



## SESSION NOTE

# Using technology for due diligence

Friday 30 June 2017 - 16:30-17:45  
Room CC10 - OECD Conference Centre

The OECD Guidelines for Multinational Enterprises (OECD Guidelines) call on businesses to conduct due diligence on their business operations and throughout their supply chains to identify, prevent and mitigate actual or potential adverse impacts in relation to matters covered by the OECD Guidelines (e.g. disclosure, human rights, employment and industrial relations, environment, combatting bribery, bribe solicitation and extortion and consumer interests) and account for how adverse impacts are addressed.

Global supply chains are increasingly complex, information on suppliers – often many tiers away – difficult to come by and sourcing-related risks manifold. The different sector guidances of the OECD (see box below) cover a wide range of risks across sectors and this session will explore technology solutions to carrying out supply chain due diligence.

## OECD Guidance on Due Diligence



The OECD due diligence guidance recognises that taking a risk-based approach—meaning that the procedures that a company implements are proportionate to the severity of the harm—means that a one-size fits all model cannot be applied when it comes to supply chain mapping and risk assessment. Rather, the enterprise is expected to justify how it conducts due diligence. In other words, an enterprise should be able to explain how it was able to identify risks in its supply chain and address those risks.

## Tools for traceability

A variety of solutions for recording, storing and retrieving data on global supply chains exists and will be discussed during the session:

## Mapping trade / commodity flows

Where information exists, the enterprise may identify trade flows of raw materials to determine the likely country of origin of raw materials being sold to material processors in their supply chain (e.g. map where the majority of cotton is purchased for spinners operating in a given country). Various tools are available to help companies map trade flows, such as the OECD's [Compare Your Country](#), 'Trade in Raw Materials'. Sufficient data may not be available for all relevant commodities.

## Blockchain

Blockchains are an open ledger that can record transactions between two parties efficiently and in a verifiable and permanent way. Each block contains a timestamp and a link to a previous block. By design, blockchains are inherently resistant to modification of the data — once recorded, the data in a block cannot be altered retroactively, rather than relying on easy-to-forge paper documents. It has been reported that this new technology is very difficult to insert into established supply chain systems. Although it is promising, the technology is still in its infancy.

## Barcodes

Barcode technology is affordable, easy to handle, and accurate. These advantages make barcodes widely used in supply chain management and accepted across the world. If a product or the raw materials to create a product arrive at your facilities without a barcode, one can quickly be created, printed, peeled and applied to begin tracking its movements. Collaborative efforts using barcode technology already exists and the hope is that they will allow consumers to scan clothing labels at the point of purchase using smartphones.

## RFID

RFID uses electromagnetic fields to automatically identify and track tags attached to objects. The tags contain electronically stored information. Passive tags collect energy from a nearby RFID reader's radio waves. Active tags have a local power source such as a battery and may operate at hundreds of meters from the RFID reader. Unlike a barcode, the tag need not be within the line of sight of the reader, so it may be embedded in the tracked object. RFID has been inhibited by certain limitations including the tag cost and tag readability. The cost of RFID tags currently limits their economic justification for item level tagging or case-level tagging in the produce industry. Reading RFID tags also requires specialised equipment, limiting their usefulness for consumers today.

## One-up-one-down (OUOD)

The one-up-one-down approach was first developed by the food industry to facilitate food traceability and safety. The OUOD approach involves the ability to identify, at any specified stage of the food chain (from production to distribution) from where the food came (one step back) and to where the food went (one step forward), the so-called “one-up, one-down” system (OUOD). This necessitates that each lot of each food material is given a unique identifier which accompanies it and is recorded at all stages of its progress through its food chain.<sup>1</sup> OUOD requires supply chain participants to be capable of identifying, through records maintained by the company, the immediate supplier and customer of an identified food material.

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<sup>1</sup> International Union of Food Science and Technology, IUFOST Scientific Information Bulletin (SIB) (March 2012), Food Traceability, <http://www.iufost.org/iufostftp/IUF.SIB.Food%20Traceability.pdf>