

# **Supply Chain Mapping**



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#### 1. What is this Protocol and Who is it for?

This protocol is designed to help you understand what supply chain mapping (SCM) is, why we should be doing it, what the benefits are of doing it, and how to go about it. It is aimed at organisations who have real intent on discovering who is in their supply chain, but also want use that information to avoid and mitigate sustainability risks as well as uncover opportunities.

## 2. Vision and Definition of Supply Chain Mapping (SCM)

Firstly, it is important to understand what the School's vision is for supply chain mapping and what we define it as.

**Vision**: supply chain mapping is a consistent approach for identifying, managing and mitigating significant sustainability risks through an agreed mapping process for construction and FM.

**Definition**: supply chain mapping is the visual representation of the sequence/system and location of activities, resources and organisations involved in providing goods or services to the end customer.

## 3. Why do SCM and what are the Benefits?

Doing supply chain mapping is a simple but effective way of understanding who your suppliers are further up the supply chain (beyond your immediate tier 1 suppliers), where they are and what they do. This is important information in being able to see where risks and opportunities lie in your supply chains. Once you have this information you are better placed to prioritise your actions on dealing with the risks or opening up the opportunities to improve sustainability performance.

Specifically, for the Modern Slavery Act it helps meet your obligations around due diligence and provides information and evidence that you have a suitable procedure in place to assess where risks may occur. It also gives you the basis from which you can start doing something about reducing risks. This is particularly useful when drafting your Modern Slavery Statement, but more widely in managing your supplier relationships and category plans.

It is assumed if an organisation is at the stage of wanting to map its supply chains that the key basic building blocks of supplier management are in place. For example: sustainable procurement policy & strategy, supplier requirements on sustainability, and supplier relationship management systems.

At this point it should be understood what SCM is, and is not.

SCM is about transparency of supply and having the necessary information to identify and mitigate against risks. It is not about auditing the supply chain for performance or improving commercial conditions to the benefit of the buyer, nor is it about attempting to get leverage over suppliers.



## 4. Scope

The geographic scope of supply chain mapping is inherently global. Eventually, you should be considering all sustainability issues, but in this first instance we have focused on the risk of modern slavery.

The extent of mapping supply chains means identifying the relevant tiers of supply for a given product, i.e. the different processes and stages that a product goes through, and identifying the suppliers at those different levels. Remember that there could easily be more than one supplier for a given component or material. It also requires the identification of the materials and resources used at each tier and the basic site activities to deliver the final product or service.

An important consideration is how far down the supply chain you should go when undertaking a mapping exercise. There is no straightforward answer to this, as it will depend on the nature and idiosyncrasies of any given supply chain and your assessment of the risk to your organization as to where to stop. Essentially you should ask yourself:

- Is it possible that significant risks exist below the level you have reached so far?
- Do you have any leverage at these lower levels?
- Will the supply chain be consistent or does it move significantly between suppliers?

#### 5. Process and Results

#### 5.1. Heatmapping

The first step is to identify the key priority products for your business through a heatmapping process. You can do this using your spend data and undertaking a inter-departmental of which categories carry the highest risks from supply chain modern slavery. This process will involve

colleagues from across procurement, such as head of procurement, category managers and buyers, staff with sustainability expertise, as well as relevant internal 'customers', such as designers and specifiers.

There are <u>resources</u> on the School website to help you with heatmapping as well as on how to manage your response to Modern Slavery Act.

Tip! Involve as many functions in your organisation as possible: more people than you think are involved in procurement decisions.

#### 5.2. Life Cycle Stages

The next stage is then to understand the key life cycle stages for your priority products' supply chains, as indicated in the generic example in Figure 1 below. This will help you visualise the stages that your product goes through and will help you refine the heatmapping results to identify where the risks could be greatest, i.e. at which stage. For example, where there is a greater degree of low paid, low skilled and/or

Tip! Consider all the possible stages of production from "cradle to grave", right back to the quarry, field or forest.



seasonal / migrant labour, there is often a greater probability of poor labour conditions and therefore also modern slavery.

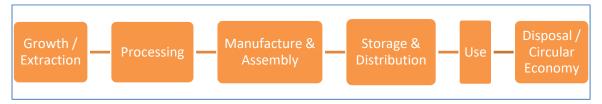


Figure 1. Generic life cycle stages for a product

#### 5.3. Engage

Once you have established the 'cradle to grave' life cycle stages for your products you need to directly engage with your category managers for the next stage. You need to enlist their help in contacting and identifying your tier 1 suppliers. These are the people with whom you trade on a regular basis and you should have good relations with. It is imperative that your colleagues understand what it is they will be asking their suppliers.

The aim of the exercise is to build on the life cycle stages above with some basic supplier information to build up the map, namely:

- Name an contact, e.g. ABC Industries, joe.bloggs@abc.com
- Location, e.g. Tianjin, China
- Main Activity, e.g. manufacture, packing, distribution
- Logistics mode(s) and provider(s) used, e.g. sea and lorry

It is understood that some suppliers are wary of commercial confidentialities. It is your role to help your category manager reassure your direct (tier 1) suppliers that all you are asking them to do is provide the information above for their suppliers, i.e. your tier 2 suppliers.

The next stage from here, using the contacts and relationships you've built up, is to repeat the process. Now you are asking your tier 2 suppliers to provide the name,

Tip! This takes time, so identify the right people who own the relationships and engage with them directly. Call them rather than email if possible, to build a trusting and positive relationship.

location and activity information on their suppliers, i.e. your tier 3 suppliers. And so it goes on until either you can get no further (law of diminishing returns for the effort you put in), or you decide that the level of risk is sufficiently low that you should stop.

We have provided a template email in the Annex that you can use with your suppliers to explain to their suppliers what you are asking for.

It is also worth considering whether any relevant trade associations have done some of this work already and contacting them to find out – this could save you considerable time and effort in accessing reliable data.



#### 5.4. Map the Supply Chain

Once this data has been compiled the next stage is to draw up a supply chain map that shows the tiers of supply working back from your organisation to the point of origin, or as far back as your risk process deems is necessary.

The SC map builds on the life cycle map approach in Figure 1. It needs to show several things all in an accessible manner. Clearly,

Tip! Don't worry if there are any gaps, just keep the engagement going and attempt to fill them over time.

the interlinkages between the consecutive stages of production, manufacture and distribution are the main aspect of what you are creating. Importantly it also needs to depict the often complex nature of component parts coming together, as well as the diversity of sourcing countries and logistics modes used, all of which will drive where your focus of attention will lie.

Where possible, it is also useful to show the relative proportions of the components coming in to form the product – this is helpful in understanding where the bulk of the material comes from and hence help you determine where the most significant risks could exist.

Tip! If you're constrained for time and resources, focus on the items you see as being at highest risk.

An example is provided below in Figure 2.

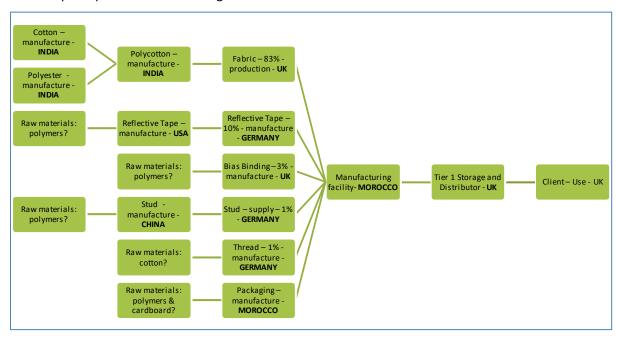


Figure 2. Mapped supply chain for a garment product



#### 5.5. Overlay the Level of Risk

The final stage is to transpose the supply chain map information into geographic risk data. In the case of modern slavery, the Walkfree Foundation has provided free information in their Global Slavery Index<sup>1</sup>.

This, along with the information gathered from suppliers through engaging with them to find out where *their* suppliers are, can be used to plot where the supply chains are coming from and hence where the main risks of modern slavery exist. An example is provided in Figure 3 below:

Tip! Don't forget, supply chains can and do change, especially for traded commodities, so be prepared to review your mapping.

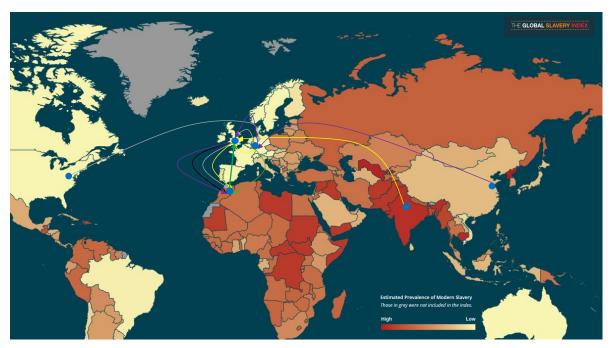


Figure 3. Mapped supply chain against risk of modern slavery for a garment product

#### 5.6. Results

Now that you have reached this stage you have a robust set of information in the supply chain map and risk overlay you can use to understand where the key risks lie for modern slavery for that supply chain.

In the example above it is apparent that the main risks occur in India and Morocco, and to a lesser extent in China. This will help you prioritise which suppliers you engage with and the method of engagement, whether it be through tender questions, supplier evaluations and even audits on the ground.

<sup>&</sup>lt;sup>1</sup> https://www.globalslaveryindex.org/ This is based on a country level assessment of the risk and likelihood of modern slavery. Note that other risk management tools are available but they require payment of a user / license fee.

### Supply Chain Mapping Protocol Version 1 – May 2017



## 6. Looking Forward

This information is of course not only useful for the risk of modern slavery, it can also help you understand other efficiencies in the supply. For example, the amount and scale of transport and logistics moving products back and forth across the globe; where there are choices or pinch points with suppliers and, if you share this information with likeminded business, how you can work together to make common supply chains more resilient to global events, be they environmental, social or economic.

If you have any questions, please contact <a href="mailto:james@actionsustainability.com">james@actionsustainability.com</a>



#### Annex

Draft email that can be used with suppliers to gain access to information at the next tier down.

In response to the requirements of the UK Modern Slavery Act we are required gain visibility of our supply chains to understand and take active steps to ensure that slavery and human trafficking are not taking place in our business or within any of our supply chains.

We have selected [insert product name] to map and are requesting your help in identifying and mapping the suppliers in the extended supply chain.

Please note this is a data gathering exercise to gain supply chain transparency only; this is not an audit or a pre-qualification exercise and any information provided will be treated as confidential will not be shared with the supply chain partners/members.

In summary, we would appreciate your support with the following basic information. This will enable us to gain visibility of the next tier of the supply chain for this product, i.e. your suppliers.

- 1. A non-technical description of component(s) or materials that your suppliers sell to you for the [product name] (note, we do not need any commercial data or prices);
- 2. If possible, the relative/approximate proportions of components listed in 1. in relation to the final product you provide, e.g. by weight percentage;
- 3. The names of your suppliers, their account manager, contact details and geographic location(s) associated with the components / materials described in 1. Indicate if there is any sub-letting of work, if appropriate;
- 4. The transport route and provider name for the components/ materials coming to you, such as road freight, rail, sea, air; and
- 5. The high-level activity data for your site, i.e. the main process/value adding activity that you undertake in relation to the [product], such as manufacture, assembly, distribution.

Kind regards, etc