A General Traceability Standard

Concept Note – Adrian Henriques (email: adrian@henriques.info)

Why traceability?

Very few products or their components can be traced fully to their source – or to their final disposition after use. This lack of traceability exposes businesses of all kinds, from primary producers through to retailers, to compliance, reputation and financial risks. Currently there is no feasible, credible and widely accepted framework for assuring the source or destination of materials, components and ingredients throughout a value chain.

In addition, without knowing where the parts of a product come from - and where they go after manufacture and use - it is not possible to put in place fully robust processes to determine what their impacts may be. And without that, in addition to the increase in commercial risk, corporate strategies for responding appropriately to environmental and social impact become haphazard.

This document proposes a general traceability standard that would control corporate risk and enable a fuller accounting for environmental and social impacts.

The state of traceability

The length and complexity of the global supply chains of the modern world may seem to make the task of achieving full traceability impossible. However a number of major industries already have significant traceability systems in place. The automotive, aircraft, agriculture, precious stones and some parts of the electronics sector are examples. These industries have such systems in place for sound commercial reasons, including to:

1. **Underpin quality**. In order to monitor and maintain quality, it is essential that the precise origins of components are known. Should quality problems emerge, the ability to track a given component back to its manufacturing supplier or on to its final use is essential to initiate recall or put in place corrective measures
2. **Demonstrating value chain compliance**. There is strong and increasing regulatory pressure for supply chain transparency from the Dodd Frank Act in the USA and the Modern Slavery Act in the UK. In addition scandals in the retail food chain and those of other industries are demanding greater investment
3. **Reassure consumers**. There is intense and growing interest in the workings of supply chains from consumers. This encompasses the ability to ensure adequate labour standards for agricultural workers, for example, or to deliver health and safety for food products
4. **Underpin the security of supply**. As resources, such as rare earths or cocoa, become more scarce or subject to social volatility, the protection of supplies will become increasingly critical to business success. One aspect of the response will be to enable materials to be more fully traceable
5. **Support corporate sustainability claims**. Those organisations that wish to improve their sustainability impacts, whether for commercial or ethical reasons, need to be able to track their products in order to do so effectively.

Since traceability systems almost by their nature require co-operation and communication across organisational boundaries, standards have an essential role to play. Yet the overall picture of traceability standards is fragmented. Typically, different industries - and sometimes different

products - each have their own traceability systems. Moreover organisations that have a measure of vertical integration in their operations may develop proprietary traceability systems. While this may be a valid response by the organisation concerned, it deepens the overall global fragmentation.

The structure and purpose of a general traceability standard

Traceability is relevant to all tangible products and is essential for accountability. It can apply to their entire lifecycle: from the origins of its components in the ground to their final disposition after use.

The value of a *general* traceability standard arises from:

- The need to compare and integrate elements of the existing traceability landscape into a demonstrably effective traceability system
- Cost-saving over implementing traceability independently in new areas
- The assessment of the level of traceability achieved by a given traceability system
- The economic and social benefit derived from sharing good practice and encouraging traceability across increasing areas of economic activity.

There are also gaps in the current suite of traceability standards. Amongst others these include:

- For many industries, traceability back to initial raw material production
- Articulation of the extent of a given value chain that is covered by a particular traceability system, leading to the potential risk of misleading business partners and consumers
- Guidance for the use of newer technologies that can support traceability

The areas that a general traceability standard should cover are:

1. A management framework for traceability
2. The physical integrity of traceability across the value chain. This is typically implemented through a chain of custody approach
3. The informational integrity across the value chain
4. Operational issues. The most prominent is that of the marking and identification of materials. However there are a number of others, including confidentiality and privacy
5. Sector considerations. The issues of traceability vary very significantly across industrial sectors. One of the major differences arises from the difference in both marking and tracking procedures appropriate to discrete products, such as mobile phones and bulk commodities such as sugar, coal or oil. For example the standard will need to provide guidance on the circumstances and sectors for which a mass balance approach, as opposed to a fuller traceability system, is appropriate and on its implications.