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

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, Luxemburg, Madagascar, Malaysia, the Netherlands, Qatar, Russian Federation, Saudi Arabia, Slovenia, Spain, Sweden, Switzerland, Türkiye, 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 Economic Commission for Europe (ECE) opened the meeting. He stated the importance of circularity and ESG traceability for the COVID-19 recovery in the ECE region, as outlined in the outcome of the 69th ECE session, and for the climate agenda. While emphasizing 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, with special attention paid to small and medium size enterprises (SMEs), emerging economies and economies in transition. He underlined a toolset that ECE had developed on environmental, social and governance
traceability of value chains, including within its initiative to advance sustainability and circularity in the garment and footwear value sector, and urged the Team of Specialists to discuss digitalization as a driver to accelerate the transition towards double-digit circularity rates. He also noted that compliance with norms and standards for sustainable business performance provides better access to investment and market opportunities for leading actors. But at the same time capacity building and financial support are key to ensure that such requirements do not pose barriers to trade, especially for vulnerable actors from emerging and transition economies.

5. The Deputy Head of Delegation of the European Union to the United Nations and other international organizations in Geneva welcomed the delegates and underlined that traceability is a key tool to manage sustainable development. He highlighted the European Circular Economy Action Plan, its role in the European 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 is a priority to ensure that all suppliers meet circular economy targets. He welcomed the efforts of ECE in launching this Team of Specialists, as ESG traceability supports the efforts of countries to address unsustainable growth patterns and key problems like 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, Secretary General to the National Contact Point to the Organisation for Economic Co-operation and Development (OECD) and Advisor for Responsible Business Conduct at the Ministry of Economics and Finance of France as chair; Ms. Nathalie Bernasconi Executive Director of the International Institute for Sustainable Development (IISD) Europe and Senior Director for Economic Law & Policy at IISD; and Mr. Harm Jan van Burg CEO, Burgcomm Consulting from The Netherlands 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. The Team underlined that 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; the generation of hazardous substances, waste and pollution; and practices of illegitimate contracting and informal work along value chains —thereby undermining long-term sustainability and putting ESG traceability on the top of the policy agenda.
9. ESG traceability can indeed accelerate sustainable production and consumption trends. It allows countries and industry actors to access information on environmental and social risks, and better monitor sustainable patterns. The development and implementation of relevant approaches and systems depend on the informed decisions of government and regulatory agencies, in close consultation with businesses and industry stakeholders. Such efforts can support resource and energy efficiency, the prevention and reduction of waste along the value chain, the development of sustainable infrastructure, the promotion of decent work practices, and access to basic services for a better quality of life for all.

10. In this connection, 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 critical industries for the circular transition (e.g. agri-food, fishery, garment and footwear, minerals, transport and e-waste management).

11. These include the need for: i) inclusive and global multi-stakeholders’ platforms to facilitate policy coherence, the sharing of good practices and lessons learned, and to explore approaches to address barriers to trade opportunities that ESG compliance may pose for SMEs and vulnerable actors; ii) a comprehensive mapping of available measures and solutions; iii) a global framework for ESG risk assessment, monitoring and reporting in value chains; iv) knowledge and capacity building to harness the potential of ESG traceability solutions, especially in emerging and transition economies.

12. For the discussion, experts addressed the following guiding questions:

- 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?
- What are the lessons learned from the COVID-19 pandemic in terms of adapting and improving the ESG performance monitoring and reporting, and how can we ensure existing and future solutions can support small actors and vulnerable groups?
- Which role can information exchange standards and advanced technologies (e.g. blockchain, internet of things, artificial intelligence) play for ESG traceability and transparency along value chains?

A. Policies and actions for ESG monitoring and reporting

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

14. There is a need to identify priority policy areas and to create a monitoring framework to promote ESG traceability in the circular economy, which could offer an opportunity to advance sustainability requirements in free trade agreements and achieve relevant SDG targets of the 2030 Agenda.

15. In the ECE region, traceability and transparency is recognized as a future policy area for both advanced economies and economies in transition. To support this commitment, ECE 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 systematic transition towards ESG traceability of sustainable value chains.

16. Experts highlighted that circular economy trade flows mainly concern secondary raw materials for production, secondary goods for repair or recycling, waste materials, and technologies and services for advancing circular patterns. In this connection, three steps identified for the transition are i) the standardization of ESG monitoring and reporting, ii) the
incorporation of focused measures in value chain policies and strategies, and iii) the support to the adoption of traceability solutions and technologies, such as blockchain.

17. Green finance regulation, together with green finance taxonomies, could be the platform for enabling such a transition, encompassing green data requirements. Product-focused legislation could include sustainable product initiatives and digital product passports, extended producer responsibility schemes, and a revision of waste shipment regulations.

18. There is a need to build trust and ensure transparency as a part of government risk management strategies, allowing countries to provide visibility into upstream and downstream activities. Current legislation covers such areas as environmental and social due diligence, transparency, sustainable reporting and thematic considerations such as modern slavery, forced labour and child labour. In the ECE region, the European Union is at the forefront with the European Green Deal and the New Circular Economy Action Plan. In the last twenty years, there has been an increase in regulations on business conduct and development impact in value chains relevant to several key sectors for the circular transition, such as agriculture, critical raw materials, construction, vehicles, IT equipment and textiles.

19. This accelerating momentum is demonstrated by the over 400 notifications 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, confirming the high demand for traceability as an entry point for market access. In such connection, the Team stressed that policy and regulatory alignment, supported by the use of global standards, is key in developing ESG traceability.

20. To address such need, it was referred that in 2021, ECE, with its UN/CEFACT, developed Recommendation No. 46 on Enhancing Traceability and Transparency of Sustainable Value Chains in the Garment and Footwear Sector. Such recommendation establishes a mechanism enabling governments and industry actors to make risk-informed decisions, overcome information asymmetry, communicate, and achieve accountability for sustainability claims. The recommendation 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 its implementation guidelines, was adopted at the 27th UN/CEFACT Plenary.

21. Furthermore, to support the development of the recommendation, ECE 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 identified key actions that businesses, institutions and governments can take to advance ESG traceability, taking into account due diligence policy and legislation, as laid down for instance through the corporate sustainability reporting directive (2014/95/EU), the New Consumer Agenda, the sustainable products initiative and the initiative on substantiating green claims.

22. Recommendations for institutions and governments on advancing ESG traceability emerging from this work and the discussion at the Team of Specialists session, include the following:

- Agree on common definitions of ESG risks and factors for the circular economy transition;
- Develop strategies, processes and mechanisms to identify, assess and manage ESG risks;
- Consider making the collection and disclosure of a variety of data mandatory, such as:
  - data from companies, including information on ESG risks and performance; and
  - data at the product level, including a clear description of sustainability impacts and compliance with environmental and social criteria to be provided in the company prospectus, with periodic reports made publicly available.
• Develop ESG indicators, methods and standards to support the incorporation of sustainability performance into financial decision-making, to ensure a level playing field, to prevent the risks of 'greenwashing', and to enhance transparency and consumer protection;
• Promote accountability for businesses to ensure a comprehensive approach to the incorporation of ESG risks into business strategies and processes;
• Support responsible production through trade policies that provide incentives to companies sourcing sustainable products;
• Educate and empower consumers to better understand and act on sustainability issues; and
• Engage with investors, trade institutions, government agencies and other relevant stakeholders in supplier countries to help industry actors, and particularly SMEs, meet sustainability requirements in export markets, which may pose a barrier to their trace capacity.

23. Recommendations for businesses to advance ESG traceability include the following:
• Comply with international and widely accepted ESG standards and codes of conduct;
• Set, disclose and implement ESG risk-related strategic objectives and/or limits in business strategies;
• Define ESG key performance indicators (KPIs) to be monitored;
• Develop methods to test resilience to ESG risks;
• Identify the gaps in data collection and in risk prevention and mitigation methodologies and take remedial actions;
• Measure the reliability of data collection systems; and
• Share sustainability-related data and information with all the relevant stakeholders, and particularly with suppliers.

B. Role of information exchange standards and technology

24. Regarding the standards and tools for advancing ESG traceability and transparency, the Team discussed the recently adopted information exchange standard that ECE with its UN/CEFACT developed under the project “Enhancing traceability and transparency for more sustainable value chains in the garment and footwear sector”. In particular, the UN/CEFACT Textile & Leather Business and Data Model supports garment value chain actors in the collection and exchange of sustainability-related information on products, processes and facilities. Through this framework, the sector can indicate its own specific information exchange requirements while complying with the overall relevant process and data structures for circular and sustainable value chains. This Business and Data Model can be applied by countries, regions or industries, and can be integrated into the software solutions of traders, agents, banks, customs and other governmental authorities, among others. UN/CEFACT programme development areas are currently expanding the model to include pre- and post-consumption, integrating the circular economy angle and developing a wide cross-industry reference data model on sustainable development and circular economy.

25. This ECE project is jointly implemented with the International Trade Centre (ITC). The ITC has developed a set of online tools “Social and Labour Convergence Program Gateway” to support traceability and transparency in the global supply chain, including a sustainability map to visualize brand supplier locations, factory profiles, social and environmental audit results and a converged assessment framework which has data collection tools and robust verification methods. In October 2021 over 6000 users were members of the system and they completed over 5000 verified assessments. The ITC will continue to update and further integrate facilities and brands that utilize the tools, provide capacity building to SMEs and integrate ECE-developed traceability standards in the Gateway.
26. The Team also noted the example of the Global Reporting Initiative\(^1\), which offers a disclosure standard on the “management of significant waste-related impacts” and requests reporting on circularity measures on both the management and prevention of waste generation and its impacts. The disclosure standard further requests that companies working with third parties determine whether those third parties manage waste in line with legislative obligations.

27. The OECD-FAO\(^2\) Guidance for Responsible Agriculture Supply Chains was presented as 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 OECD-FAO Guidance is rooted in adapting business models to identify, assess, mitigate and prevent impacts in the value chain and prioritizes them by severity and likelihood of impact. This framework on risk-based due diligence provides a step-by-step approach to how companies can integrate due diligence into their operations and supply chains.

28. Considering that nearly 1/3 of the world did not have access to adequate food in 2020 and that global food demand is projected to increase up to 56 per cent by 2050, the role of the agriculture sector is increasing. In addition, while recognizing that agriculture, forestry and other land use account for 24 per cent of global gas emissions, the Team flagged the importance of a systematic approach for the sector across countries.

29. The expert from the World Trade Organization welcomed ECE efforts in developing tools that foster traceability and transparency, as they will be of great importance for the WTO Committee on Trade and Environment and their initiatives on plastic pollution and trade and environmental sustainability.

30. 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 associated with technology adoption and the related need for capacity building. Special attention should be given to information exchange standards and digital tracking technology—enablers of traceability and transparency.

31. To meet the increasing demand for ESG traceability and transparency, there is a need for evidence, trust and automatization. This could be achieved through the development of verifiable credentials, with the support of a decentralized model based on new technology standards from the World Wide Web Consortium and semantic standards from UN/CEFACT. In this model there is 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.

32. Blockchain technology provides the capability for immutable transactions and decentralized exchanges, including smart contracts and consensus algorithms supporting traceability for sustainable value chains. Traceability is highly dependent on key data elements, which are the data inputs required to successfully trace products and/or their ingredients/components parts through all relevant events. Key data element themes for sustainability include plant protection, biodiversity, labour, climate, gender, land, value distribution, water, food, and agricultural products.

33. The Team discussed the problem of product identification post consumption in the garment sector. Speakers proposed the digitalization of products using the internet of things and creating 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 the digital identification of products in the circular economy in fashion and retail. This would prevent data overlap and data complications due to different technology needs. Product passports, such as the ones that the EU is planning to develop, can be enabled by decentralized and open-source data systems.

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\(^2\) Food and Agriculture Organization of the United Nations (FAO).
C. Outcomes of the discussion:

1. Considerations for inclusive development

34. While recognizing the growing need for ESG traceability and transparency to advance the circular transition, the team emphasized the critical importance of including relevant actors and stakeholders from developing and transition countries in discussions to avoid creating barriers, particularly for small and medium-sized enterprises.

35. Capacity building and development of local infrastructure also play an important role as it has the potential to further accelerate the introduction of sustainable practices in emerging economies and countries in transition.

36. Consumers and businesses in downstream trade and retail are increasingly concerned with how sourcing impacts vulnerable groups—including children. Responsible parties should avoid and address adverse social and environmental impacts by using products and services that take into consideration the issues of climate change, natural resources depletion, and poor labour conditions, including the use of child labour. Globally, more than 70 per cent of child labour takes place in the agricultural sector.

2. Possible future activities of the Team of Specialists

37. This Team can play an active role in supporting governments, institutions, businesses and other relevant stakeholders to enable the green and digital transformations towards a more sustainable, inclusive and resilient economy. This can be achieved by: i) looking at available approaches and tools for traceability, building on the work conducted under the ECE project on traceability and transparency in the garment and footwear sector, ii) exploring ways to assess and mitigate ESG risks along value chains in critical sectors for the circular economy, iii) facilitating the sharing of best practices and lessons learned to contribute to policy coherence and harmonization of ongoing efforts, iv) identifying the possible elements of a common framework to promote ESG traceability across different key sectors for the circular transition, which can also address potential barriers to SMEs and vulnerable actors in emerging and transition economies, v) contributing to building knowledge and capacity to harness the full potential of available solutions for ESG traceability of sustainable value chains, including advanced technologies.

38. This Team should extensively involve the private sector in discussions and revisit the topic of public access to enabling technologies, such as blockchains.

39. Fostering collaboration between the ToS and UN/CEFACT, the Team could exchange information with the UN/CEFACT Bureau about priorities and ideas for potential future value chain and sustainability work projects, provided the necessary resources exist.

Decision 21-03: The Team of specialists took note of the interventions 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)

40. 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 ECE 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).

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

42. The secretariat informed the delegates that the report of this meeting will be presented to the UN/CEFACT 2022 Plenary session. The group will have an internal discussion on the work plan.

**Decision 21-04:** The Programme of Work of the Team of Specialists for 2021-2023 was adopted by the ECE 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)**

43. No other business points were raised.

**VII. Adoption of decisions and draft report of the first session (agenda item 7)**

44. Delegates and participants agreed on decisions 1 to 4 and will receive the report of the session (ECE/TRADE/C/CEFACT/2022/24).
Annex


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

2. UN/CEFACT has 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 to be used by governments to develop environmental, social and governance traceability approaches and standards for sustainable value chains.

A. Garment and footwear sector

- The UN/CEFACT secretariat has been implementing a project called “Enhancing transparency and traceability for more sustainable value chains in the garment and footwear sector” which has produced a toolbox which includes policy recommendations, implementation guidelines, and a global information exchange standard, a blockchain system to advance traceability, transparency and sustainability, and had done so with wide engagement from industry actors.

- ECE 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 the implementation of the recommended measures and to facilitate the exchange of good practices and lessons learned.

- As another example, the ECE blockchain pilot in cotton and leather value chains, currently in its final phase, defines the value chain and data model for the traceability of cotton and leather 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 the blockchain modules developed, with an integration test for partner certification and necessary key performance indicators (KPIs) stored on blockchains; and training and roll-out with pilot partners. The project is being implemented with industry partners (brands, manufacturers, farmers, certification entities, blockchain solution providers) and targets both advanced and developing economies, such as Brazil, China, Denmark, Egypt, Germany, India, Italy, Peru, Switzerland, Uzbekistan and the United Kingdom. It is highly relevant for sectors with high circular economy potential, which directly contributes to SDG12 for responsible production and consumption.

B. Fishery sector

3. UN/CEFACT has also developed an open and global standard that allows for 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. The use of such standard by Fishery Management
of Organizations has been made mandatory in all EU Member States and major emerging economies trading fish with the EU.

C. **Agri-food sector**

4. In the agri-food sector, UN/CEFACT has developed other 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 for electronic information exchange on internationally traded agricultural produce. Electronic information exchanges strengthen regulatory control in agricultural trade and significantly reduce food loss in the value chain. 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 agricultural production.

D. **Transport and logistics sector**

- 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 developed through the Cross Industry Supply Chain Track and Trace project.

- Efficient trade logistics are at the forefront of traceability. To enhance operational performance, improve security awareness, improve compliance, enable green maintenance, contribute to product quality controls, and provide visibility on infrastructure, UN/CEFACT has 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.

5. The ECE secretariat, with UN/CEFACT, is committed to continuing its joint work with member States and supporting the Team of Specialists in enabling ESG traceability for sustainable value chains in the circular economy to achieve the SDGs of the 2030 Agenda for Sustainable Development.