

Better Work

Electronics Feasibility Study

Executive Summary

August 2010



Ergon Associates Limited
Garden Floor, 8 Coldbath Square, London EC1R 5HL UK
Tel: +44 20 7713 0386
www.ergonassociates.net

Executive Summary

This report presents the findings of a scoping study into the feasibility of a Better Work programme in the electronics industry. For the purposes of the study, the focus is on consumer- and business-oriented ICT equipment—sometimes referred to as the “3Cs” (computer, communication and consumer electronics)—and critical assembled components used in their final assembly, e.g. printed circuit boards. It does not cover industrial equipment with electronics elements, nor is the extraction and processing of raw materials within the scope of this study.

The following countries were studied with regard to electronics manufacturing: Brazil, China, Indonesia, Mexico, Philippines, Thailand and Vietnam. The report covers a description of the value chains and commercial drivers in the sector, employment relationships and labour standards issues, and initial evaluation at country level using the Better Work country selection criteria.

Overview of the value chain

The ICT sector as a whole is one of the most important and dynamic global manufacturing sectors, responsible for 5% of total global GDP growth from 2003–2008. The consumer electronics market is predicted to grow at a compound annual growth rate of around 5% during 2010–2013. While market growth continues to be focused on North America and the European Union, the growth pattern is changing with the emergence of Asia Pacific as a major region of market demand. Despite the recent economic downturn, the industry appears strong.

China has been the largest producer and exporter of ICT goods since 2004, having overtaken the United States. It is both considerably larger than other focus countries and its rate of growth has been higher. The focus countries for this study account for a third of global exports of office and telecom equipment. China alone accounted for more than a quarter of that amount. Mexico is the next most important country in terms of its share of global trade, followed by Thailand and the Philippines. In terms of the importance of electronics exports as a proportion of the country’s total merchandise exports, the Philippines ranks first among our focus countries, followed by China, Mexico and Thailand.

The electronics industry is one of the most globalized industries with products supplied by multiple companies and assembled by more than one manufacturer. It also combines the highest skilled, cutting-edge research and development functions alongside relatively low-skilled mass manufacturing operations. This creates a complex value chain picture in terms of both geographical diversification and the relationships between value chain actors. It is also intensely dynamic, with the value chain structure undergoing rapid change.

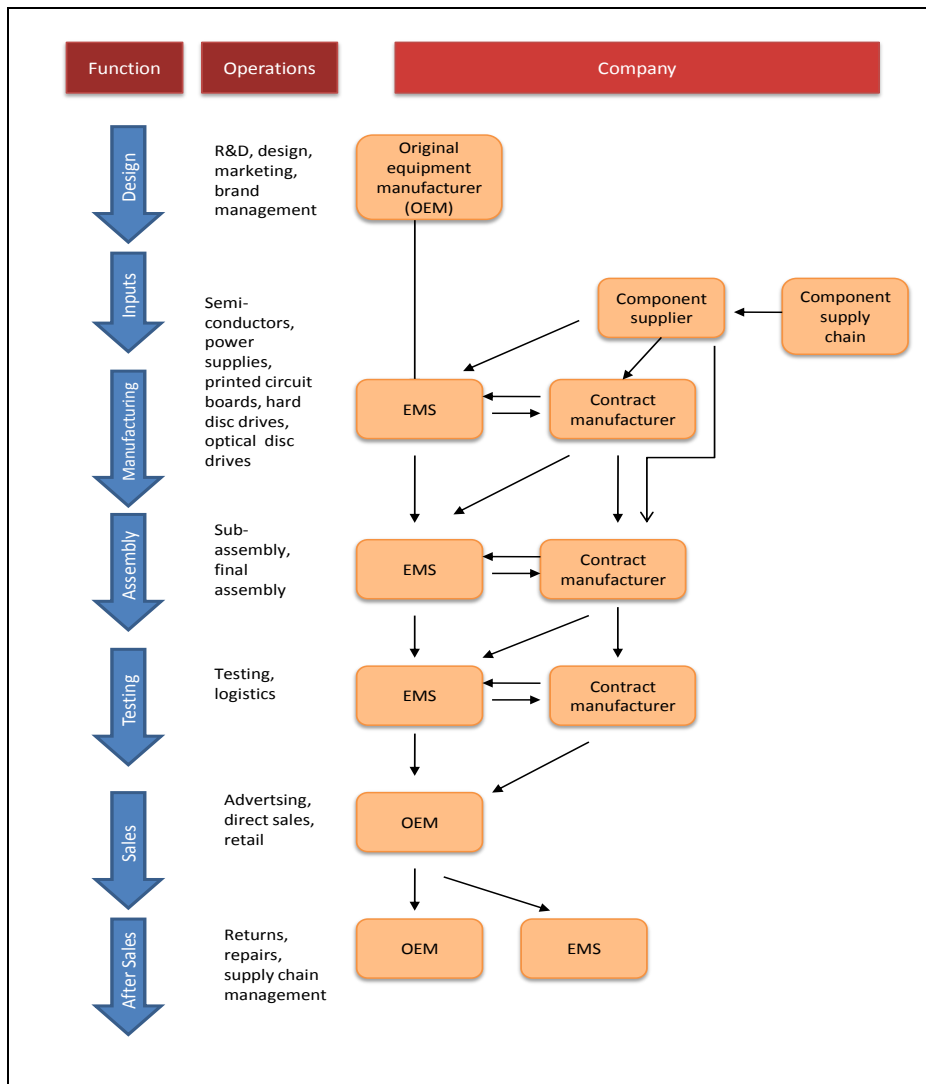
The electronics industry’s value chain has two broad sets of firms: lead firms, focused on product development, marketing and distribution (known as “Original Equipment Manufacturers”, or “OEMs”); and contract manufacturers (CMs) focused on providing many of the value chain activities that lead firms have outsourced (see Figure 1). These functions can include manufacturing design, assembly, critical component manufacture (e.g. semi-conductors and printed circuit board memory) and micro-component manufacture. The largest contract manufacturers, which are themselves globalized companies capable of performing all these functions, are known as Electronics Manufacturing Service companies (EMSs). However, there are also specialized and more localized contract manufacturers and suppliers. The complexity of many finished products that contain multiple components, many of which

have their own supply chains, means that a large number of suppliers and manufacturers using a variety of processes can be involved in any given product's supply chain.

A common way of describing industry structure is to see it as “networked”, with many companies acting both as suppliers and customers to one another, depending on the component and end product. Value chain relationships are therefore often reciprocal rather than hierarchical. Collaboration in manufacturing design between lead firms and contractors is also common, making allocation and protection of intellectual property a key issue that complicates contractual relationships between parties.

Some electronics components are interchangeable between different final consumer products and the same suppliers are involved in the supply chains of many products. In terms of labour conditions, there is no case for focussing on any particular category of final consumer product (e.g. computers or mobile phones) rather than any other.

Figure 1: Electronics manufacturing value chain - simplified



Summary of employment and labour issues

There are an estimated 18 million workers in the industry worldwide, but employment structure has shifted dramatically in recent years and jobs move regularly, with a general shift of manufacturing away from developed countries to developing countries. Increasingly, goods are manufactured in Asia, particularly China, which is the world's largest producer of electronic goods (China accounted for 35% of global electronics employment in 2004, likely much higher by now). Women and migrants (mainly internal, moving from rural to urban areas) make up much of the workforce in many countries, though women's share of the workforce can range from 5–87% in the countries studies.

Employment relationships can be characterized as:

- predominantly formal work (though little is known about relationships at lower tiers of the supply chain—i.e. micro-component manufacturing rather than assembled components)
BUT
- reduced direct, recognized employment relationships in developing countries, which lead to an increase in indirect employment through an agency, and/or use of temporary contracts, which obstruct establishment of employment relationships. This has also been encouraged by outsourcing as companies state the need for “flexibility” of workforce to meet production processes and demands.

Workers in the electronics industry appear at risk of experiencing largely the same set of labour rights violations wherever production is carried out. These issues are pervasive and endemic across the electronics (production and assembly) industry in both South-East and East Asia, and elsewhere, though they vary from workplace to workplace.

Common problems in labour standards and working conditions workers face relate to:

- occupational safety and health, particularly exposure to chemicals and ergonomics during manufacturing
- low pay, including even lower pay for women workers
- long hours, including excessive, sometimes compulsory, overtime
- discrimination (e.g. age, pregnancy, women of reproductive age)
- harassment and bullying treatment in some workplaces
- precarious work (job insecurity, short-term contracts, inability to join union owing to absence of recognized employment relationships)
- issues related to migrant workers (discrimination, deductions, lack of access to local social security, legal and health systems)
- obstacles to exercise of trade union rights (lack of union access to workplaces, negative management attitudes)
- pay issues, including fines, deductions, non-payment of benefits
- poor awareness among workers of statutory and agreed rights
- inappropriate use of adolescent workers including overuse “apprenticeships” and “vocational training”.

Private sector labour standards initiatives

Private sector labour standards compliance activities are established in the industry, but are not as developed as in the garment sector. Some brands have their own compliance programmes leading to some duplication in audits. There is only one common initiative dealing with labour standards, the Electronics Industry Citizenship Coalition (EICC). This is an industry-governed initiative with no trade union or NGO presence within its formal governance structure. The EICC code is not fully in line with ILO conventions on freedom of association and collective bargaining, though some members have adopted more stringent codes. Nevertheless, EICC has established relatively wide buy-in among leading value chain actors, its code is the most common industry reference point for labour standards, it has developed common audit protocols and it is in the process of developing capacity-building tools.

Opportunities for Better Work

Many stakeholders consulted acknowledged potential comparative advantages of Better Work's engagement in the electronics industry. The following aspects of Better Work received widespread support and interest. In some cases, these were also starting to be addressed, to a greater or lesser extent, by other initiatives in the sector and by other departments of the ILO. Engagement points for Better Work included:

- *Room to improve the thematic scope of EICC's Code of Conduct:* Better Work could take steps to act as a broker to bring together value chain actors to address the issue.
- *Labour administration and inspection:* There is a need for more support at national level for tripartite discussions and for legal enforcement.
- *Enterprise-level services:* Companies identified the need for more supplier capacity-building/enterprise-level training. Other initiatives (notably IDH) also plan to develop or use existing training. There may be scope for Better Work to work in conjunction with these initiatives using existing Better Work training, or to develop new training which the programme could license to others.
- *Social dialogue—industrial relations, worker-management communication:* It is clear from conversations with stakeholders that the areas of industrial relations and worker/management communication in general represent major challenges to the industry—which they are least equipped to address and are of particular importance to workers and their representatives. There may be scope for Better Work to develop tools or services in these areas.

Feasibility assessment findings

The research assessed the industry overall, and each research country against the Better Work country selection criteria. At a general level, the overall findings vis-à-vis the Better Work selection criteria were:

Table 1: Summary of assessment findings

Criteria	General findings
Labour standards in the industry are poorly enforced.	Evidence of labour standards deficits and poor enforcement in all study countries, particularly during elements of the manufacturing and assembly functions.
The industry employs a large number of vulnerable workers.	The manufacturing and assembly links in the value chain employ large numbers of workers in all countries, though the number of workers in China is markedly larger than other countries studied. Women and migrant workers are identified as key groups.
Competitiveness and economic prospects of the industry could be enhanced by improved labour standards performance.	Improvement in working conditions and management systems such as worker communication and dialogue could boost productivity by reducing labour turnover. But labour standard compliance is not a competitive advantage for brands or suppliers at present, as there is insufficient demand, as yet, from customers, other than in the public procurement sphere. The state of labour compliance or enforcement is not a determining factor at an enterprise level in sourcing decisions nor at a country level in location decisions.
There is social and political stability in the country.	While risk factors vary, all countries have adequate social and political stability.
The industry has sound economic potential.	In all countries the health of the industry largely is determined by global demand. The sector has experienced substantial growth rates and this is set to continue with continuing consumption in developed markets, and increasing consumption in emerging markets.
The relevant governments, and employers' and workers' organizations are committed to participate in the programme.	National situation not tested as part of this study. At international level, support from relevant unions and NGOs.
International buyers and relevant value chain actors have an interest in participating in the programme and in this particular sourcing country.	The main international industry association focussed on labour standards compliance, the EICC, has established a mechanism for conducting joint compliance assessments and sharing assessment results. The EICC expressed some interest in training services. Some brands and suppliers have operations or supply chains in all countries, though common agreement on China as the key country of interest.

Criteria	General findings
Better Work approaches can be adapted to the country context.	There is some trade union presence in all countries so there is theoretical scope for factory assessment, capacity building and tripartite engagement. However, private sector stakeholders are committed to their own inspection programmes and that of the EICC, so current scope for Better Work factory assessment is questionable. More perceived demand for capacity-building and dialogue activities.
The programme has the potential to be financially and institutionally sustainable (incl. the potential for scaling up and extending to other sectors).	Questions around buyer and supplier demand for factory assessment present significant challenges to potential sustainability at this time.
There are synergies with IFC, ILO and other initiatives in this particular country.	No existing IFC investments in the industry or supporting infrastructure in the focus countries. However, synergies with ILO Sector initiative in Indonesia, Vietnam and with existing Better Work programmes in Vietnam and Indonesia and potentially in the Philippines. Other industry initiative (IDH) focussed on China and potentially Brazil.

The findings from private sector interlocutors and our own analysis of the structure of the industry imply significant challenges for Better Work operations at this stage. These include:

- The central position enjoyed by the Electronics Industry Citizenship Coalition (EICC) among leading brands and suppliers, including buy-in to its existing auditing system and information-sharing platform, means that there is little immediate demand for an additional/different assessment programme such as could be delivered by Better Work. The EICC code and protocols are a response to the need to avoid multiple codes and audit duplication, which have been among the key arguments for engaging suppliers in Better Work operations in the garment industry in some countries.
- The complicated contractual and intellectual property relationships which characterize the electronics industry have implications for the design of Better Work. The interchangeable relationships among companies who act as both buyers and suppliers in various circumstances challenges the current subscription model Better Work uses.¹
- The complexity and reciprocity of commercial relationships means that commercial leverage does not flow in one direction down the value chain. Identification of buyers should not therefore be limited to OEMs and brands.
- Different functions exist side-by-side at several stages in the value chain and can also be combined within the same factory. The separation of functions within a factory may pose challenges for a Better Work intervention if the suppliers would not register their whole factory.

¹ As similar problems are arising in the garment industry, Better Work is rethinking its current subscription model and likely to revise procedures within the next 12 months.

Country analysis

From the assessment criteria analyzed, we conclude that there are no fundamental barriers to conducting further in-country research in any country. China is the strongest candidate, but, owing to the scale of the country and industry, it may not be the most suitable for initial engagement by Better Work. Indonesia and Vietnam have the most synergies with existing programmes but also the smallest industries and numbers of workers. It is difficult to differentiate other countries on any factors.