Report of the Team of Specialists on Environmental, Social and Governance Traceability of Sustainable Value Chains in the Circular Economy on its first session

I. Attendance

1. The Team of Specialists (ToS) on Environmental, Social and Governance (ESG) Traceability of Sustainable Value Chains in the Circular Economy held its first session, as a virtual meeting, on 10 November 2021. The session was attended by 124 delegates and experts representing national government agencies, international organizations, non-governmental organizations, and the private sector.

2. The following countries were represented: Australia, Austria, Belgium, Bosnia and Herzegovina, Canada, Chile, Denmark, France, Gambia, Germany, Hungary, Israel, Italy, Japan, Kyrgyzstan, Luxembourg, Madagascar, Malaysia, the Netherlands, Qatar, Russian Federation, Saudi Arabia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Uzbekistan. Representatives of the European Union were also present.


4. The Deputy Executive Secretary of the United Nations Economic Commission for Europe (UNECE) opened the meeting. He stated the importance of circularity and ESG traceability for the COVID-19 recovery in the UNECE region and for the climate agenda. When outlining the complexity of global value chains, which often encompass illegitimate practices, he stressed the importance for both public and private sectors to promote traceability in a wide range of areas, and with special attention to small and medium actors, emerging economies and economies in transition. He underlined a toolset that UNECE had
developed on traceability including within the project “Enhancing transparency and
traceability for sustainable value chains in the garment and footwear industry” and urged to
discuss the digitalization as a driver to accelerate the transition towards double digits
Circularity rates.

5. The Deputy Head of Delegation of the European Union to the United Nations and
other international organisations in Geneva welcomed the delegates and underlined that
traceability was a key tool to manage sustainable development. He highlighted the European
Union Circular Economy Action plan and its role in the European Union Green Deal and
how these two plans will advance the achievement of the European Union 2050 climate
targets. He stated that for the European Union it was a priority to ensure that all suppliers
meet circular economy targets. He welcomed the efforts of UNECE in launching this Team
of Specialists, as ESG traceability supports countries efforts to address unsustainable growth
patterns and such key problems as the lack of visibility on materials’ use.

II. Adoption of the agenda (Agenda Item 2)

6. The Secretariat presented the annotated provisional agenda for the first session of
the Team of Specialists on Environmental, Social and Governance (ESG) Traceability of
Sustainable Value Chains in the Circular Economy.

Decision 21-01: The Team of Specialists adopted the annotated provisional agenda for the
first session (ECE/ToS-TSVCCE/2021/INF.1).

III. Appointment of officers (Agenda Item 3)

7. The Secretariat clarified that all members of the Team of Specialists need to register
as experts of the United Nations Centre for Trade Facilitation and Electronic Business
(UN/CEFACT) and presented the applicable election procedure for the position of Chair and
Vice-Chair of the Team of Specialists for the next two-year period. In line with the Guidelines
for the establishment and functioning of Teams of Specialists ECE/EX/2/Rev.1, a Team of
Specialists appoints its officers: a Chairperson and, if deemed necessary, one or two Vice-
Chairpersons.

Decision 21-02: The Team of Specialists appointed Ms. Maylis Souque as Chair, Ms.
Nathalie Bernasconi and Mr. Harm Jan van Burg as Vice-Chairs of the Team of Specialists
for the period 2021-2023.

IV. Approaches and perspectives for advancing ESG
performance in value chains, through traceability
(Agenda Item 4)

8. In this session representatives from Member States, key industry actors and other
stakeholders discussed perspectives, available solutions and priorities for advancing ESG
traceability and transparency of value chains in priority industries for the circular transition.
Discussions focused on agri-food, fishery, garment and footwear, minerals, transport and e-
waste management sectors. Participants addressed the following guiding questions:

1. What policies and actions can governments, industry actors and other stakeholders
put in place to advance ESG monitoring and reporting in value chains of priority
industries for the circular transition?

2. What are the lessons learnt from the COVID-19 pandemic in terms of adapting and
improving the ESG performance monitoring and reporting, and how to ensure that
solutions in place can support small actors and vulnerable groups?

3. Which role can information exchange standards and advanced technologies
(Blockchain, IoT, AI) play for ESG traceability and transparency along value
chains?

UNECE and UN/CEFACT policy recommendations and standards
9. In 2021, UN/CEFACT developed the Recommendation 46 on Enhancing Traceability and Transparency of Sustainable Value Chains in the Garment and Footwear Sector, which establishes a mechanism enabling governments and industry actors to make risk-informed decisions, overcome information asymmetry, communicate, and achieve accountability for sustainability claims, and provides a set of internationally agreed practices for the harmonized collection and transmission of data for tracking and tracing materials, products and processes across the entire value chain. The Recommendation, with implementation Guidelines, was completed under the joint UNECE-ITC project for a sustainable textile and leather industry and adopted at the 27th UN/CEFACT Plenary.

10. UNECE further mapped over 100 relevant policies, regulations and guidelines globally across a variety of sectors including garment and footwear, agri-food, minerals, cosmetics and timber. This mapping study identifies key actions that businesses, institutions and governments can take to advance ESG traceability taking into account European Green Deal, Circular Economy Action Plan, Due Diligence Legislation, Corporate Sustainability Reporting Directive, New Consumer Agenda, Sustainable Products Initiative and Legislative Proposal on Substantiating Green Claim.

11. Recommendations for institutions and governments for advancing ESG traceability include:
   - agreeing on common definitions of ESG factors and ESG risks
   - implementing processes, mechanisms and strategies to identify, assess and manage ESG risks
   - making mandatory the collection and disclosure of a variety of data
     - data from companies: information on ESG performance and sustainability risks
     - data at the product level with a clear description of sustainability risks, impacts and compliance to be provided in the company prospectus and periodic reports on compliance with environmental and social criteria to be made publicly available.
   - developing ESG indicators, methods and standards to support the incorporation of sustainability-related aspects also into financial decision-making, and to ensure a level playing field, prevent the risks of 'green washing' and enhance transparency and consumer protection
   - engaging with businesses, investee companies, trade institutions and other relevant stakeholders and governments of the supplier countries to address sustainability issues that cannot be tackled by businesses, but need to be handled at the national level
   - establishing accountability for businesses to ensure a comprehensive approach to the incorporation of ESG risks into business strategies and processes
   - incentivising responsible production also through trade policies that lower costs or provide benefits for companies importing sustainable products
   - educating consumers to better understand and act on sustainability issues.

12. Recommendations for businesses to advance ESG traceability state that companies should:
   - incorporate ESG risk-related considerations when developing business strategies by setting out appropriate policies taking ESG risks into account
   - include ESG risks in the risk framework
   - identify the gaps they are facing in terms of data and methodologies and take remedial actions
   - define the KPIs to be monitored
   - measuring the reliability of data collection
• develop methods to test their resilience to ESG risks
• set, disclose and implement ESG risk-related strategic objectives and/or limits
• promote new business models and implement sustainable practices
• share sustainability related data and information with all the relevant stakeholders and particularly with suppliers
• comply with sustainability standards and code of conducts.

13. The interoperable traceability standard developed by UNECE supports garment value chain actors in the collection and exchange of products, processes, facilities and sustainability-related information. Under this project, ITC developed a set of online tools to support traceability and transparency in the global supply chain including a sustainability map to visualize brands’ suppliers’ location, factory profiles, social and environmental audit results and a converged assessment framework, which has data collection tools and a robust verification. In October 2021 over 6000 users were members of the system and they completed over 5000 verified assessments. ITC will continue to update and further integrate facilities and brands that utilize the tools, provide capacity building to SMEs and integrate UNECE-developed traceability standards.

14. UN/CEFACT Programme Development Areas are currently expanding the buy-ship-pay model to include pre- and post-consumption integrating the circular economy angle and developing a reference data model on sustainable development and circular economy.

Policies and actions for ESG monitoring and reporting

15. Circular economy trade flows include circular economy technologies and services, secondary goods for repair or recycling, secondary raw materials for production and waste materials. Three identified steps for transition are standardization of the ESG reporting, adoption of traceability technology such as blockchain and production of focused legislation in the supply chain policy. Green finance legislation together with Green Finance Taxonomies could be the platform for such transition encompassing green data requirements for a product passport. Produce focussed legislation could include EU Waste shipment regulations revision, product passport, Sustainable Product Initiative, and extended product responsibility.

16. There is a need to build trust and ensure transparency as a part of the risk management strategy allowing countries to provide visibility of upstream and downstream activities. Currently, European Union is at the forefront with European Green Deal and New Circular Economy Action Plan. There has been an increase in regulations on business conduct and development impact in supply chains relevant to agriculture enterprises in the last twenty years. Policy coherence is key in developing ESG traceability. Current legislation covers such areas as transparency and Bribery, Environmental and Social Due Diligence, Sustainable Reporting and Thematic Considerations such as modern slavery, forced labour and child labour.

17. The Team noted the example of the Global Reporting Initiative which includes in the management of significant waste-related impacts a disclosure 306-2, which requests reporting on circularity measures on both management and prevention of waste generation and its impacts. The disclosure further requests companies working with third parties to determine whether the third party manages waste in line with legislative obligations.

18. This accelerating momentum is demonstrated by over 400 notifications that the World Trade Organization received that relate to circular economy including technical regulations on waste management, recycling, eco-design standards, conformity assessment and standards on biodegradable plastic, demonstrating the high demand for traceability as an entry point for market access.

19. OECD-FAO Guidance for responsible agriculture supply chains is a leading global framework for agri-business and investors which incorporates existing responsible business conduct standards and includes a five-step framework for risk-based due diligence. It is referenced in the EU draft Directive on Corporate Due Diligence and Corporate Accountability. If approved, it will be applicable to all 27 EU Member States. The Guidance is rooted in adapting business models to identify, assess, mitigate and prevent impacts in the
supply chain and prioritizes them by severity and likelihood of impact. Considering leverage and impact caused, it provides flexible, tailored guidance to companies of all sizes and dynamic decision-making informed by stakeholder engagement.

20. As global food demand is to increase up to 56% by 2050, role of agriculture sector is increasing, taking into account that nearly 1/3 of the world did not have access to adequate food in 2020. Recognizing that Agriculture, Forestry and Other Land Use account for 24% of global gas emissions, the Team flagged the importance of a systemic approach across countries.

21. The Expert from the World Trade Organization welcomed UNECE efforts in developing tools that foster traceability and transparency as they will be of high importance for the WTO Committee on Trade and Environment and two initiatives on plastic pollution and trade and environment sustainability.

**Role of technology and information exchange standards**

22. Acknowledging the leading role of technology and information exchange standards in supporting traceability in a wide range of sectors, the Team flagged the high costs connected to technology adoption and the related need for capacity building. Special attention should be given to information exchange standards and digital tracking technology – enables of traceability and transparency.

23. To meet ESG traceability and transparency needs, there is a need for evidence, trust and automatization. This could be achieved through development of verifiable credentials, which is a decentralized model based on new technology standards from the World Wide Web Consortium and semantic standards from UN/CEFACT. There’s no dependency on Electronic Data Interchange messaging and no need for everyone to use the same hub/pipeline, leading to no disruption of longstanding paper-based processes or existing business relationships. Verifiable credentials make any trade document digitally verifiable and readable by both humans and machines.

24. Blockchain provides capabilities for immutable transactions, decentral exchanges, including smart contract and consensus algorithm supporting traceability of sustainable value chains. Traceability is highly dependent on Key Data Elements, which is data input required to successfully trace a product and/or its ingredients through all relevant events. Draft Key Data Elements themes for sustainability include plant protection, biodiversity, labour, climate, forestry, gender, land, value distributions, water, food, agricultural products.

25. The Team discussed the problem of product identification in post-consumption in the garment sector. Speakers proposed to digitalize products using the Internet of Things and create a digital twin of a physical product, similar to a digital passport holding key product and material data. To enable this, there is a need for a shared language for digital identification of products in the circular economy in fashion and retail. This would prevent data overlapping and data complications with different technology needs. Product passports can be enabled through digital transition using decentralized data systems.

**Outcomes of the discussion: Considerations for inclusive development**

26. Recognizing the growing needs of consumers to have ESG traceability and transparency in the circular economy, it is key to include developing countries and end consumers in discussions to avoid creating barriers to small and medium enterprises. Capacity building and development of local infrastructure will further accelerate introduction of sustainable practices in emerging economies and countries in transition.

27. Consumers and businesses in downstream trade and retail increasingly concerned with how sourcing impacts vulnerable groups – including children. Responsible parties should avoid and address adverse social and environmental impacts through operation products and services that take into consideration the issues of climate change, natural resources and child labour. Globally, more than 70% child labour takes place in agricultural sector.

28. To ensure that no one is left behind, there is a need for further development of interoperable standards with dynamic data elements.

**Outcomes of the discussion: Possible future activities of ToS**
29. This ToS can play an active role in supporting governments, institutions, businesses and other relevant stakeholders to enable a more sustainable, resilient and proactive economy. This can be achieved by looking at the policies for traceability and the work conducted under the UNECE project on traceability and transparency in garment and footwear, discussing ways to assess and mitigate ESG risks, sharing best practices, and identifying the framework needed for promoting ESG traceability and transparency across different sectors. This ToS could also integrate the private sector in discussions and revisit the topic of public blockchains.

30. Fostering collaboration between ToS and UN/CEFACT, the ToS could exchange information with the UN/CEFACT Bureau about priorities and ideas for potential future value chain and sustainability work projects provided that there will be necessary resources.

**Decision 21-03**: The Team of Specialists took note of the presentations made by experts. The Secretariat will prepare a report of the session summarising highlights, key findings and recommendations discussed by experts, to be presented at the next Plenary of UN/CEFACT in 2022.

V. **Discussion of the Programme of Work of the Team of Specialists for the period 2021-2023 (Agenda Item 5)**

31. The Secretariat presented Mandate and Terms of Reference of the Team of Specialists on Environmental, Social and Governance Traceability of Sustainable Value Chains in the Circular Economy ECE/TRADE/C/CEFACT/2021/23/Rev.1, its Programme of Work and Decisions related to the Team of Specialists on Environmental, Social and Governance Traceability of Sustainable Value Chains in the Circular Economy ECE/EX/2021/L.12. This document was adopted by UNECE 117th session of EXCOM on 8 July 2021 and is based on the Guidelines for the establishment and functioning of teams of specialists ECE/EX/2/Rev.1.

32. The Chair requested to take into account the tools which were already developed by UNECE and ensure integration with European Union due diligence regulations, regulations to fight deforestation, revision of the battery regulations and corporate sustainability reporting directive.

33. The Secretariat informed that the report of this meeting will be presented to the UN/CEFACT 2022 Plenary session. The group will have an internal discussion to discuss the work plan and have a meeting during the UN/CEFACT Forum in 2022.

**Decision 21-04**: The Programme of Work of the Team of Specialists for 2021-2023 was adopted by the UNECE 117th session of EXCOM on 8 July 2021 (ECE/EX/2021/L.12) and was presented for discussion. The Secretariat, together with the Chair and Vice-Chairs, will prepare a work plan and timeline for the activities to be undertaken under the Programme of Work for the period 2021-2023 and will share it with the members of the Team of Specialists.

VI. **Other business (Agenda Item 6)**

33. No other business points were raised.

VII. **Adoption of decisions and draft report of the first session (Agenda Item 7)**

34. Delegates and participants agreed on the decisions 1 to 4 and will receive the report of the session (ToS-TSVCE/2021/INF.2).

1. United Nations Economic Commission for Europe and the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) as a subsidiary, intergovernmental body of the UNECE, which serves as a focal point within the United Nations Economic and Social Council for trade facilitation recommendations and electronic business standards. It has global membership, and its members are experts from intergovernmental organizations, individual countries’ authorities and also from the business community.

2. UN/CEFACT developed a wide range of recommendations and e-business standards for agriculture and agri-food; fishery, garments and footwear, the transboundary movement of waste, trade of products under sanitary or phytosanitary control, and the trade of endangered species of wild fauna and flora (CITES). This annex outlines these tools for governments to develop environmental, social and governance traceability approaches and standards for sustainable value chains.

3. Environmental, social and governance (ESG) traceability accelerates sustainable production and consumption. Implementation of ESG traceability approaches and systems depends on informed decisions by government and regulatory organizations. Current patterns of production and consumption, coupled with rapid economic growth among developing and emerging economies, have resulted in the depletion of natural resources; the degradation of ecosystems; and the generation of hazardous substances, waste and pollution—thereby undermining long-term sustainability and putting ESG traceability on the top of the agenda.

4. Joint efforts in adopting ESG traceability of sustainable value chains will spur progress in the United Nations Sustainable Development Goals (SDGs). Such efforts will lead to resource and energy efficiency, a shift towards more responsible production and consumption patterns, the prevention and reduction of waste along the supply chain, and the development of a sustainable infrastructure. Current supply chains include practices of illegitimate contracting and informal work. This new pattern of economic growth should be achieved through decent work and should guarantee access to basic services for a better quality of life for all. Through ESG traceability, countries will access better information on environmental and sustainable patterns.

5. To advance ESG monitoring and report on relevant SDG targets of the 2030 agenda, governments and industry actors should prioritize research-based, innovative and digital policies and actions including uptake of frontier technologies and processes (blockchain, artificial intelligence and Internet of things). Small actors and vulnerable groups are of relevance in developing inclusive policies that are adaptive to challenges and incorporating lessons learned from the COVID-19 pandemic.

6. There is a need to identify priority policy areas and a monitoring framework to promote ESG traceability in Circular Economy in the context of implementation of free trade agreements and relevant SDG targets of the 2030 Agenda.

7. In the UNECE region, traceability and transparency is recognized as a future policy area for both advanced economies and economies in transition. To support this commitment, UNECE and UN/CEFACT have developed a set of tools which foster cross-sectoral linkages and bring countries, civil society, and the private sector together to share knowledge, experiences and lessons learned, and provide recommendations toward the common goal of a systemic transition towards ESG traceability of sustainable value chains.

8. The UN/CEFACT Secretariat has been implementing a project “Enhancing transparency and traceability for sustainable value chains in the garment and footwear industry” which produced a toolbox including policy recommendations, implementation guidelines, and
global information exchange standard, a blockchain system to advance traceability, transparency and sustainability with wide engagement of industry actors.

9. UNECE Recommendation 46 Enhancing Traceability and Transparency of Sustainable Value Chains in the Garment and Footwear Sector includes implementation guidelines to assist policy and decision makers in better understanding tracking and tracing while also providing a framework for implementation by all stakeholders in garment and footwear value chains. The accompanying Call to Action provides a mechanism to monitor and keep track of implementation of the recommended measures, and to facilitate the exchange of good practices and lessons learned.

10. As another example, the UNECE Project on Blockchain for Sustainable and Circular Value Chains in Cotton Value Chains, currently in its final phase, defines the value chain and data model for the traceability of cotton value chains, and the technology model for the traceability of physical assets. The project provides an analysis of the legal aspects of the blockchain pilot implementation (data security and privacy); parallel testing of blockchain modules developed, with an integration test for partner certification and necessary key performance indicators (KPIs) stored on blockchain; and training and rolling-out with pilot partners. The project is implemented with industry partners (brands, manufacturers, farmers, certification entities, blockchain solution providers) and targets both advanced and developing economies: Egypt, Germany, Italy, Switzerland and the United Kingdom. It is highly relevant to CEA4 on sectors with high circular economy potential, which directly contributes to SDG12 for responsible production and consumption.

11. UN/CEFACT has developed an open and global standard that allows the electronic exchange of fishery data. This standard is essential for the effective management of fish resources and the timely acquisition and exchange of information on fishing locations, gear used, species and quantity caught, etc. They also contribute to SDG12 for responsible production and consumption, and indirectly contribute to SDG2 on zero hunger.

12. UN/CEFACT has developed standards that foster traceability such as electronic sanitary and phytosanitary certificates (eCert), Quality certificates for fruits and vegetables (eQuality) and electronic certificates for sustainable trade in wildlife (eCITES) which allow electronic information exchange on international treated agricultural produce. The electronic information exchanges strengthen regulatory control in agriculture trade and significantly reduce food loss in the supply chain. The information technologies are now making a significant contribution to global efforts to protect crucial environmental resources such as use of water, energy and soil used for agriculture production.

13. UN/CEFACT is also at the forefront of developing standards for tracking and tracing goods during transportation from seller to buyer. Companies can thus have data-driven visibility into the physical location, condition, and context of products and assets, which increases operational efficiency. UN/CEFACT is currently developing an e-business standard covering the electronic business processes of Cross Industry Track and Trace.

14. Efficient trade logistics is at the forefront of traceability. To enhance operational performance, improve security awareness, improve compliance, enable green maintenance, contribute to product quality controls and to provide visibility on infrastructure, UN/CEFACT identified use cases and developed a Smart Container standard which helps to provide full digitalization of the supply chain, door-to-door visibility of the logistics chain and trustworthy data, enabling Transport Operators to have better control of their operations and resources.

15. The UNECE secretariat is committed to continuing its joint work with member States in enabling ESG traceability in sustainable value chains in circular economy and to achieving the SDGs of the 2030 Agenda for Sustainable Development.