainability) and identify value chains sustainability hotspots and relevant standards and certifications	01/04/2020
A2.2 Design a set of standards to track and trace sustainable textile and leather value chains	01/06/2020
A2.3 Public review of draft Standards	01/09/2020
A2.4 Exit of draft Standards	01/11/2020
A2.5 Submission and adoption of Standards by UN/CEFACT Working Party	01/12/2020
A2.6 Pilot the use of the transparency and traceability framework for 1 country and 4 companies	01/12/2020
<b>O5. Conduct of capacity building and awareness raising</b>	01/12/2020
A5.1 Design of training and coaching sessions	01/04/2021
A5.2 Conduct of training and coaching sessions	01/02/2022
A5.3 Develop and implement a project communication strategy	01/04/2022
A5.4 Conduct a concluding Action Conference	01/04/2022
Project completion	01/07/2020

## List of participants

<b>Organisation</b>	<b>Surname</b>	<b>First name</b>
Elisabeth Annat Consultancy Services	Annat	Libby
European Commission, DG International Cooperation and Development	Aurell	Ebba
FESI	Boniolo	Luca
Candiani S.P.A	Cali	Remo
UNECE	Ceccarelli	Maria Rosaria
DagangNet Technologies	Chan	Eva
UNECE	Chassot	Olivia
UNIC	Contu	Maurizia
GS1 Global Office	Coulibaly	Lena
Lenzing AG	Covini	Carlo
Triangularity	Cram-Martos	Virginia
Minespider	Cullen	Ella
Burberry	Cullen	Siobhan
Euratex	de Sabbata	Piero
European Confederation of Flax and Hemp, (CELC)	Demaegdt	Marie
Government, The Netherlands (RVO)	Dieckmann	Niki
Fashion Revolution	Ditty	Sarah
Center for Identification systems	Dravitsa	Alexey
British Fur Trade Association (BFRA)	DunMcAfee	Nicholas
Authenticae Ltd	Flowers	Karl
ICEC	Frontini	Sabrina
Modint	Geelhoed	Miriam
COTANCE	Gonzalez-Quijano	Gustavo
GEFEG	Greiff	Miriam
Open Apparel Registry	Grillon	Natalie
Sistema Moda Italia	Guffanti	Alessandra
Stella McCartney Ltd	Guo	Debra
UN/CEFACT expert	Heemskerk	Gerhard
Independant	Jones	Meg
Politecnico di Milano	Karaosman	Hakan
NextGen Knowledge Solutions Private Ltd.	Kashyap	Vinod
JASTPRO	Kedoin	Kanenori
KIET	Kim	Jeonghyun
H&M	Krebbers	Merel
Fashion Revolution	Lovejoy	Ilshio
Chain Ops	Madhala	Tal
Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH	Markschlaeger	Franzisca
University College Dublin	Marshall	Donna
Organic Cotton Accelerator	Mason	Thomas
Adidas AG	Meister	Philipp
GS1	Merckx	Jan

ChainOps	Merle	Nicolas
Stella McCartney Ltd	Mocilenkova	Zuzana
Avery Dennison	Moser	Greta
Cittadellarte Fashion B.E.S.T.	Naldini	Paolo
ITC: Ethical Fashion Initiative	Oduor	Vincent
Swedish School of Textiles, University of Borås, (HB)	Pal	Rudrajeet
Leatheriteq Limited	Pelka	Alexandra
Cittadellarte Fashion B.E.S.T.	Pirazzi	Olga
UNECE	Pisani	Maria-Teresa
COSE 361	Popescu	Stéphane
University Bocconi	Romana Rinaldi	Francesca
Euratex	Saclia	Mauro
Global Organic Textile Standard (GOTS)	Sebastian	Mark
Avery Dennison	Shakspeare	Debbie
H&M	Shariati	Nina
U.S. Hide, Skin and Leather Association, (USHSLA)	Sothmann	Stephen
Textile Exchange	Tan	Evonne
New Generation Sensors S.r.l. (NGS)	Vaglini	Alessandro
UN/CEFACT Bureau	van Burg	Harm Jan
Euratex / Creamoda	van Landeghem	Jo
Clean Clothes Campaign	Vanpeperstraete	Ben
LUKSO Blockchain	Vogelsteller	Fabian
WRÅD	Ward	Matteo
UN/CEFACT expert	Wessel	Rolf
Minespider	Williams	Nathan
China Certification & Inspection Group (CCIC)	Wu	Yang
Centre for Identification Systems	Yakushkin	Evgeniy
John Lewis Partnership	Youds	Nadia
Hugo Boss	Zeller	Heinz
China National Institute of Standardization	Zhang	Jianfang