Acer

CSR Company Profile

Michiel van Dijk & Irene Schipper

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Colofon

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By:
Michiel van Dijk & Irene Schipper
February 2007

Stichting Onderzoek Multinationale Ondernemingen (SOMO)
Centre for Research on Multinational Corporations

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1 Introduction

This corporate social responsibility (CSR) company profile on Acer is part of a research project on the ICT hardware sector by SOMO, co-financed by the Ministry of Foreign Affairs in the Netherlands. Other financers are member organisations of International Consumer Research and Testing (ICRT) and two development organisations, namely Bread for All and the Swiss Catholic Lenten Fund.¹ In addition to this profile, profiles are made on Hewlett Packard (HP), Dell, Fujitsu Siemens Computers, Apple, Toshiba, Sony and Packard Bell.

The methodology used for the survey consists of:
- Website analyses;
- Analyses of annual- and CSR reports;
- Questionnaires to major computer brands sent by ICRT;
- Workers interviews in China, The Philippines, and Thailand;
- Interviews with the management of production sites.

The research is conducted by SOMO in collaboration with research and labour organisations in China, The Philippines and Thailand: SACOM in China (Students and Scholars Against Corporate Misbehavior); the Workers’ Assistance Center, Inc (WAC) in The Philippines; the Centre for Labour Information Service and Training (CLIST) and Asia Pacific Workers Solidarity Links (APWSL) in Thailand. The definition of CSR used by SOMO is based on the “CSR Frame of Reference” published by the Dutch CSR Platform: a Coalition of 30 Dutch Civil Society Organisations and Trade Unions actively promoting CSR.²

The first part of the profile provides a short general company overview and then focuses on the companies’ CSR policies and operational standards like supply chain responsibility, stakeholder involvement, independent verification and transparency and reporting.

The second part of the profile provides research findings of the field studies on social issues including workers interviews. Where relevant, the non-compliance cases with the EICC code reported by the Center for Labor Reflection and Action (CEREAL) in its 2006 report are also included.³ For the analyses of the environmental policies and practices SOMO relies on the research reports of Greenpeace.⁴

The research by SOMO and its partners covers in total 33 supplier companies: 9 suppliers of The Philippines, 6 suppliers in China, 12 suppliers in Thailand. In addition information on 6 Mexican suppliers is available from the CEREAL report. Four of these suppliers are identified as being a

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¹ Participating ICRT members include consumer organisations of Austria, Belgium, Finland, Switzerland, Italy, Portugal, Spain and the Netherlands. The results of the study will be used for publications in the consumer magazines of the ICRT members aimed to inform their members about both the price quality proportion of PC products and the CSR policies and practices of the brand companies.

² www.mvo-platform.nl
   http://mvo-platform.tuxic.nl/files/Publicaties/MVO%20Normen/CSR%20frame%20of%20reference.pdf


supplier of Acer and can be found in this draft report. Most of these suppliers are shared by the other brand companies.

Finally, this report also includes information on working conditions in the Hard Disk Drive (HDD) supply chain of Acer. The HHD market is dominated by six HDD manufacturers (Fujitsu, Hitachi, Toshiba, Seagate/Maxtor, Samsung and Western Digital), which together produce 98.4 percent of HHDs in the world. A survey among computer repair shops and technical research department of the Dutch consumer organisation indicates that, similar to other PC brands, Acer uses HDDs of all 6 large manufacturers. This means that the suppliers of these 6 HDD manufacturers are also part Acer’s supply chain and therefore Acer can be held accountable for possible social and environmental problems at these second-tier suppliers.

To prevent the publishing of any inaccurate information about the company subject in this profile SOMO has implemented a review process in which the companies are requested to review the draft profile and inform SOMO about factual misunderstandings. Although Acer has expressed their intention to provide SOMO with comments on the draft company profile once they had completed verification of possible factual errors in the draft company profile, which they expect this to happen around January 15, 2007, SOMO did not receive any comments yet (d.d. 21 February 2007).

Based on the research of SOMO, the ICRT member organisations together with the participating development organisations will be responsible for rating the included companies on CSR policies and practices and will publish their own publications based on this research.

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2 Company Overview

Acer Incorporated’s principal activities are to develop, market and sell computer workstations, PC servers, business desktops, computer-related components and software. The company claims to be the world’s number 4 ranking vendor for PCs and notebooks (after Dell, HP and Lenovo). Its other activities include repair services of Acer brand products, investing, financing, construction, and provision of internet, electronics services and information storage.

With 58 percent, notebooks make up the largest share of Acer’s total sales. Displays, desktops and others, count for 19, 15 and 8 percent of sales, respectively. Acer’s main market is Europe, the Middle East and Africa, in which 65 percent of its products are sold. The Americas and Asia Pacific each contribute 13 percent to total sales while the Chinese market makes up 9 percent of total sales.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>15</td>
</tr>
<tr>
<td>Notebooks</td>
<td>58</td>
</tr>
<tr>
<td>Displays</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 1: Sales by Segment, 2005


<table>
<thead>
<tr>
<th>Region</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater China</td>
<td>9</td>
</tr>
<tr>
<td>The Americas</td>
<td>13</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>13</td>
</tr>
<tr>
<td>Europe, Middle East, Africa</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 2: Sales by Region, 2005


In addition to being an OEM of various types of computers, Acer produces servers, storage systems, projectors, and displays. The company also provides IT support services. Acer has

streamlined its operations in recent years, spinning off its manufacturing operations (now Wistron), as well as its consumer electronics and peripherals business (now Benq). It still holds stakes in both companies. Acer now outsources its manufacturing. It sells through resellers and distributors worldwide.

Acer Incorporated is part of the Acer Group. The Acer Group comprises several companies and markets a broad spectrum of branded IT products, e-business solutions and services. In addition, the group supplies multiple brands of IT products including components and software in Greater China. The Acer Group employs 7,800 people, while Acer Incorporated employs 5,600 people supporting dealers and distributors in more than 100 countries.7

Since 2001, Acer has shown strong growth. Revenue increased sevenfold from NT$ 30,370 to NT$ 204,957. The increase in revenue was paralleled by the growth in net income from NT$ 1,033 to NT$ 8,478.

The chairman and CEO of Acer is J. T. Wang and its president is Gianfranco Lanci

![Figure 1: Key Financial Figures, 2003-2005](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (NT$ million)</th>
<th>Net Income (NT$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>30,370.68</td>
<td>1,033.59</td>
</tr>
<tr>
<td>2002</td>
<td>42,137.28</td>
<td>8,647.92</td>
</tr>
<tr>
<td>2003</td>
<td>81,177.81</td>
<td>7,313.81</td>
</tr>
<tr>
<td>2004</td>
<td>129,108.68</td>
<td>7,011.66</td>
</tr>
<tr>
<td>2005</td>
<td>204,958.10</td>
<td>8,477.50</td>
</tr>
</tbody>
</table>


3 Supply Chain

In the last five years, Acer has transformed itself from a manufacturer into a company that focuses on global marketing of brand-name, PC-related products and services. Acer’s management considers the manufacturing sector to be of little value. The “New Channel Business Model” is not only crucial to Acer’s success today, but will also be, according to Acer, the company’s foundation in the global arena in the future. Acer will strive to extend its New Channel Business Model and work together with global distributors and resellers to compete head-to-head with direct-model leader Dell.

In practice, the implementation of this business model means that Acer is shifting from being a manufacturer to a pure brand company that markets and distributes its products, while leaving the actual production process in the hands of contract manufacturers. Acer’s supply chain management strategy can perhaps best be characterized as a strategy of “vertical disintegration.”\(^8\) In the recent past, Acer sold majority stakes in both Wistron and BenQ. These companies were main providers of manufacturing services in Acer’s supply chains. By selling its majority stake in these companies, Acer clearly demonstrates that it intends to “disintegrate” its supply chains and focus on branding and marketing.

The strategy of vertical disintegration is quite visible in Acer’s corporate structure. In the charts on the next page, one will note that Acer retains ownership of companies related to the distribution of brand-name IT products and chooses to maintain control over companies involved in Research and Development (charts A and B). Shares in Electronic Manufacturing Services (EMS) companies, on the other hand, are being sold off gradually, although in most of these companies Acer is still powerful enough to influence decision-making (chart C). The charts have been simplified and can only reflect part of Acer’s ever-changing corporate network.\(^9\)

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9 All information has been taken from Acer’s 2003 annual report.
Figure 2: Distribution, sale and maintenance of “Acer” brand name information technology products

Acer Incorporated
Taiwan

- Acer Computer (Far East) Ltd., Hong Kong 100%
- Logistron Service Pte Ltd., Singapore 100%
- Acer Information Products (Zhong Shan) Inc., China 100%
- Acer Market Services Limited, Hong Kong 100%
- Acer Computer International Ltd., Singapore 100%
- Acer Sales and Distribution Ltd., Hong Kong 100%
- Acer European Holding N.V. and Acer Europe B.V. 100%
- Boardwalk Capital Holding Limited 100%
- Acer Holding International, Incorporated 100%

20 subsidiaries in France, The Netherlands, UK, Italy, Germany, Denmark, Austria, Norway, Belgium, Spain, Finland, Sweden, Switzerland, Russia, United Arab Emirates, South Africa and Czech Republic, some of which with their own subsidiaries

15 subsidiaries in the USA, Mexico, Argentina, Uruguay, Venezuela, Colombia, Peru, Chile and Brazil

10 subsidiaries in Thailand, Japan, Australia, Malaysia, Singapore, New Zealand, South Korea, Indonesia and Vietnam, some of which with their own subsidiaries

Figure 3: Research, development, manufacture and sale of integrated circuits and related products

Acer Incorporated
Taiwan

- Apacer Technology Inc., Taiwan 57.03%
- Apacer Electronic (Shanghai), China 57.03%
- Apacer Memory America Inc., USA 57.03%
- Apacer Technology B.V., The Netherlands 57.03%
- AOR Technology Inc., Taiwan 57.03%
- Kingdom Corporation Ltd., Hong Kong 57.03%
- Animata Systems, Inc., Taiwan 57.03%
- Apacer Technology Japan Corp. 57.03%
The vertical disintegration of Acer’s supply chain becomes even more evident when analyzing the supply chain of specific Acer products. Components are sourced from many different component manufacturers, while assembly is carried out by a small group of selected contract manufacturers. In some cases, Acer holds a considerable stake in these contract manufacturers, although it almost never owns these companies. The selected contract manufacturers are allowed to manufacture final products for Acer. It does not matter whether a desktop computer or notebook is assembled in China, the Philippines or in the Netherlands. In the end, all Acer products are sold as “made in Taiwan”. The following charts show the supply chains for two Acer notebooks: the Travelmate C110 and the Travelmate C300.
Figure 5: Supply chain for the Travelmate C110

- Component manufacturer
  - Hitachi Maxell
  - Mitsubishi Engineering Plastic Corp.
  - Toshiba Electric Co., Ltd.
  - Toshiba Matsushita
  - Lite-On Electronic Inc.
  - Ambit
  - Sumida
  - Xtreme Technology
  - Taipei Multipower Electronics Co., Ltd.
  - Augen Inc.
  - Sanyo
  - Y-E Data Inc.
  - Various manufacturers
  - IBM Japan Ltd.
  - Fujitsu Ltd.
  - Hitachi Global Storage Technologies
  - Toshiba Corp.

- Critical component
  - Lithium battery
  - LCD bezel
  - LCD Panel
  - Switching power supply
  - Fax/modem card (optional)
  - 802.11 a/b (wireless) (RF) module
  - DC/AC inverter
  - DC/AC Inverter Transformer
  - External 1394 DVD-ROM / CD-RW (optional)
  - CD-ROM (external use) (optional)
  - Battery pack (optional)
  - Floppy disk (external use) (optional)
  - PCR
  - HDD

- Contract manufacturer
  - Beijing Acer Information P.R. China
  - Acer Information Services P.R. China
  - Wistron Corporation Taiwan
  - Wistron InfoComm (Philippines) Corporation Philippines
  - IMS B.V. The Netherlands
  - Wistron México S.A. de C.V. Mexico

- Product
  - Travelmate C110
  - Acer Incorporated Taiwan

Made in Taiwan
These charts were composed with detailed information from Acer’s CB test certificates. The CB certificates of Acer’s notebook computers reveal a complex web of suppliers. In most cases, one

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10 The IECEE CB Scheme is an international system for acceptance of test reports dealing with the safety of electrical and
particular component can be provided by two or three different component manufacturers. A hard disk drive (HDD) for the Travelmate C300, for example, can be supplied by Toshiba or Fujitsu. This is necessary to guarantee continuous supply of critical components. If a supplier fails to provide a particular component just-in-time or on demand, the selected contract manufacturers can rely on other suppliers that are able to provide the same component. For some components, however, the contract manufacturers depend on a key supplier. If these components are out of stock, delays in delivery are likely to happen.

It is important to note that Acer actually depends on the performance of some of its competitors in the IT market. Many critical components in Acer's supply chain for notebook computers are provided by its key competitors. Fujitsu, a company that also engages in the production of notebooks, supplies the hard disks for the Travelmate C300 and the Travelmate C110. For the same notebooks, Sony provides the DVD-ROM. Sony also produces notebooks as an Original Equipment Manufacturer. Other key competitors for Acer Incorporated in the consumer electronics market are Toshiba, Hitachi, IBM and Matsushita. All these companies provide components for Acer notebooks. This situation may be described as a sort of "entrepreneurial endogamy," as companies have no alternative but to engage in commercial relationships with their industrial peers (competitors), rather than to integrate essential parts of their supply chains. Large multinationals such as Sony and Toshiba can not be labelled as pure original equipment manufacturers (OEMs), because they also provide services that are typical of component manufacturers or electronics manufacturing services (EMS) companies. Acer is a different type of company because it neither manufactures technology products itself nor produces components for other OEMs.

At the other end of the supply chain, in sales, Acer engages in partnerships with key competitors as well. In New Zealand, for example, Acer appointed Fujitsu as a "Gold Channel Partner" in 2004. As a whole, Acer's supply chain and sales strategies can be characterised as indirect and very lean. Selling is done through distribution only and even large retailers are approached through the business channel, thus indirectly. Decision-making in the company can be very fast because there are few hierarchical levels.

electronic products. It is a multilateral agreement among participating countries and certification organisations. A manufacturer utilizing a CB test report issued by one of these organisations can obtain national certification in all other member countries of the CB Scheme. The Scheme is based on the use of international (IEC) Standards. If some members' national standards are not yet completely harmonized with IEC Standards, national differences are permitted if clearly declared to all other members. The CB Scheme utilizes CB Test Certificates to attest that product samples have successfully passed the appropriate tests and are in compliance with the requirements of the relevant IEC Standard and with the declared national differences of various member countries.

4  CSR Policies

Acer recognizes the importance of Corporate Social Responsibility by stating:

“As an ethical and responsible enterprise, Acer believes in building a people-friendly environment that cultivates innovative thinking, and in creating a sustainable company while providing positive contributions to society. We regard the interests of our customers, employees and shareholders with foremost importance. With company growth and profitability achieved, Acer holds to the spirit of giving back to the society that sustains it and is committed to implementing CSR for sustainable operations.”

However, Acer’s interest in CSR is very recent and seems to focus predominantly on environmental issues. Only in 2005, Acer published its first Corporate Environmental Report. The report mainly focuses on the environmental performance of Acer while human and labour rights are hardly addressed. Acer also does not have a code of conduct which mentions these themes. Neither is there any information on human and labour policies on its website.

4.1 Human and Labour Policies

On its website, the only information available refers to environmental policies. However, some of the assertions in the environmental report Acer published recently indicate that Acer can also be held accountable for issues related to human and labour rights in its supply chain. The company states, “At Acer, we liken the relationships within the supply chain to those of a community [...]. Acer has nearly 100 suppliers, most of which are system suppliers and primary component suppliers. In terms of supply chain management, Acer makes no distinction between itself and its suppliers. Fostering a corporate culture that emphasizes creativity, Acer sets goals and lets suppliers propose the method of execution” (emphasis added).

Acer does have a code of conduct for staff members. This code does not make any reference to human rights or labour rights issues.

4.2 Environmental Policies

According to the company, Acer’s global operation, spanning across Europe, Middle East, Africa, the Americas, Greater China and the Asia Pacific, is devoted to:

- Ensuring that its products and operations meet all applicable environmental regulatory requirements.
- Selecting technologies that minimize harmful, non-environmentally sensitive materials; conserve energy; and are recyclable.
- Saving energies, preventing pollution, minimizing and recycling discards in its daily operations.

13 http://global.acer.com/about/sustainability.htm (5 October 2006)
16 Ibid, p. 40.
Promoting awareness of its environmental policy among employees and partners in our supply chain.

Building an Environmental Management System (EMS) to continually monitor and improve activities.\(^{17}\)

Acer applies the precautionary approach. It states that: “our product design takes into consideration the ways to reduce environmental loading from the outset of production, in addition to user needs, functionality and added value.”\(^{18}\)

Acer is an ISO 9001 and 14001 certified company. Also all of Acer’s tier-one suppliers have acquired ISO 14001 certification. Acer states that it adheres to the EU Directive on the restriction of hazardous substances (RoHS) by prohibiting the use of lead, cadmium, mercury, hexavalent chromium and brominated flame retardants PBB and PBDE. As of January 1, 2006, all Acer products will comply with the RoHS Directive. As of August, 2005, according to the company, all Acer operations and products comply with the EU Directive on Waste Electrical & Electronic Equipment (WEEE).\(^{19}\)

All of Acer’s suppliers must adhere to Acer green product specifications. Suppliers are required to comply with these specifications with regard to rules on energy conservation, ease of recycling, low toxicity, battery usage and packaging.

Acer is a partner of the EPA Energy Star program, through which companies and organisations aim to complete successful whole-building energy efficiency upgrades.

The environmental performances of Acer according to Greenpeace

In the Greenpeace Report \(^{20}\), Acer was ranked 2.3 points out of ten which is a rather low score. According to Greenpeace, despite Acer’s adoption of the precautionary principle, the company has yet to provide timelines for the elimination of polyvinyl chloride (PVC) and brominated flame retardants (BFRs). The company scores no points on product take back and recycling. Acer loses a point because its Hazardous Substance List fails to provide a system for identifying future harmful chemicals for elimination. Further it has no PVC-free or BFR-free models on the market, no reference to individual producer responsibility Acer only provides takeback services where required to do so by national EPR laws, no information to individual customers on what to do with their discarded Acer products and no information on the amounts of e-waste collected and recycled.

4.3 Compliance with CRS Standards

4.3.1 Responsibility

As mentioned above Acer demands that its suppliers adhere to green product specifications. One of the environmental objectives of the company is to establish a ‘green supply chain’.\(^{21}\) However, nowhere Acer acknowledges its corporate responsibility with regard to social issues in its supplier chain.

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17 Ibid, p. 14
18 http://global.acer.com/about/sustainability09.htm (5 October 2006)
20 http://www.greenpeace.org/raw/content/international/press/reports/greener-electronics-guide.pdf
21 Ibid., p. 5 & 18.
4.3.2 Stakeholder involvement

The only information on stakeholder involvement is provided by the website, which states that “Acer actively communicates with international environmentalist organizations such as Greenpeace and Silicon Valley Toxic Coalition (SVTC) to better sensitize itself with related issues as well as expectations of other sectors.”

4.3.3 Verification

It seems that Acer is presently in the process of auditing its suppliers on environmental performance. In the environmental report it is mentioned that with regard to the green supply chain the 2006 objectives are to “establish a comprehensive supplier grading system”, “complete green product management system audits of first-tier suppliers” and “advise/require suppliers to improve corporate responsibility”. There is no information on social audits of suppliers.

4.3.4 Transparency and Reporting

Overall, Acer publishes very limited CSR related information. The main sources are:

- Acer Corporate Environmental Report: Mainly includes environmental practices. In the report it is stated that it adopts the GRI guidelines. However, unlike some other companies, it is not clear which and where guidelines are applied.
- Acer website: also mainly addresses environmental issues.

Acer has set up an environmental management liaison window which allows the public to contact the company by e-mail on environmental issues.

4.3.5 Analyses CSR Policy

The CSR policies of the computer companies: ACER

<table>
<thead>
<tr>
<th>General international Guidelines and Standards (not sector specific)</th>
<th>Part of Company Policy?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Norms on Business and Human Rights</td>
<td>No</td>
<td>Comment SOMO: at the moment there are almost no companies signatories of these UN Norms.</td>
</tr>
<tr>
<td>ILO core labour standards and Conventions are included in company policy</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Commitment UN Global Compact</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Commitment to Universal Declaration of Human Rights</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Commitment OECD Guidelines</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Development of Company Codes of Conduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of Code of Conduct by the company on social issues?</td>
<td>No</td>
<td>There is a staff code of conduct which addresses governance issues.</td>
</tr>
<tr>
<td>Development supplier Code of Conduct on</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

22 http://global.acer.com/about/sustainability.htm (5 October 2006)
25 http://global.acer.com/about/sustainability.htm
### Guidelines and standards for the electronics sector

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Electronics Industry Code of Conduct (EICC)</td>
<td>No</td>
</tr>
<tr>
<td>The Global e-Sustainability Initiative (GeSI)</td>
<td>No</td>
</tr>
</tbody>
</table>

### Guidelines and standards on Occupational Health & Safety

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILO Guidelines on Occupational Safety &amp; Health management Systems ILO-OSH 2001</td>
<td>No</td>
</tr>
<tr>
<td>OHSAS 18001: Occupational Health and Safety Management System specification.</td>
<td>No</td>
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</tbody>
</table>

### ILO core labour standards covered

<table>
<thead>
<tr>
<th>Standard</th>
<th>ILO Convention</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom of association and the right to Collective bargaining</td>
<td>87 and 98, complemented by 135</td>
<td>No</td>
</tr>
<tr>
<td>No use of forced, debt bonded or involuntary prison labour</td>
<td>29 and 105</td>
<td>No</td>
</tr>
<tr>
<td>No Child labour</td>
<td>ILO Convention 138 and 182</td>
<td>No</td>
</tr>
<tr>
<td>No discrimination in employment</td>
<td>100 and 111</td>
<td>No</td>
</tr>
</tbody>
</table>

### ILO Conventions

<table>
<thead>
<tr>
<th>Standard</th>
<th>No. of declaration</th>
<th>Subscribed by the company?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right to security of employment</td>
<td>Tripartite Declaration, art. 24-28</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Living wages are paid</td>
<td>26 en 131</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Safe and sound working conditions</td>
<td>155</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Maximum number of working hours (48 + 12)</td>
<td>1</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Compensation for overtime work</td>
<td></td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### Operational aspects

<table>
<thead>
<tr>
<th>Question</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the company policy on social issues include external manufacturers and suppliers?</td>
<td>No</td>
</tr>
<tr>
<td>Is there a monitoring system in place to check compliance with the mentioned standards/codes/policy?</td>
<td></td>
</tr>
<tr>
<td>Own sites</td>
<td>Supplier sites</td>
</tr>
<tr>
<td>Internal Monitoring</td>
<td>No info</td>
</tr>
<tr>
<td>External monitoring (third party organisations involved)</td>
<td>No info</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the percentage of supplier monitored</td>
<td>No info</td>
</tr>
<tr>
<td>Question</td>
<td>Feedback</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Each year?</td>
<td>Only feedback on policy is requested</td>
</tr>
<tr>
<td>Are (local) stakeholders involved at the design level/ at implementation (production) level/ at monitoring level and at relevant decision-making level?</td>
<td>Real involvement as in multistakeholder initiatives</td>
</tr>
</tbody>
</table>

The Environmental policies of the computer companies:

<table>
<thead>
<tr>
<th>General Environmental Policies</th>
<th>Company policy?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO certification 14001</td>
<td>Yes</td>
<td>Also required of all tier 1 suppliers.</td>
</tr>
<tr>
<td>ISO certification 9001/9002</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Other Eco-Labels that are used by the company, like Blue Angel, ENERGY STAR, Green Mark etc.</td>
<td>Yes</td>
<td>Energy Star.</td>
</tr>
</tbody>
</table>

Environmental guidelines and standards for the electronics sector

<table>
<thead>
<tr>
<th>Environmental guidelines and standards for the electronics sector</th>
<th>Score methodology of Greenpeace</th>
<th>Environmental guidelines and standards for the electronics sector based on Greenpeace report (Bad=0, Partially bad=1, Partially good=2, Good=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A chemicals policy based on the precautionary principle (includes materials innovation, design for less environmental impact, not using hazardous materials that could impact recycling)</td>
<td>Greenpeace: 3</td>
<td></td>
</tr>
<tr>
<td>Chemicals management: Supply chain management via banned/restricted substance lists, policy to identify problematic substances of future eliminations/substitution</td>
<td>Greenpeace: 2</td>
<td></td>
</tr>
<tr>
<td>Timeline for phasing out all PVC</td>
<td>Greenpeace: 1</td>
<td></td>
</tr>
<tr>
<td>Timeline for phasing out all BFRs (not just the 2 banned by RoHS)</td>
<td>Greenpeace: 1</td>
<td></td>
</tr>
<tr>
<td>PVC free and/or BFR free models available?</td>
<td>Greenpeace: 0</td>
<td></td>
</tr>
<tr>
<td>Commitment Individual Producer Responsibility (IPR) (producers finance the end-of-life management of their products, by taking back/recycle/reuse their own brand discarded products)</td>
<td>Greenpeace: 0</td>
<td></td>
</tr>
<tr>
<td>Voluntary take back in every country where it sell products</td>
<td>Greenpeace: 0</td>
<td></td>
</tr>
<tr>
<td>Provides information to individual customers on take back and recycling services</td>
<td>Greenpeace: 0</td>
<td></td>
</tr>
<tr>
<td>Reports on amount of waste electrical and electronics equipment (WEEE) collected and recycled.</td>
<td>Greenpeace: 0</td>
<td></td>
</tr>
</tbody>
</table>

Operational aspects environmental policy

<table>
<thead>
<tr>
<th>Does the company policy on environmental issues include external manufacturers and suppliers?</th>
<th>Yes, ISO 14001 and Green Supply Chain programme.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a monitoring system in place to check compliance with the mentioned standards/codes/policy?</td>
<td>Own sites: Unclear in process of implementing Audit system, Suppliers sites: Unclear in process of implementing Audit system</td>
</tr>
<tr>
<td>Internal Monitoring</td>
<td>External Monitoring</td>
</tr>
<tr>
<td>No info</td>
<td>No info</td>
</tr>
</tbody>
</table>
## Transparency and Cooperation

<table>
<thead>
<tr>
<th>Transparency/Reporting</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate website section on CSR?</td>
<td>No, only limited part on sustainability</td>
</tr>
<tr>
<td>Reporting on CSR performances?</td>
<td>Yes, however only in Environmental report</td>
</tr>
<tr>
<td>Are GRI indicators used?</td>
<td>Yes, but unclear which.</td>
</tr>
<tr>
<td>Special Office for complaints CSR issues</td>
<td>Yes/No, only for environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cooperation with the Research</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response to the questionnaire</td>
<td>No</td>
</tr>
<tr>
<td>Disclosure of production and supply chains</td>
<td>Disclosure of production countries?</td>
</tr>
<tr>
<td></td>
<td>Disclosure of production locations?</td>
</tr>
<tr>
<td>Assistance with organising interviews with local management of suppliers?</td>
<td>No</td>
</tr>
<tr>
<td>Feedback to draft company profile</td>
<td>Feedback is announced but not received d.d.21-2-2007</td>
</tr>
</tbody>
</table>
5 Field Research

This section identifies and describes CSR issues specific to the Suppliers of Acer. The findings are based on the analysis of working conditions of four Acer suppliers in Thailand (3) and China (1). In addition it summarizes CSR issues related to the Hard Disk Drive supply chain of Acer in Thailand and the Philippines.

Most research into working conditions in the ICT sector concentrates on the ILO’s eight primary labour rights, which are specified in most model codes of conducts such as the International Confederation of Free Trade Unions (ICFTU) base code and the CSR Frame of Reference SOMO works with.

Much of the overall manufacturing process of ICT hardware is low-tech and labour intensive and thus faces similar working condition issues as in the garment and footwear industries. This research reveals violations including dangerous working conditions, degrading and abusive working conditions, excessive working hours and forced overtime, illegally low wages and unpaid overtime, denial of the right to strike, discrimination in employment, use of contract labour and “trainees”, workers without a contract, and lack of freedom of association and unionisation.

SOMO in cooperation with local labour organisations have gathered information about the working conditions in the factories producing (parts of) computers for one or more of the targeted companies. This information is obtained through interviews with the workers and trade unions, field organizers and factory management in some cases. The interviews are conducted outside the factory in an informal setting, in a situation where the workers feel safe to speak openly, i.e. not in the presence of the management. A reasonable amount of workers per factory is interviewed. The workers are selected (as far as possible) on the basis of sex, age and type of job so as to represent the workforce in the factory. The worker interviews are undertaken through individual interviews with each worker, or through group discussions.

5.1 Acer Suppliers

5.1.1 China

Shenzhen Yonghong

Shenzhen Yonghong (hereafter Yonghong) is owned by Shenzhen Zhonghan Science & Tech Co., which, in turn, is a subsidiary of the FSP Group. The FSP Group, a Taiwanese owned company is the 10th largest power supply vendor worldwide. Its main products are PC / Industrial Power Supplies, ODM or OEM Power Supplies, Open Frames, LCD TV Power and Adapters. Yonghong is a supplier of Lenovo, Huawei, Founder, Tsinghua Tongfang, Greatwall, TCL, Ruijie (formerly Start), Evoc and Datang, Dell, NEC, Siemens, Motorola, Acer, Samsung and Fujitsu.

26 http://www.fsp-group.com/english/4_about/1_brand.asp?id=4
5.1.2 Thailand

Delta Electronics (Thailand) Public Company Limited.

Delta Electronics (Thailand) Public Company Limited is a public traded company. The Group's principal activities are the manufacture and export of electronic components. It operates in Thailand and the USA. Delta Electronics is established in the Bangpoo Industrial Estate, an economic processing zone (EPZ) near Bangkok. The facility consists of three production sites: Delta 1 (monitors and televisions), Delta 3-4 (components and small products for adapters), and Delta 5 (power supplies and adapters). Another production facility, Delta 6, is located in Welgrow, and produces cooling fans for computers. The company has a workforce of 12,000 employees of which 10,000 are regular and 2,000 are subcontracted workers. Delta Electronics Thailand is part of the Delta Group, the world's largest provider of switching power supplies, headquartered in Taiwan. The company is a supplier of almost all large PC manufacturers, including Acer, Apple, Dell, Fujitsu Siemens, Sony, NEC, HP, Toshiba and IBM. The Company was certified ISO 14001 for environmental safety standard in 1999 and OHSAS (Occupational Health and Safety Assessment) by BVQI.27

CKL Electronics Co. Ltd.

CKL Electronics Co. Ltd., hereafter CKL, is located in the Bangpa-in Industrial Estate. It exists for 16 years, and was acquired some years ago by APCB, a Japanese company. This is the only facility they have in Thailand. They have two other facilities in China (Shenzhen and Guan Shan). The company produces PCBs (printed circuit boards) of which 40-50% for automotive industry (Amron, TIW and Suletron), 20% is computer related and 20% for home appliances (Panasonic and Sony, Sony via Panasonic). The computer related products concern PCBs for power supplies, fans, fan controls and ear phones. All the computer related products are supplied to Delta Electronics, and Delta Electronics in turn supplies all computer brands including Acer, Apple, Dell, Fujitsu Siemens, Sony, NEC, HP, Toshiba and IBM. The company employs 850 workers. A new factory of 100,000 square feet will produce LCD TVs, control boards, and car audio boards. CKL has adopted ISO/TS 16949 and ISO 14001.

LTEC Company

LTEC Company (hereafter LTEC) is a joint Thai-Japanese company. The company produces components for Nokia mobile phones, microwaves, digital cameras, airbag switches, National electric thermoses, Sony cameras, Acer computer notebooks, Fujitsu microchips, IBM SIMs, Toshiba calculators, and control screens for Sharp microwaves. LTEC employs more than 6,000 persons and plans to expand to 10,000 employees. Five years ago, LTEC upgraded its factories and installed automatic machines, now the factories have regular, semi-automatic, and fully automatic packaging machines. Previously, three workers were needed for each machine, now only one person per machine is needed.

5.2 Working Conditions in Supplier Companies

5.2.1 Employment is Freely Chosen

No cases of forced or bonded labour were reported. However, at LTEC the site is protected by guards and workers are not allowed to enter or leave the premises during work hours unless they have asked permission.

27 http://www.deltathailand.com/about_corporate.html
5.2.2 Discrimination and Unequal Treatment of Contract Workers

At Delta Electronics contract workers are discriminated vis-à-vis regular workers because they earn less wage.

At LTEC it was reported that workers who have hepatitis B only get a year-to-year contract. Further, workers pointed out that obtaining sick leave and the size of the end-of-year bonus and promotions strongly depend on personal contacts with the supervisor.

5.2.3 Child Labour

One case of child labour was encountered. Yonghong was found to be hiring more than 200 child workers under the age of 16, mainly students from rural villages seeking for summer jobs. Out of the 25 workers interviewed, 7 of them are child workers. Many child workers were students from Henan and Shaanxi provinces. They were led by teachers to come to work in Shenzhen-based Yonghong partly to pay off the school fees owed. Since they were considered ‘unskilled’, the factory required them to work an extra 1.5 hours daily without pay to compensate for the ‘lower than normal productivity.’ Normally, they worked 13 hours per day or 390 hours (for 30 days) per month. During peak seasons, they worked more than 400 hours and 60 of those hours were without pay.

One investigator pretended to be a teacher and inquired about job opportunities from a human resources manager of Yonghong, who said underage students would be hired as long as they looked ‘not so young.’ X was aged 15, she just finished second grade in secondary school and was hired by Yonghong. She said she tried to resign in early September when the new term began. However, her resignation was not approved by the factory and the teacher who sent her there. As found out later, many teachers lived near the factory to ‘monitor’ the students. They required the students to report to them every night when the shift was finished.

5.2.4 Freedom of Association and the Right to Collective Bargaining

At present, there is no union at LTEC. This can be explained by saying that the Northern region of Thailand is known for being really tough to unionise and as a subsequence the workers in this region are not familiar with unions. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there.

In several factories included in this research (33 suppliers), severe violations of the freedom of association and the right to collective bargaining were reported.

But some of the investigated companies in Thailand do have unions. At Delta Electronics there is a strong union with about 5,000 members. According to the management the union only has small complaints like the food quality, the transport ventilators and wages. However, currently there is a labour dispute in preparation by the union because they want wage increases. Some of the workers explained that because of the low wages their debts are increasing each month. The basic wage is not living wage. They are really angry with the company because their financial situation is getting worse every month while they can read on the Stock Exchange Information that Delta's profits are getting larger.

At CKL there is a union and 540 out of the 751 workers are union members. The efforts of the union are geared towards increasing the minimum wage and bonuses of the workers. There is a collective agreement (set every two years) between the union and the management but the union
is not positive about its results. There is a monthly meeting between the union and the management but according to the union this is mainly focussed on profits and the need to improve production of workers instead of discussing labour conditions. The relationship between the union and the management is described as ‘tense’. Contract workers normally do not join the union because they can be dismissed easily and are afraid to loose their job being associated with a union.

5.2.5 Wages and Overtime Payment

The legal minimum for overtime pay is 6 and 8 Yuan per hour respectively for normal days and holidays in Shenzhen City. Yonghong currently was found to be paying 4.5 and 5.8 Yuan respectively. Workers worked 150 overtime hours every month and the hours beyond 150 were not paid. China labour laws require employers to buy social insurance policies for workers, including industrial accident insurance, medical insurance and old age pension. Yonghong did not provide any of the legally required social insurance for workers.

Workers of LTEC, CKL and Delta Electronics stated that their wage is not a living wage because it is simply not enough to cover their living expenditures. Moreover, workers of the latter company also reported their wages are deducted in case of sickness.

At CKL workers are warned when they miss the, often unreasonably high, target. The number of warnings has a negative effect on their wage increase and affects the bonus at the end of the year.

5.2.6 Excessive Working Hours and Intensive Production Rhythms

Table 3 presents the regular working hours and overtime per factory for which information was acquired.

At Yonghong, a female worker complained that she had to work 7 days a week and have overtime every day except on Fridays. She was forced to sign an agreement which said she “willingly agreed to work overtime according to the factory schedule.” Yonghong had workers working 296 hours per month during low season and 374 hours during peak season, which were both way beyond the legal maximum of 210 hours (174 basic work month in Shenzhen City plus 36 hours overtime work) per month.

At Delta Electronics the regular workweek is 8 hours plus 2 to 3.5 hours overtime for 5 days per week. This implies that total working hours including overtime does not exceed the 60 hour standard set by the ILO.

Workers at CKL pointed out that overtime is compulsory during peak production from January till June. In principle overtime during Saturday and Sunday (or any other sixth and seventh day of the workweek) can be refused but as a repercussion workers are excluded from future (voluntary) overtime work. Workers also mentioned that sometimes during peak production they have to work two shifts in a row (i.e. 24 hours in total).

For LTEC, workers mention that their regular workweek is 8 hours per day during 6 days a week. Moreover, they indicate they are forced to work overtime for an additional 4 hours per day and on Sundays. This means that working hours at LTEC exceed the ILO standard.
### Table 3: Regular working hours and overtime per factory

<table>
<thead>
<tr>
<th>Factory</th>
<th>Regular working hours</th>
<th>Regular Overtime</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yonghong</td>
<td>-</td>
<td>296 hours per month during low season and 374 during peak season</td>
<td>Compulsory overtime</td>
</tr>
<tr>
<td>Delta Electronics</td>
<td>8 hours, 5 days per week</td>
<td>2 hours during day shift, 3.5 hours during night shift</td>
<td>Between 50-57.5 hours per week.</td>
</tr>
<tr>
<td>CKL</td>
<td>9.5 hours, 5 days per week</td>
<td>2.5 hours per day and on Saturday and Sunday</td>
<td>Compulsory during peak production. Between 60-84 hours per week.</td>
</tr>
<tr>
<td>LTEC</td>
<td>8 hours, 8 days per week</td>
<td>4 hours overtime per day and on Sundays.</td>
<td>Compulsory overtime</td>
</tr>
</tbody>
</table>

Note: With regular overtime is meant overwork performed on a day-to-day basis.

#### 5.2.7 Health and Safety Conditions

**Yonghong** did not provide gloves, masks and proper ergonomics in the workplace, leading to injury on hands, eyes and other bodily injuries.

In **Delta Electronics** the LCD department pointed out they are soldering with lead. They are afraid how this affects their health because they inhale the smoke. They require better medical check-ups but do not trust the health and safety inspector, who says there are no problems, and medical facility at the factory. Workers also complain about a terrible smell in the cooler fan department that sticks in their clothes for days. The management has not responded to their complaints. Finally, workers reported an accident in 2001 in which six people died after the collapse of a building.

At **CKL** workers have to work with hazardous chemicals and there is not enough safety equipment provided by the company. There is one department where chemicals are mixed just outside the factory. As was expected by the interviewed workers, this site was not shown by the management to SOMO researchers during their factory visit. Workers complain about coughing and irritated skin and at least two cases have been found of workers having poisonous chemicals in their blood. After complaints by the union the management only installed a fan but the problem remains. Another problem reported by workers at **CKL** is the mixing of ink. They indicate that the provided mouth caps are too thin and of low quality resulting in the inhaling of poisonous fumes. Although the yearly company medical check did not find any medical problem one sick worker went to a hospital where it was found that his lungs were affected by toxics. After notification, the worker was transferred to another department. Finally, workers pointed out that at **CKL** chemicals sometimes react, for example because different machines are cleaned with the same cloth, and cause fire. Around June-July there were three of such fires. This is also dangerous, because workers report that the fire equipment is of low quality and some of the fire extinguishers are empty.

At **LTEC** workers have mixed feelings about the working conditions. On the one hand, they point out that there is a nurse and on some days a doctor, sufficient protective gear and drinking water, trainings on hazardous chemicals and a clean canteen. On the other hand, they report there have been some minor and two major accidents in the factory; several workers feel sick although they passed the annual health check; there are not enough toilets; and protective clothing is not comfortable and is often not used because workers feel it prevents them from meeting production targets. Nonetheless, all in all it seems that **LTEC** takes working conditions serious. This is illustrated by the companies willingness to investigate the before mentioned accidents.
5.2.8 Awareness of Code of Conduct and Audits

The management of Delta Electronics said that large buyers stimulate the company to treat its workers well and deal correctly with environmental issues and that some of these companies do come with codes of conduct and perform audits. Some buyers are very specific, like not using child labour and ensuring that the maximum working week does not exceed 60 hours. Some of them also ask about the suppliers of Delta Electronics and even check them. The management mentioned the EICC code and said that Delta Electronics complies with this standard.

Currently the Green Partnership approval from SONY/Panasonic for CKL is pending. CKL is recently audited (October 2006). Panasonic is one of their partners, as they buy the PCBs for Sony. Sony had expressed their concerns about reliabilities, and a few items need to be improved for Sony. The management of CKL explained that the Japanese standards are high, like using all halogen free materials, and these standards are higher than in Europe.28 At October the 12th 2006 CKL expected an audit from Delta Electronics, their main client, and Fujitsu had also announced their visit. The management of CKL made clear that none of the customers ask for social standards. The interviewed manager (Sales Assistant manager) has no knowledge of company codes supplied by customers.

Foreign visitors have come to the LTEC factory but never spoke to workers. It is unclear whether the visitors came to audit the factory or for other purposes. Sometimes the visitors asked about safety conditions but never about working conditions.

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28 Source SOMO interview with the management of CKL Electronics, 11 October 2006.
5.2.9 Summary of Violations

Table 4: EICC Violations of Acer Suppliers

<table>
<thead>
<tr>
<th>Supplier Country</th>
<th>Yonghong</th>
<th>LTEC</th>
<th>CKL</th>
<th>Delta Electronics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour</td>
<td>China</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Thailand</td>
</tr>
<tr>
<td>Freely chosen labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child labour avoidance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours more than 60 hours</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Working hours: forced overtime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>no minimum wage paid/over time not paid/unreasonable wage deductions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Workers indicate it is not a living wage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(in)Humane treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non discrimination</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Freedom of association</td>
<td>see note 1</td>
<td>see note 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Under Chinese law, the All China Federation of Trade Unions (ACFTU) is the only trade union recognized in China. It exercises a legal and heavily protected monopoly over all subsidiary union organizations and trade union activities. It remains under the control of the Communist Party, which appoints its officials. This means that by law there is no possibility of truly independent unions forming in China, which compromises workers' freedom of association.

Note 2: The Northern region of Thailand is really tough to unionise. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there. According to interviewed labor groups it has occurred that local police man play the role of hitman. They told the story of an organizer, trying to organise workers, who was shot for doing this but fortunately not killed. This happened between 1 and 2 years ago. More recently a researcher on workers rights was threatened and decided to go back to Bangkok. The workers in this region are not familiar with unions.

5.3 Acer Hard Disk Drive Supply Chain in Thailand

Figure 7 depicts a part of the Hard Disk Drive (HDD) supply chain in Thailand. The working conditions in six suppliers (including one second-tier supplier) of HDD manufacturers have been analysed. The figure shows that almost all suppliers produce equipment for more than one HDD manufacturer (indicated by the arrows). Below, first a brief description of the HDD suppliers is presented, followed by a summary of the findings on working conditions in the next section.

SOMO received corrections and supplementing information by Seagate (one of the HDD manufacturers operating in Thailand) related to their suppliers subject in this field study. 29 Seagate took the initiative to send the draft report to its (former) suppliers for verification.

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29 SOMO received the comments of Seagate on February the 16th 2007 relating to the following suppliers: Innovex, MMI, Ltec, Mektec and Paragaon. According to Seagate MMI is not one of their suppliers anymore since December 2004.
LTEC Ltd.
LTEC Ltd. (hereafter LTEC) is a joined Thai-Japanese company. The company produces components for Nokia mobile phones, microwaves, digital cameras, airbag switches, National electric thermoses, Sony cameras, Acer computer notebooks, Fujitsu microchips, IBM SIMs, Toshiba calculators, control screens for Sharp microwaves and HDDs for Seagate/Maxtor. LTEC employs 6,400 persons and plans to expand to 10,000 employees. Female employees account for 82% of all employees. Five years ago, LTEC upgraded its factories and installed automatic machines, now the factories have regular, semi-automatic, and fully automatic packaging machines. Previously, three workers were needed for each machine, now only one person per machine is needed.

MMI Precision (Thailand) Co. Ltd
MMI Precision a Singaporean owned company. The company operates in four countries – Singapore (Headquarter), China, Malaysia and Thailand – and in Thailand there are four branches of MMI precision. The information in this report refers to 2 production sites situated in Nawa Nakhorn Industrial Estate 1 (project 1 and 3) and is hereafter referred to as MMI. Its main client is Seagate/Maxtor but the company also supplies NEC, Minibear, Fujitsu and Fujikura. The interviewed workers are producing the metal covers for HDDs.

Info provided by MMI\textsuperscript{30}: Overall the company has 211 regular workers and 517 contract workers. Overall workers composition: Female=46.5%, Male= 53.5% in both Zone 1 & Zone 3. MMIT took over TPW and continued the Maxtor (now Seagate) business until 2004. Zone 1: Motor Brackets for spindle motor [HDD] & also other non-HDD businesses, e.g. automotive, telco, medical businesses. Zone 3: All non-HDD business [machining]. Current main clients: SC Wado/JVC, Fujikura, Shindengen, Fabrinet-Avanex. Since the cessation of Maxtor's business in 2004, MMIT has shifted the business focus to non-HDD businesses.

The activities and main clients mentioned by the workers do not correspond with the information provided by the management of MMI.

Innovex
Innovex is owned by Hana Company and was previously named Adflex. Its parent company which supplies raw materials is located in America. Starting in 1999-2000 the company transitioned from the lead wire business to flexible circuit interconnects. Over 95% of the company revenue is from the flexible circuit business. There are two branches of Innovex in Thailand: one is in Korat and the other is in Lamphun province. The information below pertains to the latter production site. It mainly produces electronic components for various brands, including: Nokia (mobile phone circuit board chips), IBM (hard disk processors), Philips (TV and computer circuit boards), Hitachi (electric circuit boards), Samsung (televisions and digital cameras), Seagate/Maxtor (hard disk drives), IBM (Now Hitachi) and other customers order erratically. There are about 3000 employees at Innovex.

Comment Innovex: although most of their production in intercompany; 3M is the largest flexible circuit manufacturer in North America.

Mektect
Mektect’s main business is flip-chip “assembly” for disk drives. It attaches semiconductor dies using the flip-chip method to FPC for the disk drive industry for which as noted earlier Thailand is the number 2 spot in the world. Mektect’s main customers are Seagate/Maxtor, Western Digital, Hitachi, TI and Fujitsu. The company states that: “We are the world’s largest flex and flip chip assembler, and supply to computer, automotive and communication manufacturers worldwide. Our

\textsuperscript{30} Info supplied by MMI through Seagate.
plants are located in Bangpa-in Industrial Estate and Hi-Tech Industrial Estate, Ayutthaya.” Mektec has 3,600 employees as of Jan. 2007.31

**Paragon**
Paragon has 350 employees. Paragon is a supplier of Mektec according to the interviewed workers. Paragon is Mektec’s Subcontractor (outsourcing). The interviewed workers (female) work on the production department checking the APC for computers and digital camera’s. It concerns flip chip assembly.

**Murata Company**
Murata Company (hereafter Murata) is Japanese-owned producer of Panasonic, Hitachi, Cannon, and Toshiba products, the majority of which are Toshiba televisions and copiers. After five years, Murata has repaired and refurbished its factories and added one more to bring the total number of factories to eight. It has increased the number of employees continuously and is currently hiring. Murata Company employs over three thousand workers, of which about 1,000 workers are male, and it does not have any policy to discontinue hiring. Usually when there is little work, the company will rotate workers and responsibilities to other busy areas. Many workers have left Murata in the past because of job monotony and boredom, to look for a better workplace, problems with co-workers, or long-term health problems. Full time employment is offered to workers who pass a probationary period, after which they are paid on a daily rate.

**Fujitsu (Thailand) Co., Ltd.**
Fujitsu (Thailand) Co., Ltd (hereafter Fujitsu) established in 1988, is located in the Navanakorn Industrial Estate and employs total about 4000 people. It mainly produces hard disk drives (HDDs) for a variety of customers, including besides HP, Sony, Dell, Matsushita, Hitachi, Toshiba, IBM, Sony and National (Panasonic).

**Western Digital Thailand**
Western Digital (US company) is the second largest Hard Disk Drive manufacturer worldwide (after Seagate which recently acquired Maxtor). Like Fujitsu, Western Digital Thailand (hereafter Western Digital) is located in the Navanakorn Industrial Estate. The facility consists of former Fujitsu and Read Rite factories, which were acquired in 2001 and 2003, respectively. Since July 2006 the facility is named Western Digital. Its main customers are HP, Lenovo/IBM, Sony, Panasonic, and Dell. Western Digital employs about 22,000 workers in Thailand of which about 8000 work at the facility in Navanakorn. Western-Digital is investing this year to expand capacity at its two plants in Thailand.

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31 SOMO received comments from Seagate by email on February the 16th 2007 relating to the following suppliers: Innovex, MMI, Ltec, Mektec and Paragaon. Mektec provided feedback on the draft report.
5.4 Working Conditions in the Thai HDD Supply Chain

5.4.1 Employment is Freely Chosen

No evidence was found of forced, bonded or involuntary labour.

5.4.2 Discrimination and Unequal Treatment of Contract Workers

Some cases of discrimination were reported. At LTEC it was reported that workers who have hepatitis B only get a year-to-year contract. Further, workers pointed out that obtaining sick leave and the size of the end-of-year bonus and promotions strongly depend on personal contacts with the supervisor. Comment LTEC: LTEC does not discriminate against employees on the grounds of infection with Hepatitis B virus. Supervisors cannot decide rankings or promotions of their subordinate by only their preferences.

A number of discrimination cases were found relating to discrimination of contract workers. The workforce of several companies in this research mainly consists of this type of workers. For example, in Western Digital 60 percent are agency hired. At Western Digital and Fujitsu contract workers received a lower wage. At Fujitsu contract workers were denied certain bonuses and insurances, and when female workers apply for a job they have to take a urine/pregnancy test, contract workers getting pregnant will be fired.
At Western Digital most males are regular workers but the majority of female workers, mainly in the assembly line, are hired through an agency. The agency requires the female candidates to take a urine test, which is very likely used to determine pregnancy. This is confirmed by the fact that one of the workers was dismissed after she got pregnant. Only after a lawsuit, filled by CLIST, the worker could return to the factory as a subcontracted worker.  

Only 30% of the workforce in MMI is employed on a regular basis, the rest have their employment outsourced through agencies. The outsourced workers don’t have any job security. Their length of employment contract is completely dependent on the amount of orders the company receives. Resulting from this uncertainty was a high turnover rate of around 50% for a given day. The wages of the workers at MMI are different between the regular workers and the contract workers. The regular workers earn at least 8,000 Baht per month (the highest amount we learned was 15,240), and benefits like an annual bonus equal to one month wages and monthly diligence bonus of 450-500 per month, and transport allowance and rice, social security and their uniform is provided for free. The contract workers earn 184 baht per day, making 4,784 per month (26 x 184), they get no annual bonus and their monthly diligence bonus amounts 150-200 baht per month, they have to pay 160 baht for a shirt, 99 baht for the trousers, 350 baht for safety shoes. Subcontracted workers also have to buy their safety mask and safety glasses themselves (!), these costs were deducted from their salary. Moreover, contract workers have less air-conditioning, and no medical check-ups for the contract workers.

Comment MMI: Contract workers pay 170 baht for their shirts and they are allowed to wear their own pants. Personnel protective equipment [PPE] are provided free-of-charge to all staff, contract workers included, if the jobs condition requires them, as per safety regulations. Contract workers are provided free annual health checks. The regular workers had been with the company and previous company (TPW) for more than 10 years and hence, the higher salary as compared to the new recruits.

Also at LTEC the benefit is different between temporary workers and permanent workers.

At Murata, if the company finds out that some of the subcontracted workers are union members then these workers will be fired immediately. One interviewed female worker (contract worker) of Murata said the medical test for the labour agency includes a pregnancy test. The workers have to pay themselves for the medical test. Also at Murata, women who become pregnant during the probation period will not obtain fixed employment. Also when women are found to be pregnant during the application the company will not offer her employment.

5.4.3 Child Labour
No evidence of child labour was encountered in any of the factories investigated.

5.4.4 Wages and overtime payment
At 6 production sites, MMI, LTEC, Innovex, Fujitsu, Western Digital and Murata, workers state their wage is not enough to cover the cost of living, let alone save money, although it meets Thai labour Law. They also point out they feel forced to work overtime in order to earn additional income to cover basic expenditures.

Comment LTEC: The legal minimum wage rate is periodically reviewed and adjusted by the Wage Committee to suit the economy and standard costs of living. The basic minimum wage rate is

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32 CLIST is a Thai non governmental Thai workers’ rights organization.
generally considered as appropriate and acceptable by the government, employers, and employees.

Workers at Paragon also mention a case of unjust wage deductions because that their annual bonus will be cut if they do not meet their production targets. They may loose up to 4/5 of their bonus.

At Western Digital the bonus is reduced in case of sickness.

5.4.5 Freedom of Association and the Right to Collective Bargaining

The findings with respect workers’ freedom of association and the right to collective bargaining vary across production sites.

There is no union at LTEC. This can be explained by saying that the Northern region of Thailand is known for being really tough to unionise and as a subsequence the workers in this region are not familiar with unions. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there.\(^3\)

At present there is no labour union at the Fujitsu Thailand factory. The main reason for this is that in 1998 after a major strike the company shut down and fired all the union leaders. It also started to hire more contract instead of regular workers, which makes it more difficult to set up a union. Workers indicate that in the past the company actively discouraged the formation of a trade union but this is less the case now. Nonetheless, workers feel that setting up a union is not possible.

There is no union at Western Digital, but only a welfare committee. It is not known what they do and whether they function on behalf of the workers. Workers feel it is very difficult to organise because they are all covered up with protective clothing, do not have time to talk and the breaks are very short. Workers are afraid they will lose their jobs when they start forming a union.

According to the workers at MMI are now 235 regular workers and 600 subcontracted workers. 80% of the regular workers are member of a union. Three years ago this location had 1600 workers of which 1400 union members. After a major labour dispute three years ago, all union members were laid off (1400!). This weakened the union to great extent; this is also called ‘union bashing’. The current union members have a better relationship with the management since the management is replaced. The subcontracted workers do not join the union because they are afraid to be dismissed because of this. According to them, the union only supports the regular workers. The use of contract workers has reduced the unions bargaining power. 

Comment MMI: Staff were laid off based on business exigencies and severance compensation as per labor law were provided. Not all union members were laid off. The past union chair is still employed by MMIT and he continues as the union lead in MMIT.

Moreover, in 2004 MMI successfully dismantled the trade unions at two of its other factories by spinning of these factories and making them subcontracted factories, with new workers via labour agencies and no trade unions anymore. The workers expect the same will happen at one of the two factories in Nawa Nakorn, at the moment workers of this factory experience quite some sabotage from the management. 

Comment MMI: MPMT and MMI’s Korat project [MPA] were expansions of MMI Group’s business and have nothing to do with MMIT’s operations. Management adhered to the CBA closely.

\(^3\) Interview SOMO with fieldworkers, October 2006, Bangkok.
At **Innovex** there is no union. It seems as if workers are not aware of their right to form unions. They mention that there exists some kind of labour rights training but only supervisors attend. The workers indicate they are not informed nor invited about them. Allegedly, the trainings are not about labour rights but deal with issues like working hours and wages.  

*Comment Innovex:* At every quarterly communication meeting, every employee is given the opportunity to submit questions or complaints and every submission is answered. There have also been regular, random skip level meetings with the workers by senior management. The safety committee, which has 4 daily production workers out of the 15 members, meets monthly. The Safety Officer performs daily facility walks to monitor compliance and look for potential problems.

Also at **Mektec** there is no trade union. The company does not seem to discourage the trade union actively but it rather provides alternatives to avoid trade union. The factory has set up an association for the workers, with activities as library services, renting CD and karaoke for the break time etc. Workers rights are not an item.  

*Comment Mektec:* Mektec always encourages its employees to express their opinions regarding to their work. The company also set up systems for their employees to express their concerns or complaints through several activities. Furthermore, Mektec allows its employees to express their abilities through activities such as Quality Circles Committees (QCC) and several other improvement projects.

At **Paragon** the management discourages the formation of a union by prohibiting people to talk with more than 5 persons together and states workers have to talk to the management when there are problems. The workers strongly feel that the management does not want a union in the factory. Hence, not surprisingly, so far no union has been formed at **Paragon**.

There is no union at **Murata**. Similar to **Innovex**, it seems that workers are not aware of the freedom of association and the right to collective bargaining. There are trainings which deal with working hours, pay rates ad the like in which only staff participates. When workers have complaints they can put them in a suggestion box but it seems that nothing is done with them.
5.4.6 Excessive Working Hours and Intensive Production Rhythms

Table 5 presents an overview of regular and overtime working hours per production site.

During the time of the investigation there was due to limited orders not much work at Innovex. Workers indicate they want to work more but there is simply no work. This raises also problems. It is the company’s policy to compensate workers during regular workdays. As a consequence, it forces workers to take up holiday when there is no work in order to avoid paying them salary. It regularly happens that workers show up at the factory but sent home again and told they have to use one of their rest days. Finally, workers also mention that when workers are ill they are only allowed to rest for two hours. If they need longer they have to take a sick day and lose their daily pay benefits.

At LTEC, workers mention that their regular workweek is 8 hours per day during 6 days a week. Moreover, they indicate they are forced to work overtime for an additional 4 hours per day and on Sundays. This means that working hours at LTEC exceed the ILO standard. Comment LTEC : LTEC working hour is 8hours/day + overtime 2.5 hours/day (Max 10.5hours/day). LTEC adjusts the worker's working schedule to avoid 7 days working in a row. LTEC has not forced the workers overtime working and had got the consent of overtime working from the workers. LTEC ensures that the number of hours for working overtime and working on holidays should not exceed the 36hours / week. Thai law) But even when LTEC workers work 10.5 hours per day instead of the 12 hours as claimed by the workers, LTEC still exceeds the ILO standard and the EICC.

At Murata workers state they work 12 hours per day, including overtime for five or six days per week, depending on the company’s schedule. There is regular overtime work, depending on orders. If there is a large order workers overtime is compulsory also during holidays. If there aren’t many orders, workers can take some holidays. Overtime and holiday pay is paid in accordance with company regulations.

At Innovex workdays are eight hours long, and the workweek is six days long, with Sundays off. During peak production workers overtime is compulsory. Currently there is not enough work so there is no overtime at all, moreover, workers are forced to take holidays even if they have showed up at the factory dressed and ready for work, only to be told that they must use one of their rest days, and the worker has no choice but to follow the orders. Comment Innovex : This is not Innovex practice. Over the past two and a half years, we have had two shutdowns (one in August 2006 and one in December 2006). Both of these shutdowns were announced well in advance, employees were paid half their daily wages and given the option of supplementing that pay by taking annual leave for the other half of the day.

At MMI the workers must work 12 hours per day. Overtime is automatically required. For the outsourced workers it is written into their hiring contracts that they must work 12 hours per day. A temporary worker was intimidated by the agency that he cannot refuse overtime and will get dismissed immediately in case overtime is refused. One interviewed worker said that if they refuse overtime on Sunday, their salary will be cut with 1 day salary. Her working schedule over 2006 showed that she worked 2 Sundays per month in the low season. The peak season was 4 months this year, in that period she worked every Sunday (thus 7 days per week, 12 hours per day).

Based on other interviews MMI: The employer requires the workers to work 36 hours of overtime per week. Often the workers have no opportunity to take any day off in a month. The only time off is
when the shift is changed (one per month), where workers will have almost a whole day before they will have to go to work again. The workers will have to work 324 hours per month. The employer will inform on Saturday whether the workers will have to work the following Sunday. As for Monday through Saturday the workers must work 12 hours per day. If the workers don’t want to work overtime they must provide the line leader with a reason. The line leader will at these occasions ask/plead/threaten the workers to stay as there is so much work to do.

*Comment MMI: Overtime is performed only with the consent of our staff. We do not force our staff to work overtime if they do not agree to do so for whatever reasons that they may have.*

At Mektec overtime is also forced by the management. Workers point out that in practice they cannot refuse overtime because only with a ‘very good’ reason they are allowed not to work. A normal working day is 10.5 hours for 6 days per week. During peak season they also work on Sundays which is about three months per year.

*Comment Mektec: Regular working hour is 7 hours per day. Should there be any overtime in each day; Mektec would allow its employees to volunteer to work overtime. Mektec also makes sure that within one week, including their day off or any holidays, overtime would not exceed 36 hours per week. This is enforced by Thai Labor Law.* It would be better if Mektec refers to the EICC instead of referring to Thai labour Law which is legalising work weeks up 84 hours.

At Paragon overtime is not compulsory as is the case at Mektec. However, as wages are very low workers generally want to work more than the regular workday of 8 hours. The overtime is usually 3.5 hours. The company knows this and therefore has made overtime conditional on reaching the daily production target. In other words, workers are denied overtime if they do not reach the set production target, which is hard to meet.

Excessive working hours were also reported by some of the workers of Fujitsu, and Western Digital; 2-4 hours overtime plus overtime during the weekends is regular practice. This overtime is perceived as compulsory. At Fujitsu labourers stated that if they refused to work overtime without a very good reason they are put on a black list and receive warnings. After three warnings there is a chance you will be dismissed. In addition, it was reported that in case overtime is refused, the annual bonus is deducted, salary is cut or wage increases are not followed up. Further, workers said there are mandatory exercises of 15 minutes with music and trainer to prevent workers from falling asleep because they are so tired of the work.

At Western Digital workers indicate that supervisors threaten them with dismissal if they do not accept the overtime work. With 12-hour shifts, 7 days a week during peak season (which lasts 10 months a year according to workers) working hours in this factory are particularly excessive and unreasonable.

Finally, at Mektec and Paragon, workers are subject to degrading treatment and intensive production rhythms. Every month the manager is speaking to the workers just to yell and shout at them to make them work harder. Moreover, workers feel that targets are set which are impossible to complete. At Paragon there is also a weekly meeting with the supervisors to make them work harder and the management threatens to close the factory in case they do not increase their efforts.

*Comment Mektec: Yelling is not practiced within Mektec. Mektec has many other ways to encourage workers to work harder such Quality Circle Committee activities. Mektec set targets with
careful consideration and we have exceeded our targets every year. Mektec to have records and evidence to support this. At Paragon there is a weekly meeting with supervisor to enhance workers attitude and guide them to work happily and effectively.

<table>
<thead>
<tr>
<th>Factory</th>
<th>Regular working hours</th>
<th>Regular Overtime</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTEC</td>
<td>8 hours, 6 days per week</td>
<td>2.5 according to LTEC, 4 hours per day according to the workers and every Sunday.</td>
<td>Compulsory overtime. 10.5 or 12 hours in each day, 63-84 hours per week.</td>
</tr>
<tr>
<td>MMI</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and 2 out of 4 Sundays.</td>
<td>12 hours in total each day, 72-84 hours p.w.</td>
</tr>
<tr>
<td>Innovec</td>
<td>8 hours, 6 days per week</td>
<td>No overtime</td>
<td>48 hours p.w.</td>
</tr>
<tr>
<td>Mektec</td>
<td>8 hours, 6 days per week</td>
<td>2.5 hours per day. During peak production (about 3 months per year) also on Sunday</td>
<td>Compulsory overtime. 10.5 hours in total each day, 63-73.5 hours p.w.</td>
</tr>
<tr>
<td>Paragon</td>
<td>8 hours, 5-6 days per week</td>
<td>3.5 hours per day. During peak production (June-January) every day including Saturday and Sunday</td>
<td>11.5 hours in total each day, 57.5-80.5 hours per week.</td>
</tr>
<tr>
<td>Murata</td>
<td>8 hours, 5-6 days per week</td>
<td>4 hours per day</td>
<td>12 hours in total each day, 60-72 hours per week.</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and 2 Sundays per month</td>
<td>Compulsory overtime</td>
</tr>
<tr>
<td>Western Digital</td>
<td>8 hours, 5 days per week</td>
<td>4 hours overtime per day. During peak season (10 months per year) a 12 hour shift, 7 days per week.</td>
<td>Compulsory overtime</td>
</tr>
</tbody>
</table>

Note: With regular overtime is meant overwork performed on a day-to-day basis.

5.4.7 Health and Safety Conditions

At LTEC workers have mixed feelings about the working conditions. On the one hand, they point out that there is a nurse and on some days a doctor, sufficient protective gear and drinking water, trainings on hazardous chemicals and a clean canteen. On the other hand, they report there have been some minor and two major accidents in the factory, that several workers feel sick although they passed the annual health check, there are not enough toilets and protective clothing is not comfortable and is often not used because workers feel it prevents them from meeting production targets. Nonetheless, all and all it seems that LTEC takes working conditions serious. This is illustrated by the companies willingness to investigate the before mentioned accidents.

Comment LTEC: LTEC conducts health & safety education when they join the company. Protective equipments such as eye glasses, gloves, mask, helmet, and boots which is necessarily for their safety are provided and workers are required to wear protective clothing. LTEC displays sign boards to inform employees of hazards in the work place. The company does not set unrealistic production targets which can not be met with protective clothing.

Workers at MMI have a number of complaints concerning their working environment and are very concerned about their health and safety. First, the work MMI entails very heavy lifting. Second, the factory is very hot due to the casting oven with hot aluminium. The workers have heat rashes, sore and dry throats before they have completed their first year. Third, in the factory with the casting oven, workers have to take out hot pieces with only simple cloth gloves. Further, as they are pressured to speed up – it is said that some workers even take amphetamine to work faster - there is not sufficient time to let the products cool off. Hence, sometimes the aluminium is splashing around, occasionally leaving skin burns in case it hits the workers. Fourth, workers complain about
aluminium dust in the factory. When it rains, the water leaks which sometimes results in electrical sparks because the electrical plugs are all covered in aluminium dust, which serves as the leader of electrical current to the outside. The aluminium dust when wet turns into acidic waste with a foul smell. The workers complained about this pool of acid to the management but it has not been cleaned up. The factory building is old and workers are afraid it will collapse some day. Besides aluminium dust and lead dust there dust from the sand paper used for polishing the pieces. Some workers have to go regularly to the doctor to scrape out lead dust form the throat. When workers cannot take it any longer they will be replaced to another department but the problem remains. Fifth, the noise impacts the workers hearing. They are using headphones and mouth caps but they do not offer sufficient protection.

One female worker even fell sick and appeared to have aluminium dust in her longs. She only partly recovered and no improvements have been made since. Finally, the drinking water is not clean in both factories. To the astonishment of the workers a public health and safety inspection did not confirm their complaints.

Comment MMI: Workers’ performance based on targets was developed by Industrial Engineers and is within stipulated standards. PPE is provided as appropriate, e.g. thick gloves for handling hot work. There were no cases of amphetamine consumption that MMIT is aware of and MMIT’s clinic do not possess or prescribe such drugs. MMIT does not engage in the use of lead or its derivatives. PPE are provided as appropriate. There are also no records or medical reports of these mentioned OHS related, or cancerous cases. MMIT has an in-house Safety Committee with a certified Safety Officer. The Union Chair is a committee member of the Safety Committee. There was no complaint receive from the workers nor the union regarding insufficient toilets and unhygienic canteen conditions. A Canteen Committee, which is also comprised of mainly union committee members, oversees the proper operation of the canteen and the selection of the caterer. UV and filters are installed for the drinking water.

At Innovex workers point out that health problems include: Fatigued eyes, backaches, sore legs for workers who are forced to stand. For workers using magnifying lenses all day long, some suffer from fatigued eyes and migraine headaches; some have soreness in the eyes leading to headache. One worker said that workers “have swollen red eyes that look like they have stung by wasps and the have to stop working for a week to recover.” There is sufficient fire equipment at the factory but to conserve electricity the lights close to the fire exit are largely dimmed. There are not sufficient toilets and workers must wait in line, and workers complain about the canteen. Some workers suffer from bladder diseases because they are forced to hold their urine. Some workers suffer from abdominal pains or swollen legs and don’t know what is causing the pains. Apart from these concerns, workers are also worried about inhaling toxic fumes, because they don’t know what chemicals they are inhaling and what the effects will be. During yearly health check-ups, they have told that their health is normal. Finally, workers report they are exposed to certain chemicals (including Borik Acid) because of limited or protective gear. Due to the bad working conditions work injuries happen regularly. Safety officers do come to inspect them but do not seem to write reports or undertake any action.

Comment Innovex: Low concentrations of Boric acid are used in the gold plate process and all industry standard safety standards are adhered to. Innovex provides personal protective equipment for every employees working with chemicals. We conduct regular internal audits and, as noted, were recently audited by BVQI (ISO certification agency) and certified for OHSAS 18001. Employee health conditions are monitored regularly. Innovex recognizes the potential hazards associated with microscope work and has complied with or exceeded all safety standards. Innovex has 109 toilets which are more than required by Ministry of Labor. All areas that have chemicals or possible fumes have the accepted standard safety monitors and controls.
The testimonies of the workers about the H&S situation at Innovex are in contrast with the comments of Innovex management.

At Mektec health and safety conditions seem up to standard. There is a problem with aluminium dust but good protection equipment is provided for free. Every year there is an extensive medical check up: including blood test, urine tests, x-rays of the lungs. The more dangerous the work the more medical check ups. Nonetheless, workers report an accident with a machine. A worker warned the management that the machine was defect but she still had to work with this machine and hurt herself badly. The management paid the medical costs and her sick leave. The worker returned to work although her hand never healed completely.

At Paragon there are problems with dust. Before workers used protection masks but recently the company abolished them because it wants to save money (!) In addition, similar to Innovex, workers who use magnifying glasses extensively, experience trouble with their eyesight.

Also at Murata working conditions are up to standard. There is a health centre for which workers do not have to pay. There are also few accidents and if any they are taken seriously. Further, workers point out that there is sufficient protection for working with chemical products, a clean canteen and sufficient toilets. In general workers are satisfied with the working conditions. Nevertheless, some still report problems with their eyesight and backaches because of heavy lifting.

At Western Digital the main health and safety problems mentioned are aluminium dust and noise. The aluminium dust is in the “kitting out” room where electronics parts are being put together before going to the clean room. Some electronics parts first have to go to the washing room, before going to the “kitting out” and the clean room. The noise problem is in the washing room, where the work is very hard (male workers). The workers do wear big ear covers. In the clean room the main problem is the low temperature (17celsius) in the factory necessary for the production process and the chemicals they have to work with. Most clean room workers have problems with their skin (itching). It is likely that this occurs because they have to mix chemicals at the end of their shift before going home. All production workers of the clean room have to mix these chemicals, and one shift in the clean room contains about 1000 workers. When mixing the chemicals they still wear all their protective clothing. After the mixing the factory takes their protective clothes and washes them. The interviewed worker does not know what kind of chemicals they have to mix. But she thinks it’s not healthy, because a lot of workers have problems with their facial skins.

5.4.8 Awareness of Code of Conduct and Audits

None of the interviewed workers had any knowledge about codes of conduct and never seen any.

Several production sites (LTEC, MMI, Innovex, Western Digital, Fujitsu and Murata) have been visited by representatives of buyer companies but none of them has spoken with workers. It is also not clear what was the purpose of the visit: labour inspections or business. Some buyers have audited Western Digital. According to the management social standards are not a requirement of the buyers. They only require occupational health and safety. Furthermore, Western Digital only asks its suppliers for ISO certificates, whether they are lead free or not and they do random checks on what kind of metals are used. The company does not check its suppliers on social standards.

Comment HP: HP is scheduled to audit Western Digital Thailand in 2007 and has completed the Malaysia audit. HP is working to influence our first tier suppliers to implement more rigorous supplier SER programs with their own suppliers and lack of a supplier management program is a common non-conformance found during HP audits.
Comment LTEC: LTEC distributed the Code of Conduct booklet to all employees. Employees had a meeting to learn about the Code of Conduct. LTEC undergoes several factory inspections per year by many customers for troubleshooting, periodically quality audits and environmental audits.

Comment Seagate: Seagate has sent the Electronics Industry Code of Conduct (EICC) to their suppliers.

Comment MMI: Workers are briefed on Company Policy and Work Rules during orientation and via monthly communication meetings. MMI policy and work rules are based on current Thai Labour Law B.E. 2541. MMI is TS16949/ISO 9002 certified.

Comment Innovex: Innovex has a written policy and a reminder was sent by email to all employees from the COO reminding them of the policy as recently as November 2006. Several customers require information regarding workers conditions. Typically, customers cannot speak with the workers because very few of the production workers speak English.

5.4.9 Summary of Violations

Table 6: Summary of EICC Violations in the Thai HDD Supply Chain

<table>
<thead>
<tr>
<th></th>
<th>LTEC</th>
<th>MMI</th>
<th>Innovex</th>
<th>Mektec</th>
<th>Paragon</th>
<th>Murata</th>
<th>Western Digital</th>
<th>Fujitsu</th>
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<tbody>
<tr>
<td>Labour</td>
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<td>Freely chosen labour</td>
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<td>Child labour avoidance</td>
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<tr>
<td>Working hours more than 60 hours</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Working hours: forced overtime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>No minimum wage paid/ overtime not paid/ unreasonable wage deductions</td>
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<td>Workers indicate it is not a living wage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>(in)Humane treatment</td>
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<tr>
<td>Non discrimination</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Freedom of association</td>
<td>see note 1</td>
<td>see note 1</td>
<td>see note 2</td>
<td>X</td>
<td>see note 2</td>
<td>see note 3</td>
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<tr>
<td>Health and safety</td>
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<td>Occupational safety</td>
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<td>Emergency preparedness</td>
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<tr>
<td>Occupational injury and illness</td>
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<tr>
<td>Industrial hygiene</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Physically demanding work</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Machine safeguarding</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitory and canteen</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Note 1: The Northern region of Thailand is really tough to unionise. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there. According to interviewed labour groups the local police man play the role of hit man. They told the story of an organizer, trying to organise workers, who was shot for doing this but fortunately not killed. This happened between 1 and 2 years ago. More recently a researcher on workers rights was threatened and decided to go back to Bangkok. The workers in this region are not familiar with unions.

Note 2: In a few cases a welfare committee or workers committee are set up instead of (or to prevent) a union. But these committees do not represent the workers rights as unions can do. In some cases the main tasks of these committees are birthday parties, library services, and organising karaoke etc.
5.5 Acer Hard Disk Drive Supply Chain in the Philippines

Figure 8 depicts Acer’s Hard Disk Drive (HDD) supply chain in the Philippines. Below, information on working conditions for seven suppliers (including two second-tier supplier) of HDD manufacturers is reported. Similar to the Thai HDD supply chain most suppliers produce equipment for more than one HDD manufacturer (indicated by the arrows).

Astec Power Phil. Inc.
Astec Power Phil. Inc. (hereafter Astec Power), in Cavite Philippines, established its manufacturing in 1994. It is 99.99% British, 0.003% Filipino and 0.001% American owned company. The parent company of Astec Power is a wholly owned subsidiary of Emerson which is headquartered in Carlsbad, California, USA and listed on the New York Stock Exchange. On April 28, 2006, Emerson acquired Artesyn Technologies and merged it with Astec Power (the parent company), creating the single largest power conversion supply manufacturer in the world. With over 25,000 employees, Astec/Artesyn is now the undisputed industry Leader. Astec Power has a total workforce of 4,000 employees in 275k sq ft. Its mission is for ACDC modules, servers, medium or high power custom and standard products. The company manufactures printed circuit boards of computer motherboards, magnetic coils for HDD, wiring coils, power supply for computers and machines, and DVD-EI. Customers of Astec are Sony, HP, Nokia, Fujitsu, IBM, LG, Compact and Certek Laguna. Products are exported to Japan, China, Europe and Panasonic. Local sub-contracting companies of the company are APC, MEC, Maxxon, Petronics, DKP, Ultimate, P. Imes, Radix Philippines and Dae duck.

San Technology Inc.
San Technology Inc., (hereafter San Technology), a Japanese owned company, was established in Cavite, Philippines in November 8, 1988, to expand production of magnetic head cores for computers for its parent company Sumitomo Special Metals Corporation. In May 2003, the parent company decided to join the Hitachi Group: Hitachi Metals Special Metals decide to form a strategic business alliance; Hitachi metals acquired 32.9 % of the voting rights of Sumitomo special Metals from Sumitomo Metals Industries. In 2004, with effect from April 1, Sumitomo special metals Co, Ltd. And Hitachi Metals, LTD. merged their permanent magnet operations, with the view to expanding them under the new company name of NEOMAX CO. Therefore, since April 2004, San Technology is a subsidiary of Neomax Co.
The company has about 2000 employees; most of them were female workers. The youngest workers in the factory are 20 years old and there is no temporal employment because of the no-hiring policy implemented by Hitachi since the merger in 2003. Products manufactured are chips inductors, printed circuit boards for computers and magnets for Hard disk drives. Apart from Toshiba, San Technology produces for Hitachi (Laguna), Samsung, Hanstar, Fujitsu, IBM, Main Aike and P. IMES & Hayakawa (CEPZ)34. Products are exported to Japan, Singapore, Korea, Malaysia, Taiwan, China and Indonesia.

Mechanical Keyparts Philippines Incorporation
Mechanical Keyparts Philippines (MKP) Incorporation (hereafter MKP) is a 99.99% Japanese and 0.01% Filipino owned company that was established on September 26, 2000 at Cavite Economic Zone. The company was designed for the assembly of carriage spacers for the hard disk drives. It has a labour force of about 1500 of which 25% are regular or fixed employees and 75% are agency hired or Labor-Only Contracting (LOC) workers, also known as Sunpiro. Apart from for Toshiba,

34 Seagate/Maxtor indicated that San Technology is not one of their suppliers.
MKP makes products for Nidec Subic, Nidec Laguna, Nissin Precision (Laguna), TRC and Kapco manufacturing and exports to Singapore, Japan, Malaysia and Thailand.

**Micro-device Technology**
Micro-device Technology (hereafter MD-Tech), separated from San Technology Inc. and established its own manufacturing production on January 1, 2005. It is fully owned by Sumitomo Metal Micro-Devices, Inc. In 2004 the company had a labour force of about 1,000 employees of which 70% were fixed and 30% were probationary employees. On 2006, after the company separated from San Tech, employment was lowered to 900, all fixed workers; 90-95% are females and 5%-10% are males. Its main products are printed circuit boards, flat screen TVs, hard disks, TV slides, DW rewinds for computers, plasma displays which are produced for TMD, Samsung, Nanox, PIT, Toshiba, Nokia, SMDR, Panasonic, Hayakawa, and P. Imes.

**Tsukuba Die-casting Corporation**
Tsukuba Die-casting Corporation (hereafter Tsukuba), a 100% Japanese-owned company was established in the Cavite economic Zone (CEPZ) on April 9, 1996. The company has a total workforce of 1,000 of which 30% are regular and 70% are temporal workers. Among the latter, 30% are agency hired. Workers identified Toshiba as one of the clients of Tsukuba. Local sub-contractors of the company are Kapco, P-ton and CAM Laguna. The company is a supplier of aluminium base for HDDs. It has a unique position of having two other small Japanese firms located with it in the same compound: KAPCO for coating of aluminium die-cast and P-TON for plastic injection. Thus, advantage of reducing production time, providing close communication, and interaction among the three firms, and reducing cost for the customer who has deal with only one firm with regard to product specifications. On the other hand, while having received instructions for specifications directly from Toshiba for the base and cover supplies, it must closely interact with Kapco for surface treatment and with P-Ton for plastic injection parts. Such agglomeration economies originating from co-location of suppliers is exemplified by the fact that lower-tier suppliers Kapco and P-ton are located in the same compound as higher-tier supplier Tsukuba Die-casting.

**Kent Adhesive Products Co.**
Kent Adhesive Products Co. (hereafter Kapco), a 99.99% Japanese and .0025% Filipino was established on May 9, 1996 in Cavite Philippines. It is a manufacturer of surface coated hard disc frames and other coated products and electronic parts if similar feature. The identified products produced by the workers in the production were HDD 2.5-1.8, HDD base, SH cover, top cover and HDD plating for Fujitsu, MKP, EMECEM-Subic, PTON, Tsukuba and Bridgestone and exported to Japan and China. Around 500 workers are employed at Kapco. Most of the workers are agency hired by Sunpiro manpower agency. Kapco uses the following sub-contracting companies: MKP, Tsukuba, Dayap and Emecem.

**Hitachi Global Storage Technologies Philippines Corporation**
Hitachi GST was formed as a result of the strategic combination of IBMs and Hitachi’s storage technology businesses. Hitachi Global Storage Technologies Philippines investments are focused on the manufacture of Hard disk drive (HDD) and HDD component parts such as head gimbal assembly or magnetic heads, slider and headstack assembly for, among others, IBM, Apple and Dell.. Subcontractors of Hitachi GST are the San Technology, Micro Device Technology (MD Tech) and Luzon Magnetics. The company was established on May 11, 1994, is located in Laguna Technopark Inc. and employs about 7000 employees.

**Fujitsu Computer Products Corporation of the Philippines**
Fujitsu Computer Products Corporation of the Philippines is 100% Japanese and fully owned subsidiary of Fujitsu Limited in Japan. It was established in February 1, 1995 at Carmelry Industrial Park I-SEZ Canlubang, Laguna Philippines. Its line of business is for the manufacture of Magneto Optical Disk (MOD) Drives, Magnetic Hard Disk drives (HDD’s), semi-finished computers, components parts and accessories. It was considered by PEZA as a Pioneering activity, FCPP expanded rapidly in its first 5 years of operation exporting its products to the United States, Europe, Japan and Southeast Asian countries. The HDD production started on April 1996. The company has a 6,158 total number of employee as April30, 2006 wherein; 5,443 (88%) are the operators which composed by 96% female and 4% male with 715 (11%) engineers, staff and technicians in which 65% are male and 35% are female. The products of the company are mainly supplied to its mother company which is the Fujitsu limited in Japan and also provided to Sun Micro/SAE and the products are exported to USA and China.

Figure 8: Acer HDD Supply Chain in the Philippines

Second tier HDD suppliers

HDD suppliers

HDD manufacturers

PC manufacturers

Hitachi GST
Seagate/Maxtor
San technology
Samsung
Toshiba
Fujitsu

Acer

MKP
Kapco

Astec Power

Tsukuba

MD-Tech
5.6 Working Conditions in the Philippine HDD Supply Chain

5.6.1 Employment is Freely Chosen

No evidence was found on forced or bonded labour.

5.6.2 Discrimination

Most of the workers in the electronics factories were direct hired (not agency hired) Labor-Only contracting or the manpower agencies already existed in the zone in which there are factories that are supplied with workers by the agencies like in the case of MKP, Kapco and Tsukuba. It is beneficial for the companies hiring employees from LOC’s since there will be no regularization of employment and no benefits/incentives will be spend on the workers. Astec is practicing the hiring of apprentice employees where they will only give 75% of the minimum wage for the apprentices as legal regulations.

A number of unequal treatment or discrimination cases were found, mainly relating to discrimination of contract workers. In some factories contract workers were denied holiday (Astec Power, Kapco) and paid sick leave (Kapco). In the latter company the majority of workers work on a contract basis. Workers pointed out that the management of Kapco also discriminates on sexual orientation as it does not want to hire gay or lesbian workers. At Astec the salaries of regular employees are paid on a monthly basis. The highest paid workers are those who have stayed in the factory for more than five years. They receive an average of PhP350 to PhP400 daily including benefits and incentives based on their monthly wage rate. On the other hand, contract workers receive only PhP254.00 on daily rate while apprentices receive 75% of the minimum wage computed at a daily rate.

At Fujitsu opportunity on training and promotion is not equal according to the interviewees, the one who were promoted and sent for training to other countries are those who were closely related or favorites of higher-positioned employees.

5.6.3 Child Labour

At Fujitsu the youngest workers in the factory are aging 15 to 18 years old which are recommended or had been supplied by a identified community orphanage known for offering under aged workers. The company required parent consent signed by parents or guardians of the applicants.

35 Explanation: Previous documentation and research by WAC revealed that the Sisters of Mary is an institution that gather teenagers from the rural and depressed areas, house them in a convent and provide their high school education under a scholarship program which is financed by philanthropic entities including Korean and Japanese investors. After graduation, the teenagers are assisted by the Sisters of Mary in seeking and applying for a job and provide their boarding houses until such time that they have gained a relatively stable job. In some cases, the Sisters of Mary are either sought out or have an agreement with certain companies where the teenagers would be brought after graduation. While in school, the students are trained with technical and homeroom skills and with obedient attitudes inside the convent where they stayed. Basically, the institution supply young, cheap and meek or docile labor to companies. Since teenagers graduate from high school usually at the age of 16 and are thus underaged or minors under Philippine labor laws, the company requires a parental or guardian consent to avoid prosecution with a violation of the Philippine Labor laws.
5.6.4 Freedom of Association and the Right to Collective Bargaining

In several factories violations of the freedom of association and the right to collective bargaining were reported. Company management is strictly prohibiting the workers on the memberships on unions and threatened them that the company will be closed or relocated whenever there were unions to be organized.

Workers at MKP, Kapco and MD-Tech pointed out that at these factories unions are strictly prohibited by the management.

At San Technology, it was mentioned that the workers had planned to organize a union back in 2003 but this was detected early on by the management. To bust the union, the company management immediately transferred some of the workers involved to different departments in order to make it difficult for them to meet and discuss their organizing plans. While some have been promoted to higher positions, specifically to sub-leader or to line leaders, none of the workers obtained higher supervisory or managerial positions. The explanation behind the promotions is that under Philippine labour law workers or employees who have supervisory or managerial functions cannot become members of a union of workers. If the union accepts members who have supervisory functions, their union registration will be revoked by the Department of Labour and Employment.

At Tsukuba there is no union in the company but there was a report that there was a plan to organize one last January 2006. However, when the management found out, they ordered the transfer of 10 workers into separate areas to prevent union formation.

5.6.5 Wages and Overtime Payment

Workers at Astec Power and Fujitsu said their wage is not sufficient to cover living expenditures. At Astec Power they complained that they even have to pay for drinking water. At Fujitsu the wage rate is based on the hours of work of the workers with a daily target quota. Workers at San Technology and MD-Tech indicated they are satisfied with their wage. Workers at MKP and Tsukuba pointed out that the wage is sufficient for single workers but no enough to support a family of multiple persons.

At the time of the research the minimum wage was PhP254.00. The new wage order for a new minimum wage is PhP272.00 in the region where the companies are located. Apprentice workers receive 75% of that as provided for by the Philippine labour laws.

5.6.6 Excessive Working Hours and Intensive Production Rhythms

Table 7 presents the regular working hours and overtime per factory for which information was found. In all the factories except MD-Tech, a few hours overtime per day is standard practice and in most cases the number of hours by far exceeds the ILO (48+12) maximum number of working hours. Moreover, in many factories overtime is compulsory, meaning that workers are forced to do overtime, and production rhythms are inhumane.

At Astec Power, San Technology, MKP and Tsukuba four hours per day overtime is normal and compulsory. Except for Astec Power, overtime on Sunday is mostly voluntary (although ‘voluntary’
at MKP means that workers need to have a good reason to refuse) but obligatory during peak production.

At Fujitsu working days of the workers depends on the production in which when the production is low, they are required to work for 8 hours a day, 6 days a week with 3 hours overtime while when the production is high, they should work for 4 hours daily, 8 hours Sunday overtime and the engineers for 5 hours overtime a day.

At Hitachi Global Storage regular working hours are 8 hours, six days per week for the first two weeks and 8 hours, 5 days a week for the last two weeks of the month. The workers render 8 hours regular work plus 3 hours of mandatory overtime daily. Sunday 8-hour overtime is not normal and happens only when the demand for production is high. There is no evidence that overtime is compulsory. Like in other factories, peak production has no regularity and depends on the volume of order of the customer.

In the Philippines, as may be deduced from the information gathered from the different factories it is normal and standard for a worker to render 12 hours (8 hours regular and 4 hours mandatory overtime) of work daily for 6 days with mandatory Sunday or rest day overtime when production is high.

<table>
<thead>
<tr>
<th>Factory</th>
<th>Regular working hours</th>
<th>Regular Overtime</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astec Power</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and on Sunday during peak production</td>
<td>Compulsory on Sunday. 72-84 hours per week</td>
</tr>
<tr>
<td>San Technology</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and on Sunday during peak production</td>
<td>Compulsory overtime. 72-84 hours per week.</td>
</tr>
<tr>
<td>MKP</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and on Sunday</td>
<td>Overtime on Sunday is voluntary but workers need to ask permission not to work. During peak production overtime on Sunday is compulsory. 72-84 hours per week.</td>
</tr>
<tr>
<td>MD-tech</td>
<td>8 hours, 6 days per week</td>
<td>No regular overtime except during peak production.</td>
<td>Compulsory on Sunday during peak production. 48 hours per week.</td>
</tr>
<tr>
<td>Tsukuba</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day and on Sunday</td>
<td>Compulsory overtime. 72-84 hours per week.</td>
</tr>
<tr>
<td>Kapco</td>
<td>8 hours, 6 days per week</td>
<td>4 hours per day</td>
<td>Compulsory overtime. 72 hours per week.</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>8 hours, 6 days per week</td>
<td>3 hours per in low season, 4 hours peak season and engineers 5 hours per day and on Sunday in peak season.</td>
<td>Compulsory overtime.66-91 per week.</td>
</tr>
<tr>
<td>Hitachi GST</td>
<td>8 hours, 6 days per week</td>
<td>3 hours per day. On Sunday during peak season.</td>
<td>About 66 hours per week.</td>
</tr>
</tbody>
</table>

Note: With regular overtime is meant overwork performed on a day-to-day basis.

5.6.7 Health and Safety Conditions

The safety and health conditions vary significantly across factories. General complaints include: (1) bad working conditions in terms of temperature (Fujitsu), smell or dust (Astec Power and, Tsukuba), frequent small accidents such as cuts (Astec Power).
At Kapco workers pointed out that the production area is not fully ventilated. There are various reports of diseases (bronchitis, dizziness, sinusitis) and cough because of bad chemical odour and the lack of sufficient protective clothing. Workers also said there have not been improvements in working conditions since they started complaining.

Mentioned chemicals workers of San Technology work with are: Isopropyl alcohol, adhesives, UV-transparent, acetone, flux, lead, ammonia, silicon, nitric acid, and sodium hydroxide. At P.IMEs the chemicals or substances they were usually using were alcohol, acetone, soldering materials and paints. At Astec chemicals or substances used in the production were IPA, flux, soldering materials, solvent, lead, araldite, residue, thinner, sunning bar, adhesives and thermal. At Kapco chemicals that present in the production area were nitric acid, chromium, nickel and IPA. At Tsukuba-die casting chemicals or substances used in the production were molding materials, metal or iron, and cleaning chemicals. In all factories protection materials are supplied.

Finally, for Hitachi Global Storage workers indicated that working conditions were in general very good. In particular workers praised the strong environmental commitment of Hitachi Global Storage, which aims to reduce the usage of harmful chemical substances.

5.6.8 Awareness of Code of Conduct and Audits

Most of the interviewed workers did not known what a code of conducts is and for whom they are made. Some clients of a particular company visited the factory not to look at the condition of the workers but to inspect the production process because many of the products delivered to them were rejected. When speaking about the Corporate Social Responsibility (CSR) policy, workers told about the company policies, rules and regulations in the production for the customers’ satisfaction and also for the environment management. Labour issues were not given too much attention by the company to be part of their CSR policy.
### 5.6.9 Summary of Violations

Table 8: Summary of EICC Violations in the Philippine HDD Supply Chain

<table>
<thead>
<tr>
<th>Labour</th>
<th>Astec Power</th>
<th>Hitachi Global Storage</th>
<th>Fujitsu</th>
<th>San Technology</th>
<th>MKP</th>
<th>MD-Tech</th>
<th>Tsukuba</th>
<th>Kapco</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freely chosen labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child labour avoidance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours more than 60 hours</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours: forced overtime</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no minimum wage paid/overtime not paid/unreasonable wage deductions</td>
<td>X</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Workers indicate it is not a living wage</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in)Humane treatment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non discrimination</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Freedom of association</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Health and safety

| Occupational safety          | X           |                        |         |                |     |         |         |       |
| Emergency preparedness       |             |                        |         |                |     |         |         |       |
| Occupational injury and illness |             |                        |         |                |     |         |         |       |
| Industrial hygiene           |             |                        |         |                |     |         |         |       |
| Physically demanding work    |             |                        |         |                |     |         |         |       |
| Machine safeguarding         |             |                        |         |                |     |         |         |       |
| Dormitory and canteen        | X           |                        |         |                |     |         |         |       |