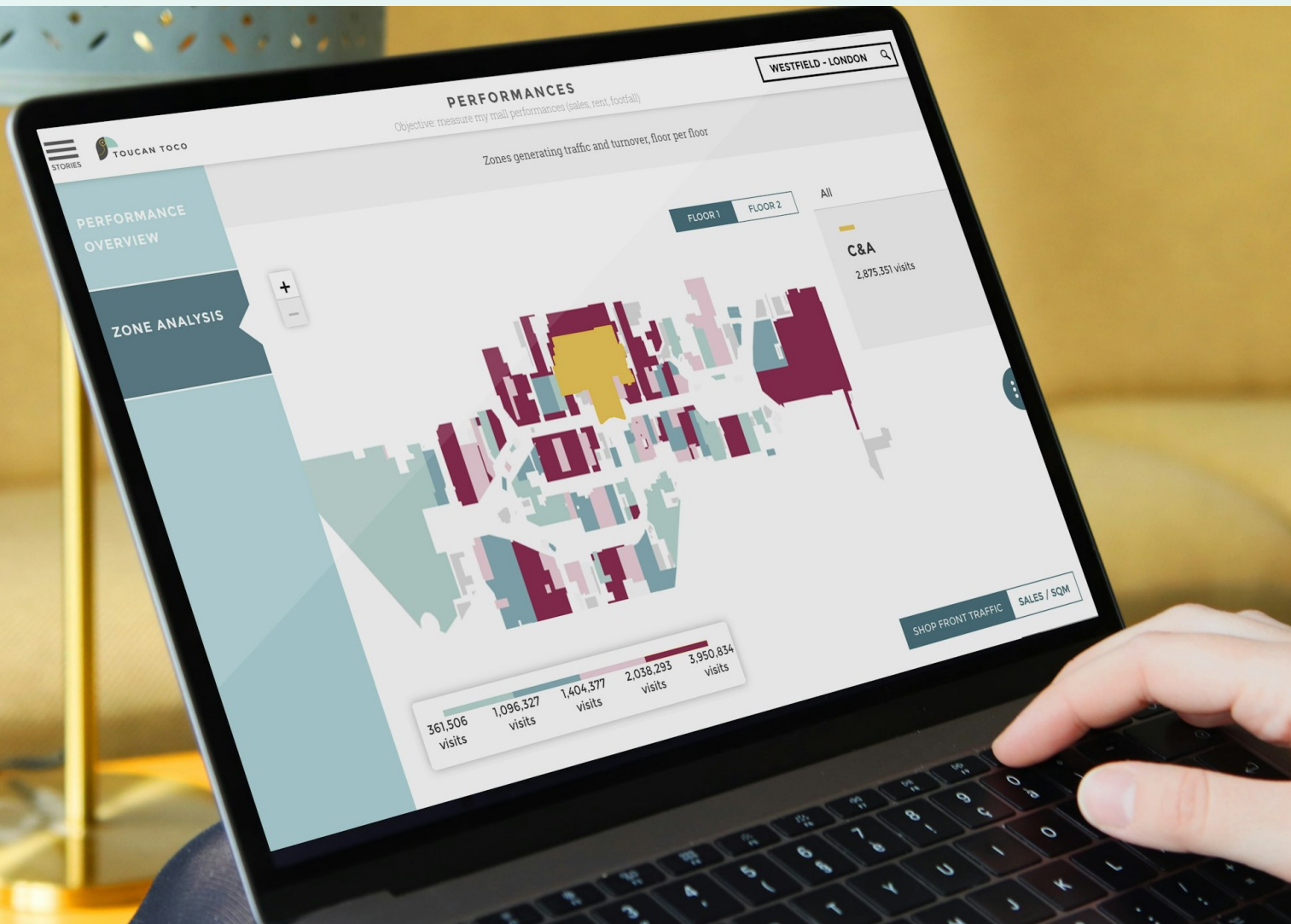


Supply Chain Mapping Guide

DD-07 Guide, Version 1.1





Version History

Version	Date	Note
1.0	21 January 2025	First version published.
1.1	5 May 2025	Revised to align with Version 1.5 of the Sustainability Framework .



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About This Tool



About this tool

This tool provides an introduction to supply chain mapping and explains how it is used as a critical early step in robust due diligence processes.



Other relevant tools

The **Supplier Information Collection Template (DD-08)** can be used as a practical example demonstrating the type of supplier, product and supply chain information you should be collecting.

Use the **Supplier Letter Template (DD-05)** and the **Supplier Consent Form Template (DD-06)** as templates to inform suppliers about your due diligence process and ensure their consent to enable supply chain actions.

Use the **Digital Tools for Responsible Sourcing Guide (DD-16)** to evaluate potential digital solutions for product and supply chain information management.

1. Introduction: Managing Supply Chain Information

A fundamental step of due diligence is ensuring that you can access information about the product you are sourcing. To assess potential legality and/or sustainability risks associated with a product (or the materials from which it is comprised), it is essential to understand the supply chain, from production, through processing to the end user. It is also necessary to have access to relevant information and documentation from the different steps of the supply chain.

Collecting product information and mapping your supply chain will enable you to:



Gain an overview of each product's components, the raw materials or ingredients it contains or was made from - or in the case of reared animals, the commodities they were fed with.



Access relevant documentation that can be used to evaluate risks of legal non-compliance and/or the adherence of the raw materials and supply chains to the sustainability principles of your Responsible Sourcing Policy.



Gain an overview of the origin of each component or raw material (location of production) and its individual associated supply chain.



Conduct a robust risk assessment.



Identify all relevant actors at each step in your supply chain.



Initiate necessary mitigating action in cases where risks are identified.

Creating a **supply chain map** involves identifying the various actors involved in the trading, handling and processing of the materials or products you are sourcing.

Typically, a supply chain mapping exercise starts at the point where your organisation sits within the supply chain and looks 'upstream' towards the point of production – i.e., at the steps between

where the product or commodity was produced downstream and where you physically receive and/or take legal ownership of the material or product.

1.1 Challenges in Supply Chain Mapping

Robust information and comprehensive supply chain mapping are crucial for effective supply chain management. A fully mapped supply chain, tracing materials back to their raw material producers, adds significant value to any due diligence system. However, even with detailed mapping, challenges remain. At each stage, materials may be mixed with unidentified or unmapped sources, introducing undesirable elements from a sustainability or quality perspective.

Robust supply chain information and mapping are essential for detecting and mitigating risks associated with unidentified and undesirable materials entering the supply chain. Precise tracking of transactions and volumes enhances transparency and builds trust, enabling organisations to uphold the integrity, quality, and sustainability of their products.

For organisations sourcing via long and/or complex supply chains, having a thorough and accurate overview of their supply chain can be extremely challenging. Consider the following:

- Each supplier might purchase from multiple suppliers, who, in turn, also source from numerous suppliers. This results in a vast supply chain map with many roots of origins.
- Physical flows of material might differ from financial flows (ownership) of material. For instance, a trader located in country A may purchase/sell products that will never actually enter country A in physical form. Outsourcing of processing or production activities is another example of this.
- Supplier identification itself may prove tricky too. For example, it is common within corporations, for parent companies to trade with subsidiary entities, which may not be clear to an outsider. This lack of clarity makes it difficult to identify trade and transaction flows. Even identifying the legal entities behind company names or transcribing the names of organisations between languages might lead to varying corporate names being misidentified or recorded.
- Suppliers can change their supply base regularly by adding new suppliers and ceasing business with others. This can lead to rapidly incomplete and out-of-date supply chain mapping. Continually reviewing supply-chain maps and engaging with suppliers can help you mitigate the risk of mixing with unidentified or undeclared material.

In the following sections, we provide guidance on how to collect and manage supply chain information.

2. Evaluating and On-Boarding Suppliers

Evaluating a potential or even an existing supplier can assist you in ensuring that you will be able to achieve your due diligence objectives. You should ensure that you have basic information about your suppliers before purchasing from them. This information includes, but is not limited to:

- Basic information about the supplier's organisation profile
- Information about supplier product range
- The presence of procedures and systems within the supplier, to manage relevant business processes
- The supplier's upstream supply chain information, including sources and sub-suppliers
- Information about supplier's own sustainability activities and responsible sourcing policies

- Information about due diligence or other systems implemented to meet sustainability regulations and/or the responsible sourcing policies of the supplier, including the conducting of risk assessments and the risk mitigation measures employed (if relevant).
- Relevant certifications such as voluntary certification or ISO standards, environmental certifications (e.g., ISO 14001), and social responsibility certifications

The evaluation and approval of suppliers may be more or less structured, depending on the level of control you wish to achieve. However, it is recommended to always evaluate your suppliers at least to gain a basic understanding of their ability to manage product flows and participate in achieving your due diligence objectives.



Adapt and use the [Supplier Questionnaire Template \(DD-04\)](#) as a basis for conducting your supplier on-boarding process and supplier evaluation.

3. Ensuring Supplier Collaboration

Foster collaboration with your suppliers to create accurate supply chain maps and obtain relevant information from entities within your supply chains.

Your suppliers are essential to the successful implementation of your due diligence system, and they should be adequately informed about relevant requirements or expectations applicable to them. This is likely the case for the entities in each tier of your supply chains, potentially back to the level of production or harvest.

To ensure your suppliers collaborate, you need to communicate clearly with them and foster clear communication with sub-suppliers, if applicable. In some cases, supply chains may be too complex, and it may not be possible to communicate and work directly with all entities. In other cases, suppliers may be unwilling or unable to collaborate in the way you wish. In such cases, you may need to consider whether effective due diligence is possible or not, as well as whether alternative approaches are necessary to support or engage with suppliers.

Suppliers should provide information relevant to the products they supply to you. Beyond the information available on sales and shipping documents, they should be instructed to furnish you with the necessary information that enables you to conduct effective due diligence.

This means they should provide all relevant information about the products and materials relevant to each product, as well as information that will support your evaluation of sustainability risks.

Where they have the resources and are able to do so, suppliers could be called upon to implement—or support the implementation further upstream of—applicable risk mitigation actions if the success of these depends on their collaboration.

Where appropriate¹, suppliers should:

- Identify a representative responsible as liaison with your organisation on matters relating to your Responsible Sourcing Policy, and in relation to the conformance of the supplier with the requirements or responsibilities applicable or assigned to them, as part of your due diligence system implementation.

¹ Exercise best judgement as to under which circumstances these requirements of suppliers are applied. For example, a retailer or secondary manufacturer may require both provisions of their tier 1 suppliers. However, for a mill sourcing from possibly thousands of smallholders, these provisions may be neither necessary nor possible.

- Provide consent² to allow representatives of your organisation to conduct audits to verify conformance with relevant requirements of your Responsible Sourcing Policy.

To manage relationships with your suppliers and ensure that you gain access to sufficient supply chain information, you should properly inform them of your Responsible Sourcing Policy and due diligence activities and request their collaboration. Specific training measures, guidance materials, capacity building, or the provision of other types of support may be necessary.

Afterwards, ensure that suppliers confirm their understanding of your due diligence needs and consent to support you and provide sufficient information.



Adapt and send the [Supplier Letter Template \(DD-05\)](#) to suppliers at the start of the due diligence process. Receive a signed copy from the supplier to indicate that they understand and agree to support and collaborate with you. Pair this with the [Supplier Consent Form Template \(DD-06\)](#) to ensure that supplier's consent to sharing relevant information.



For organisations seeking to align exclusively with the EUDR, both the [Supplier Letter Template \(DD-05\)](#) and the [Supplier Consent Form Template \(DD-06\)](#) contain EUDR-specific versions.

4. Collection of Supply Chain Information

Once a secure relationship is established with your suppliers, you can begin collecting detailed information about the products and supply chains. Often, this begins with acquiring information from your direct supplier and potentially from the next tiers in the supply chain, sometimes all the way to the entities and areas involved in the production of raw materials or commodities.

Looking upstream, supply chain mapping starts with the tier one suppliers.

² Even if no supplier audits are planned, the need to take risk mitigation actions may change over time. Examples include if sub-suppliers or sourcing regions change. It is therefore advisable to always seek (in advance) this consent included in agreements with direct suppliers.

Example of Supply Chain Tiers

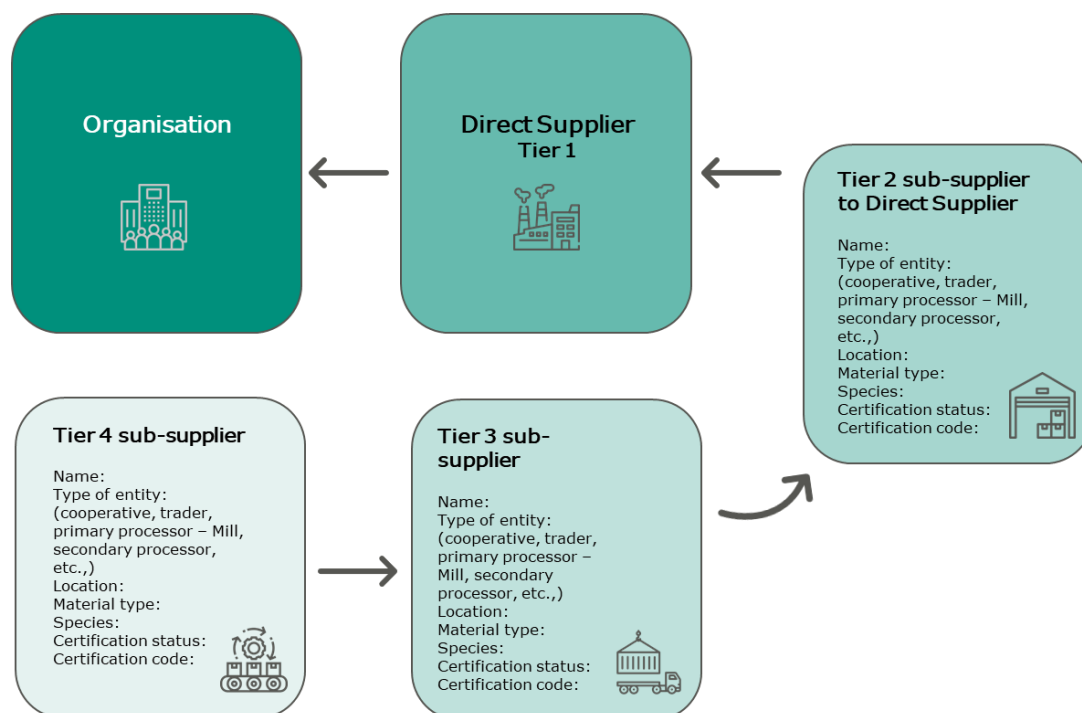


Figure 1: Example of a supply chain mapping with numbers for the different tiers

Depending on the product you source, different information will need to be collected. If you are sourcing a simple product consisting of perhaps only one type of material or component (e.g., sawn timber, a basic agricultural commodity, etc.) the collection of product and supply chain information may be simpler than sourcing a complex product consisting of different components or materials, each of which may have different supply chains.

In the Preferred by Nature Due Diligence System Toolkit, we have developed a number of Excel-based spreadsheets as examples of data collection and management (see, for example, step 4.3). We are aware that Excel is not often used for this purpose, and the Excel sheets should only be considered illustrative.

In the following subsections, we outline some basic steps to support your supply chain data collection and information requirements.

4.1 Identify the Components, Ingredients or Raw Materials in Your Products

An accurate supply chain mapping exercise will start by looking at the material or product you are sourcing. Does it comprise multiple components or ingredients? If yes, these different components or ingredients may have different origins, and your supply chain map will need to reflect any branching out to different sources or origins.

An example is plywood (Figure 2), which is made using different layers of veneers, sometimes from different species. If a product consists of multiple components from different sources, it will be necessary to map the supply chain for each individual component.

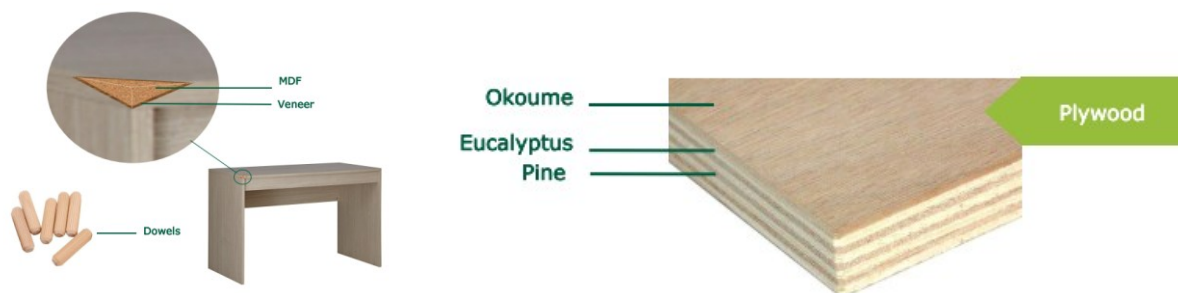


Figure 2: A breakdown of the materials in plywood

However, consider that a product containing only one component, material or ingredient may be comprised of materials from different sources that are aggregated at some point in the supply chain. Your supply chain maps will need to reflect those multiple origins within the material or product you are sourcing.

For example, the natural rubber in a car tyre will certainly be sourced from many rubber plantations, and likely from different jurisdictions and even countries, although natural rubber only constitutes one material type.

A *unique* supply chain can be defined as a linear supply chain back to each individual forest or farm plot. However, to break down supply chain mapping and the collection of information regarding your supply chains into manageable stages, it is often advantageous to start by mapping each supply chain back to the first point of collection (e.g., pulp mill, palm oil mill, silo, aggregator, etc.) and then collecting information about the different sources (land plots) feeding it.

This approach is particularly useful for certain products than can potentially be derived from hundreds, if not thousands, of sources, such as pulp or paper, palm oil, natural rubber, cocoa or other products for which smallholder production is common.

Box 1 provides examples of products composed of different components and commodities and products of single components or commodities coming from multiple sources (supply chains).



Blended Coffee Capsule: Coffee is a blend of Arabica beans from Ethiopia and Colombia with Robusta beans from Vietnam. The Ethiopian Arabica beans are sourced from smallholder farms, while the Colombian Arabica beans come from larger plantations. The Vietnamese Robusta beans, on the other hand, are produced in intensive agricultural systems.



Chocolate Bar with Global Cocoa Sources: Cocoa beans are sourced from West Africa, mainly Ghana and Ivory Coast, but also Ecuador, and Madagascar. West Africa's cocoa involves small-holders and large-scale farming operations with a supply chain geared towards volume export. Cocoa from Madagascar and Ecuador, on the other hand, is shade-grown and produced on smaller plots, often with other crops on the same field.



Rubber Footwear Featuring Multiple Rubber Types: Footwear incorporates natural rubber from Thailand, Malaysia, and Vietnam. These supply chains include large-scale plantations, smallholder plots, as well as indigenous forests where the rubber grows beneath a natural canopy cover.

Box 1: examples of component product supply chains

4.2 Identify Relevant Entities in the Supply Chain

For each product you are sourcing, map the supply chains linked to each specific component or raw material it contains, or was made with³. To gather information about the component's origin and journey, you will need to survey your suppliers to collect information about their product components and linked supply chain.

The level of information you require about your supply chain will vary depending on the nature of your due diligence system, the relevant sustainability topics included within your Responsible Sourcing Policy, and the level of risks inherent in your supply chains. As a result, in some cases, it may be enough to obtain information on your supply chain back to the country of production or export.

In some cases, it may be required to know the entities involved in producing the raw materials or commodities and identify all individual areas (plots of land) of production within each forest or farm. This latter example is the case with the EU Deforestation Regulation (EUDR).




Organisations wishing to align with the [EUDR](#) will need to obtain geolocation data for all plots of land (forest or farm) from where the raw material (relevant commodity) was produced. It may, therefore, be necessary for you to map all entities at every tier in the supply chain back to the forest or farm.

However, this activity may not need to be obtained directly by your organisation if the geolocation data is already being transferred downstream through the supply chain via the Information System or other means.

Additionally, if your organisation is further down the supply chain, you may not need to obtain geolocation data directly. Organisations placing relevant products on the EU market or making them available can refer to due diligence statements submitted by previous operators, provided they ascertain that due diligence has been properly exercised according to the regulation. Referring to previously submitted due diligence statements allows operators to access and view geolocation data submitted by earlier operators, if those operators choose to share the data with downstream entities.

It is important to note, however, that operators relying on previous due diligence statements remain responsible for the compliance of those products. Therefore, they are encouraged to verify the accuracy of the information.

³  Organisations wishing to align with the [EUDR](#) and trading cattle, may wish to map supply chains of animal feed, in order to ensure that this is also deforestation free.

4.3 Collect Information on Products and Supply Chains

The following information is considered important for the purpose of supply chain mapping:

- **Direct Supplier details** – Name; address; EORI⁴ number for EU-based suppliers, if applicable.
- **Product Description** – Commercial/trade name
- **Product ID** – Supplier's unique identifier which allows the organisation to locate all information relevant to a specific product.
- **Batch ID** - (if applicable) Supplier's unique identifier which allows the organisation to locate all information relevant to a specific batch of production
- **HS Code/CN Code (EU)** of the product
- **Certification Status of the product and claim** – Certification scheme if applicable, claim (e.g., 100%, X%, Mix, segregated, identity preserved, etc.)
- **List of the separate relevant components, materials or ingredients** which the product contains, was made using or was fed with, along with the individual supply chains relevant to each of these (as applicable). NOTE: this is the case for multiple-component products as well as complex products which comprise mixtures of materials.
- **Species names** – Mainly relevant for wood (including common and scientific full names). NOTE: for composite products all (known as present or potentially present) species should be recorded.
- **Quantities** by weight, volume or other measure
- **Country(ies) of origin** (subnational or regional if known and relevant)
- **List of the Supply chain entities back to (as applicable) the country of production or the first tier in the supply chain collecting material from forest or farm** (i.e.: sawmill, pulp-paper mill, cooperative, etc.).
- **Trade and transport documents** (or other documents or information) that demonstrate a supply relationship between different supply tiers, to evidence the supply chain information provided.



For organisations seeking to align with the EUDR, the following is necessary as well:

- **Due Diligence Statement Reference Numbers** – Where the product has already been placed on the EU market or exported from it, provide the relevant Reference Numbers and Verification (Security Token) Numbers of Due Diligence Statement(s) that have been previously submitted - and other relevant information of importance.
- **Geolocations of all plots of land** associated with the production of the commodities associated with the product.
- **Date or time range of production for the commodities** associated with the geolocation data.

⁴ EORI (Economic Operators Registration and Identification) is a unique number required for businesses and individuals involved in customs activities to import or export goods within the EU.



Use the **Supplier Information Collection Template (DD-08)** to gather and record supplier information and details about each supply chain. The supplier should be asked to fill in this form prior to the agreement to purchase.

4.3.1 Products with Multiple Components

Obtaining farm or forest-level supply-chain information can often be extremely difficult for complex and/or composite materials (e.g., pulp and paper or MDF, chocolate, natural rubber products, coffee, etc.) where inputs may be sourced from hundreds of different farm or forest units and materials may be manufactured by continuous processing.

Rather than attempting to identify risk in a specific forest or farm, it is often more useful to focus on the cooperative, collection point, or mill as the focal point of the assessment. It is easier for these entities with direct access to the production to access information about sources, the certification status of the individual sources, the species (wood products only), etc⁵.

When obtaining information about multiple components, ingredients or raw material inputs of a specific product, the same data requirements identified in section 4.3 above apply. Additionally, the following data points should be available for each specific component or input:

- **Description** of the components, ingredients or raw materials input relevant for each tier,
- **Reference to the applicable product** the component is associated with.

4.4 Level of Supply Chain Detail Required

The level of supply-chain detail required may vary when mapping your supply chain, but it should be sufficient for conducting a risk assessment. For the risk assessment, it may be necessary to trace a product or material back to the country of production, or to the sub-national area. Alternatively, it may be necessary to trace the supply chain back to individual areas of production, such as harvest areas or farms.

Information collection can also be an iterative process, where you will start by mapping back to the country of origin of the raw material, or perhaps to the cooperative, collection point or mill. Depending on circumstances, such as the risks present at the country or regional level, it may be possible to stop here. Alternatively, you may have to map further back to the specific areas of harvest/production.

Factors that may influence the level of detail required often include the **risks identified** in the country of production. For instance, if you are sourcing a product from a country where the risk of legal non-compliance during harvesting activities or production varies between sub-national regions or even between individual forest concessions or farms, it may not be sufficient to simply identify the country of harvest/production. In this case, you will need to work with your suppliers to **identify all links in your supply chain** back to either a sub-national region or even the individual forests or farms of relevance.

⁵ NOTE: For the purposes of a risk assessment this report is a self-declaration, and the information contained within it may need to be validated and verified for its accuracy.



For organisations seeking to align with the EUDR, the following will be required:

Organisations implementing a full DDS aligned with the EUDR will need to obtain geolocation information and the date or time range of production for all plots of land where the relevant commodities were produced. To do this, it may be necessary for them to fully map their supply chains back to the forest or farms from which they are sourcing.

4.5 Obtain Supporting Evidence for Supply Chain Maps

Depending on the level of confidence in your sources, a supply chain mapping exercise may rely purely on a declaration by your direct supplier (e.g., via names of sub-suppliers provided via a survey filled by your direct supplier) or may rely on many data points, documents or other evidence to verify that trade is happening as declared by your suppliers.

We advise strengthening your supply chain mapping exercise as much as possible, by collecting information that evidences the trade and transport of products and materials along the supply chains described by your suppliers. This information builds confidence in your supply chain map by evidencing the links between suppliers and sub-suppliers.

Sales documents (i.e., commercial invoices) and official transport documents⁶ can demonstrate transactions between different entities in the supply chain and validate the supply chain information provided to you by your supplier. These documents usually contain essential information, including buyer and seller identification, date of transaction and/or delivery, and product description:

- In general, invoices are the official document showing the transfer of legal ownership between two entities. So, invoices can be considered the preferred document to evidence transactions. It is also important to consider that invoices may also be required to verify if a product traded is certified (in cases where it is required by certification schemes to indicate a certification claim on invoices).
- However, there may be situations when transport documents are preferred and required to evidence the route of products. For example, if you need evidence that a product was exported from one country A (from tier X) to another country B (tier X+1), exporting documents such as a Certificate of Origin and Bill of Lading can provide more information than an invoice. In these cases, if exporting-importing documents (CoC, BL, phytosanitary) can evidence that the material is imported from country A to B with the Certificate of Origin and Bill of lading, we may not require the invoice.

NOTE: It is often common to request that commercially sensitive information not relevant to the supply chain mapping exercise (e.g., prices) is removed or covered from supporting documentation obtained from suppliers.

So, invoices or transport documents may be necessary to verify both the financial and physical routes of products and the declared supply chain map. However, when the physical and commercial (legal ownership) routes of a product differ, it may be necessary to collect *both* transport documents to evidence the physical route and commercial invoices to evidence the commercial route.

⁶ Transport document⁷ is a generic term which includes but is not limited to the following types of documents: Official Transport permit, Official Packing List, Certificate of Origin, Bill of Lading, Phytosanitary Certificate, Official Import/Export documents.

5. Approach for Collecting Geolocation Information

Collecting geolocation data of the origin of products is a requirement for companies seeking to align with the EUDR.

Geolocation data should be shared by a supplier with a buyer/receiving entity each time the physical location or ownership of a product changes. It should also be made available on request by suppliers or made available for regulatory compliance when requested by a competent authority.

When sharing geolocation data, an appropriate identifier should be provided. This could be the number of an order or invoice, or any other identifier that both the sender and receiver can understand.

Geolocation data should always be organised and structured in a way that allows for efficient retrieval and access. Spatial Indexing Systems help in this task, providing a method for organising geographic data into a format that is easy to search and manage. This makes handling large amounts of location data more efficient and ensures data quality by fixing common issues like non-closed polygons and inaccurate data projections. An appropriate Spatial Indexing System also reduces the size of data files, making them easier to manage.



For organisations seeking to align with the EUDR, the following applies:

The EUDR imposes stringent requirements to ensure that commodities linked to deforestation or legal violations are not placed on the EU market or exported from it. A crucial aspect of compliance is the accurate and effective sharing of geolocation data throughout the supply chain.

Below we have outlined some steps your organisation may take to ensure alignment with the regulation. Additionally, we provide references to additional resources that may be useful for this topic area:

1. Understand EUDR geolocation data requirements. Identify the scope of affected products

- Review the EUDR requirements, FAQs and associated guidance notes, focusing on the specific obligations related to geolocation data and the obligation to provide geospatial information on the origin of commodities.
- Determine which products and commodities⁷ in your supply chain fall under this regulation and require geolocation data.

2. Standardise data formats and structures

- **Choose** supported data formats such as GeoJSON or WGS-84, with EPSG-4326 projection for your geolocation data to ensure compatibility and ease of sharing. Consider using the structure outlined in the [Geospatial Data Sharing Protocol \(GDSP\)](#) to facilitate consistent and efficient data exchange within the supply chain.
- Ensure that all geolocation data includes relevant metadata, including collection dates, accuracy levels, and data source identifiers.

3. Assess your capacity to obtain geolocation data

- Liaise with your different suppliers to understand their readiness and capability to provide geolocation data. This will depend on factors such as their level of preparation for the EUDR, their role in the supply chain, the nature of agricultural or forest resources they manage, the supply chain complexity, and their access to resources needed for geolocating their forest/farm plots.
- Determine your ability to obtain existing geospatial data from credible sources such as government databases, certification bodies, or previous audits.
Identify potential challenges in acquiring geolocation data from upstream suppliers.

4. Develop a strategy for obtaining, storing and sharing downstream geolocation data

Based on your assessment, establish how you will obtain or receive geolocation data, store it appropriately, and share it with downstream

⁷ soy, oil palm, cattle, wood, cocoa, rubber and coffee

buyers. Specify the extent and precision of data required to meet EUDR requirements.

Clarify your geolocation data needs with your supply base

- Establish clear agreements with supply chain partners on how geolocation data will be shared, including responsibilities, data formats, and update frequencies.
- Maintain unique identifiers for each organisation involved in the data-sharing process to ensure traceability and accountability.

For smallholder communities

- If your organisation is positioned closely to smallholder (or other) communities that might struggle with providing geolocation data, **consider how best to support them**. This could include directly involving them in geolocation data collection or collaborating with existing initiatives or other stakeholders to obtain the necessary information.
- Evaluate the most suitable methods for data collection, taking into account factors such as: i) the utility, cost and access considerations of different technologies (satellite imagery, GPS devices, mobile applications, and drones); ii) options for training/capacity building, iii) financial barriers. Consider the relative advantages/disadvantages of each approach.
- Look for opportunities to join existing initiatives or collaborate with other stakeholders to streamline data collection efforts.

5. Establish data collection methods

If your organisation is directly involved in geolocation data collection, implement field collection measures using GPS-enabled devices to collect accurate data from commodity production sites. Additionally, provide training for field staff and local partners on effective data collection techniques. In areas where on-site data collection is impractical, use satellite imagery and drones to gather the necessary information.

The following Preferred by Nature publications provide more detail on how to collect and transfer geolocation data in the supply chain:



Access the [Geospatial Data Sharing Protocol](#) as guidance on how to transfer and share geospatial points or polygons and other data.

Refer to the [Guidance on the collection of polygon location data](#) developed by [ISEAL](#), for guidance on the collection of polygon location data.

6. Managing Supply Chain Information

If a supply chain map is simple, it probably can be maintained in a spreadsheet. However, be aware of the limitations associated with using Excel spreadsheets for representing supply chain information. While spreadsheets are widely used, they face significant challenges in effectively mapping networked suppliers and managing multiple links between information, such as the same component being used in different products or products that utilise various raw materials⁸.

Organisations with a large number of complex supply chains will most likely need to use a customised supply chain data management system. Supply chain mapping software solutions can be extremely useful for storing supply chain data, and helping you better visualise your supply chain.

To enhance the quality of collected information, consider whether suppliers have already undertaken a supply chain mapping exercise for other buyers. If so, aligning questions asked could reduce redundancy and improve data quality.

Preferred by Nature strongly recommends the adoption of dedicated digital tools, particularly databases, for more accurate storage and representation of supply chain information. Unlike spreadsheets, databases allow for the creation of dedicated and linked records, providing enhanced capabilities to compile, aggregate and assess data through reports and dashboards. Additionally, data is centralised in a single repository, mitigating the risk of multiple, conflicting versions that can arise from spreadsheet files being duplicated and stored across different computers or cloud storage platforms.

Databases can vary in form; they can be developed in-house (for example, using Microsoft Access) or sourced from external providers, offering either off-the-shelf solutions or services fully tailored to an organisation's specific needs. Adopting such digital tools is essential for maintaining an up-to-date, coherent, and comprehensive view of your supply chain information, ultimately leading to more informed decision-making processes.



Refer to the [Digital Tools for Responsible Sourcing Guide \(DD-16\)](#) to explore how digital tools can support your sustainable sourcing and traceability efforts. Learn how to assess the alignment of digital tools' objectives with your organisation's specific needs.

⁸ Be aware of the limitations associated with using Excel spreadsheets for representing supply chain information. While spreadsheets are widely used, they face significant challenges in effectively mapping networked suppliers and managing multiple links between information, such as the same component being used in different products or products that utilise various raw materials.

Spreadsheets are also prone to becoming outdated quickly and may not be the most user-friendly option for suppliers to fill out. This can lead to incomplete declarations due to the lack of time (or appropriate incentives) for suppliers to thoroughly complete these documents. Moreover, processors often receive similar requests from multiple buyers, leading to unnecessarily duplicated efforts.

7. Addressing Issues of Confidentiality

The exercise of supply chain mapping requires a level of transparency and trust from your suppliers because they will have to share information about their sourcing and supply chains.

This can trigger concerns from suppliers, as this information is often regarded as commercially sensitive and may not be habitually shared with customers. It is, however, a necessary step towards achieving your responsible sourcing objectives.

If you are under regulatory requirements to implement traceability by obtaining supply chain information—including geolocation data—you may need to explain this to your suppliers so they understand the necessity of it and the sanctions (and associated business implications) you may face if you fail to appropriately map your supply chains.

In any case, a key element in overcoming concerns about sharing sourcing information is building trust with your suppliers to ensure long-lasting relationships between all parties along the supply chain. In addition, your suppliers are very likely to receive similar requests for information from different customers subject to the same regulatory requirements, which will facilitate the implementation of transparency procedures.



For organisations seeking to align with the EUDR, it should be noted that the EU Deforestation Regulation does not require complete transparency of all supply chain entities. Even if it does require geolocation data to be transferred from the plot of land of production, it does not require all intermediate steps to be identified and reported.

It is, therefore, possible to provide information to buyers further down the supply chain without disclosing information about intermediate sub-suppliers. The key is to ensure access to geolocation data, as well as information enabling risk assessment, not necessarily to disclose the entire supply chain.

Another important aspect to understand is the case of smallholders where concerns about confidentiality arise in relation to the sharing of what may be considered private data. Unless smallholders are direct suppliers of the operators or operators themselves, no personal information is required from the farmers and the geolocation of the land they cultivate is sufficient⁹.

8. Sustainability Schemes and other Assurance Systems

Incorporating third-party sustainability certification or other assurance systems into your supply chain information mapping can be a highly effective way to ensure that your products—and the raw materials or commodities from which they are derived—meet the sustainability and traceability requirements outlined via your Responsible Sourcing Policy.

When sourcing certified or verified materials, it is critical to consider the specific certification scheme and system requirements in relation to your organisation's objectives. Each system will

⁹ [European Commission FAQ \(#8 What if property registers or titles are unavailable?\)](#)

have unique criteria and methodologies—which can differ significantly between schemes—that can impact how well they align with your sustainability and traceability goals.

8.1 Promoting Responsible Production

Certification systems like the Forest Stewardship Council™ (FSC™) and the Rainforest Alliance have developed rigorous standards to ensure that agricultural or forest commodities are produced legally. These standards include compliance with local, national, and international laws related to land use, labour rights, and environmental regulations.

Additionally, sustainability measures comprise a core component of certification systems such as these. The FSC and Rainforest Alliance certification systems, among others, promote environmentally and socially responsible management of natural resources, focusing on maintaining biodiversity, protecting ecosystems, and ensuring that production practices do not deplete resources. They also promote fair labour practices and improve working conditions by ensuring that certified entities adhere to social standards and ethical guidelines, as well as enhancing the well-being of local communities and Indigenous Peoples by encouraging responsible interactions with them.

By choosing materials certified under these schemes, organisations can reduce the risk of sourcing raw materials which have not been produced in compliance with local regulations, thereby avoiding legal repercussions and enhancing their reputation for ethical practices.

8.2 Enhancing Traceability

Sustainability schemes and other systems can support your work to trace and map your supply chains by providing transparent and verified information about the origin and journey of products. These schemes often require detailed documentation and auditing of each stage in the supply chain, ensuring that all processes meet specified sustainability standards and allowing for clear tracking from source to final destination. Certification databases can supplement your efforts to obtain information on certified supply chain entities.

However, most certification and verification schemes still rely on paper-based tracking systems for certified or conforming products, and the weaknesses and shortcomings of this approach have been well-documented¹⁰. However, a growing number of certification systems have responded by implementing robust IT-based traceability solutions. For instance, credible schemes are increasingly requiring certified forest or farm management entities to geolocate the production of materials. Advanced tracking technologies allow organisations to demonstrate the origins of their products. This can be particularly beneficial in showing conformance with due diligence regulations, such as the EUDR. It is important to understand the traceability options available in the certification system you are using.

8.3 Potential Weaknesses of Certification Schemes & Strategies to Mitigate Them

Certification systems provide a potentially valuable tool for mitigating risks, particularly where the buyer is far from the area of production or where there are many tiers within the supply chain, or where the supply chain is complex. However, they are not without their weaknesses. Understanding these potential shortcomings and proactively addressing them, can help organisations optimise the role and benefits of using certification schemes within the context of a risk-based approach to sourcing.

¹⁰ See PART II Cross-cutting issue, Section 6 (Traceability and CoC) of the report: [Study on Certification and Verification Schemes in the Forest Sector and for Wood-based Products](#)

In the **Assurance System Evaluation Procedure (DD-15)**, we provide comprehensive guidance on how to evaluate certification or verification schemes to better ensure that the certification or verification systems accepted by your organisation meet the requirements of your Responsible Sourcing Policy. Tools like the **Assurance System Evaluation Procedure (DD-15)** and **Assurance System Evaluation Template (DD-15a)** will help you identify weaknesses or gaps in certification schemes and help clarify how you can work to close those gaps.



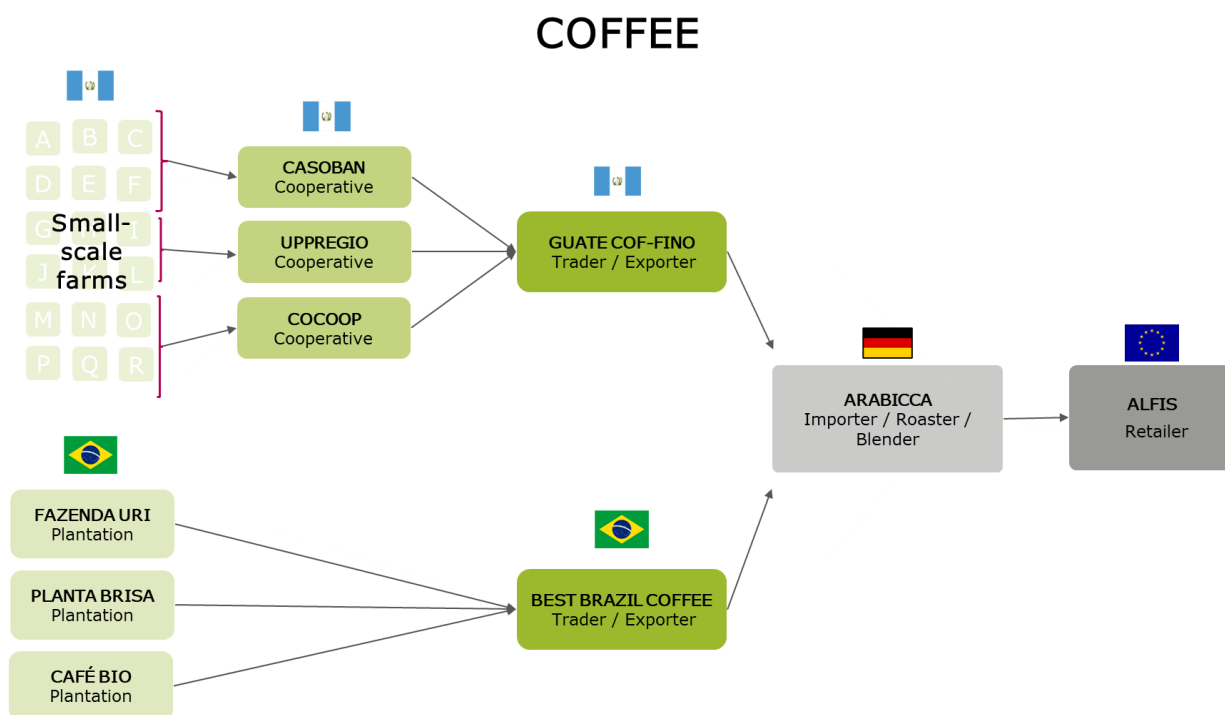
Review the **Assurance System Evaluation Procedure (DD-15)** to understand how to evaluate verification and certification schemes, ensuring that a chosen scheme covers the requirements you need to successfully implement your due diligence system.



Use the **Assurance System Evaluation Template (DD-15a)** as a checklist to assess how well a certification or verification scheme meets the requirements of the PBN-01 Sustainability Framework version 1.5.

Annex I - Examples of Supply Chains

Coffee



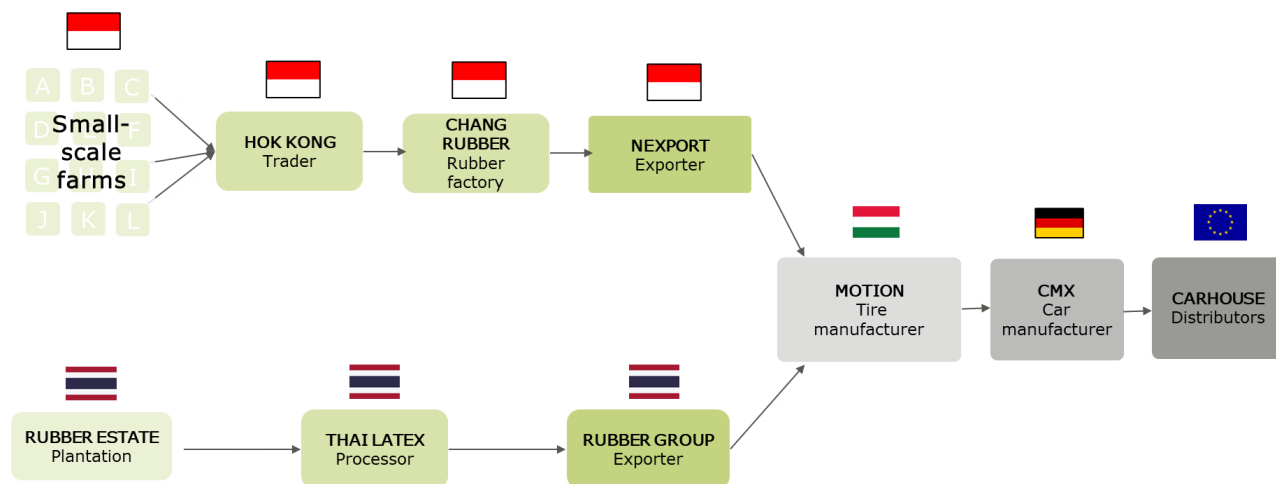
Germany-based company, Arabicca, is importing relevant coffee products from Guatemala and Brazil into the EU. They are acting as an operator under the EUDR. They will be required to establish a due diligence system, exercise due diligence, and submit a due diligence statement to the Information System.

Challenges

The company will need to trace all of the coffee they source back to the farm level. Considering the many different smallholder farms their coffee comes from, they will need to be particularly diligent when tracing their products and conducting risk assessments.

Rubber

RUBBER



A tyre manufacturer located in Hungary imports rubber from Indonesia and Thailand. The supply chain in Indonesia includes many small-scale rubber farmers, who typically own 1-5 hectares of land. The supply chain from Thailand includes only rubber from a large-scale industrial rubber estate.

Challenges

Accessing information from the Indonesian supply chain will be challenging due to the large number of smallholders. The trader buying from smallholders also often changes suppliers and may add new smallholders to his supply base over time. In this case, it will be necessary to ensure information collection and analysis upstream in the supply chain and try to engage the trader in collecting the necessary information.



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