

FAIR PHONES: IT'S YOUR CALL

How European mobile network operators can
improve responsibility for their supply chain

September 2009



COLOPHON

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PUBLISHED BY: SOMO – Centre for Research on Multinational Corporations

COVER DESIGN: Justar.nl

ISBN: 978-90-71284-41-0



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FUNDING:

This publication has been produced with the assistance of the European Union. The contents of this publication is the sole responsibility of SOMO and can in no way be taken to reflect the views of the European Union.



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MAKEITFAIR

MakeITfair is a European wide project on the electronics industry, especially on consumer electronics.

We want to inform young consumers about the conditions and problems of consumer electronics over their full life cycle like human rights violations and non-compliance with social and environmental standards. And we want them to get active against this. At the same time we aim to take the multinational companies into account and ask them to take their responsibility and to change their behaviour.



This report is published as part of the makeITfair campaign, co-ordinated by the Dutch organisation SOMO. Project partners are SwedWatch, Fair Trade Center, Church of Sweden Aid from Sweden, FinnWatch and Finnish Association for Nature Conservation from Finland; Germanwatch and Verbraucher Initiative from Germany, KARAT from CEE; ACIDH from the DR Congo, CIVIDEP from India and Labour Action China from China.

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Germanwatch is a non-governmental organisation promoting North-South equity and the preservation of livelihoods. We observe and analyse politics and economics of the North with their worldwide consequences and interfere towards sustainable development. We work on climate protection, world trade, development policies, the financial sector and corporate accountability.

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FAIR TRADE CENTER

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FINNWATCH

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Established in 1973, the Centre for Research on Multinational Corporations (SOMO) is a non-profit Dutch research and advisory bureau. SOMO investigates the consequences of Multinational Enterprises' (MNEs) policies and the internationalisation of business worldwide. SOMO's expertise lies in the field of international guidelines, treaties and codes of conduct for MNEs, and it conducts research on compliance with related norms. Focus is placed upon research on labour conditions in the global South and cooperation with local organisations and trade unions. Website: www.somo.nl



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FOREWORD

This report is part of the ‘makeITfair’ project to raise awareness about development issues in the production chain of the consumer electronics industry, with a special focus on products for young consumers, such as mobile phones, MP3 players, game consoles and laptops. The focus of the project is on the consumer electronics industry, as this industry is growing rapidly and facing many social and environmental problems throughout the world. The industry has only recently become the subject of public campaigns, and there is still limited awareness among the wider public about what goes on in the electronics sector. As the production chain for consumer electronic products is a truly global one, the sector is a particularly good example to use in discussing issues of globalisation with young consumers.

The three-year makeITfair programme concentrates on young consumers because they can play a decisive role in moving the industry towards more equitable and sustainable production methods. At the same time, dialogues are being initiated with companies in the electronics industry that are responsible for working conditions throughout their entire supply chain.

In the first year, makeITfair research reports described the conditions under which the raw materials for electronics are extracted. In the second year, the research focused on the production of electronic gadgets, such as mobile phones in Asia. Retailing, and eventually the discarding of products in the last phase of the product’s life cycle, are the focus of research in the current, third year of the project.

Communicating the results of this research entails the publication of Consumer Guides, educational material, toolkits for campaigning organisations and web-based tools. Other activities in this project include capacity building sessions in Eastern Europe and the organisation of an annual international Round Table to bring together electronics companies, non-governmental organisations (NGOs) and trade unions to discuss the various responsibilities for the environmental, human rights and labour conditions down the supply chain of consumer electronics.

MakeITfair is funded by the European Union (EU) and led by a consortium of NGOs from Europe including: Germanwatch, Verbraucher Initiative, SwedWatch, Church of Sweden, Fair Trade Center, FinnWatch/Finnish Association for Nature Conservation, Karat and SOMO. The consortium also includes NGOs in developing countries in Asia and Africa, such as SACOM in China, CIVIDEP in India and ACIDH in the Democratic Republic of Congo.

ACRONYMS

CSR	Corporate Social Responsibility
EICC	Electronic Industry Citizenship Coalition
E-TASC	Electronics – Tool for Accountable Supply Chains
ETNO	European Telecommunications Network Operators' Association
GeSI	Global e-Sustainability Initiative
ILO	International Labour Organization
ITU	International Telecommunication Union
NGO	Non-governmental organisation
SACOM	Students and Scholars Against Corporate Misbehaviour
SAR	Specific absorption rate
SOMO	Centre for Research on Multinational Corporations

SUMMARY

Over the past ten years, the worldwide use of mobile phones has increased rapidly. In 2008, the International Telecommunication Union (ITU) estimated that there were 4.1 billion mobile phone subscribers.¹ This equates to an average global penetration rate of 61%.

A growing proportion of consumer electronic products such as mobile phones is manufactured in developing countries or countries in transition. Every second mobile phone is made in China. Previous makeITfair research found that severe environmental and social problems persist in the mobile phone supply chain, emphasising the need for increased responsibility and accountability in the supply chain.

This makeITfair study focuses on the supply chain responsibility of major mobile network operators in Finland, Germany, Sweden and the Netherlands. Some of these operators belong to the global top ten: Vodafone, Telefónica/O₂, Telenor, TeliaSonera, and Deutsche Telekom/T-Mobile. Other companies that are included in this study are KPN/E-Plus, Tele2, Tre, Elisa and DNA.

Collectively, the mobile network operators included in this report had nearly 1 billion subscribers in 2008, implying they represent almost one quarter of all global subscriptions for mobile communication networks.² The mobile network operators' position in the supply chain is particularly crucial since these companies are an important retail channel of mobile phones for consumers. For this report, makeITfair asked mobile network operators questions about sales, recycling efforts and supply chain responsibility efforts. Fifteen questionnaires were sent out to the national branches of mobile network operators in Finland, Germany, the Netherlands and Sweden. Three of them declined to answer makeITfair, showing poor transparency.

Sales figures

Most mobile network operators do not disclose sales figures of mobile phones. The only exceptions from the 12 national branches of mobile network operators that returned the questionnaire are O₂ (Telefónica Germany) and KPN. O₂ provides sales figures of 3.6 million mobile phones in Germany in 2008. Due to a lack of information, it is not possible to assess their procurement volume of mobile phones. However, an indication is offered by the Finnish Communications Regulatory Authority: almost 30% of mobile phones sold in Finland in 2008 were distributed by mobile network operators. The brands that the operators mention as the most popular are Nokia, Samsung, Sony Ericsson and Apple.

A fairly recent development is the marketing of so-called 'green' mobile phones, although it is doubtful whether these phones deserve the label 'green'. There are only four (branches of) mobile network operators in our selection that explicitly sell 'green' mobile phones: T-Mobile Netherlands, Tele2 Sweden, Telenor and DNA. T-Mobile Germany told makeITfair that it is encouraging the manufacturers to produce really green phones (i.e. taking into account the whole life cycle).

¹ International Telecommunication Union, 2009. *Measuring the Information Society. The ICT Development Index*; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 4

² Based on the the International Telecommunication Union (ITU) estimate of 4.1 billion subscribers in 2008 globally.

Recycling and re-use of mobile phones

All the mobile network operators included in this study have a re-use and recycling programme in place, with the exception of Tele2 Netherlands. Since Tele2 does not operate shops in every country, it should start a recycling programme by mail in those countries. Although 'hand in' programmes are in place, collection and recycling figures of mobile phones are still dramatically low. There is a lot of room for improvement here.

When asked about initiatives to stimulate environmental design of mobile phones with the manufacturers of mobile phones, eight out of the ten companies that answered this question indicate that they discuss environmental design aspects in their communication with manufacturers during procurement. However, the common marketing practice of mobile network operators offering 'free' phones with tie-in subscriptions has an enormous impact on the amount of mobile phones that are circulating on the market and the mounting volumes of e-waste.

Supply chain responsibility

In terms of supply chain responsibility, seven out of the ten mobile networks studied have some sort of supply chain policy in place. Only five of them have systems in place to monitor the compliance with their policies by suppliers, using supplier self-assessment questionnaires and site audits of suppliers (i.e. Telenor, T-Mobile, Vodafone, Telefónica (known as 'O₂' in Germany) and TeliaSonera). None of the operators in this report uses independent, third party site assessments to monitor their suppliers. Most of the operators are just at the beginning of developing criteria for, and monitoring and verification systems of, their supplier standards. In the cases of companies that use site assessment as part of their supply chain monitoring, the number of audits remains small. This number needs to be increased considerably to cover all high-risk suppliers, ensuring compliance with the social and environmental supplier criteria that are codified in policies.

The content of the supply chain policies differs. Of the seven companies that have a policy, six refer to International Labour Organization (ILO) conventions and five refer to the UN Human Rights Charter or Declaration of Human Rights as a basis for their policies. Most companies state that they will comply with national laws. Such a commitment cannot be regarded as very ambitious.

Only Vodafone, Deutsche Telekom (to which T-Mobile belongs) and Telenor are transparent about the number of audits over 2008. Vodafone and Deutsche Telekom also report the main results of their audits. Vodafone reports it conducted 18 site assessments and made a total of 166 recommendations to suppliers for improvement.³ Deutsche Telekom states in its Corporate Responsibility Report 2009 that it held three site audits in China, Mexico and Taiwan in 2008.⁴ Due to a lack of information, it is impossible to assess how many of the audited suppliers are actually mobile phone manufacturers. Although the supply chain responsibility for Vodafone and Deutsche Telekom is the most developed, the amount of site assessments reported by them are small in comparison to Telenor and other companies in the electronics sector. For example, Philips audited 277 supplier facilities and Apple audited 83 facilities in 2008, mainly in China.⁵

³ Vodafone website, *Supply chain: Progress*, <http://www.vodafone.com/static/cr_report09/issues/supply-progress-have.html> , 30 July 2009.

⁴ Deutsche Telekom: *The 2009 Corporate Responsibility Report*, June 2009.

⁵ FinnWatch, SACOM and SOMO, 2009. *Playing With Labour Rights - Music player and game console manufacturing in China*, p. 23.

Conclusions and recommendations

Although all mobile network operators except Tele2 Netherlands have ‘hand-in’ programmes in place, collection and recycling figures of mobile phones are still dramatically low. In order to address this, the first step seems to be to raise awareness about the existence of recycling opportunities. Mobile network operators might even consider a joint awareness-raising campaign. Another way to promote recycling is to offer gift vouchers on products and/or subscriptions when customers hand in their old mobile phone. Such ‘hand in’ programmes also need to be developed outside Europe. Consumers in developing countries often get money for their discarded mobile phones if they sell them to the informal recycling sector, where the phones are recycled improperly. MakeITfair believes that mobile network operators with operations in these regions must consider economic incentives for proper recycling in the emerging markets.

Making SIM-only contracts more attractive to consumers than subscription renewal in combination with a mobile phone represents a promising opportunity for mobile network operators to address several issues in the chain simultaneously – i.e. less mining of precious metals, less time-pressure and thus overwork in manufacturing, less e-waste. In the current marketing of subscription renewals, most operators present consumers with two alternatives: a ‘reduced’ SIM-only tariff or a new mobile phone. Operators could do several things to promote the SIM-only option. They could make the SIM-only subscription more visible by marketing it more actively than the new phone option, or they could skip the option for receiving a new phone with a renewal altogether. Another option is to demand handing in the old phone as a condition of receiving a new mobile phone with a subscription renewal. Each of these options could be accompanied with a message that highlights the environmental and social benefits of the SIM-only or ‘new-for-old’ alternatives, which may enhance the company’s image.

MakeITfair believes that supplier monitoring systems and improvement plans must include representatives of workers from the South, to provide a balanced insight into the suppliers’ performance, as well as an employee perspective on the attainability and desirability of improvement measures. Working in a multi-stakeholder setting would enhance the possibility of taking on labour issues as a company initiative, which the auditing service from the Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) cannot. Furthermore, to work towards long-term improvements, the supply chain management system should also include a complaint mechanism for stakeholders along the supply chain.

To conclude, this research report has shown that mobile network operators have developed several initiatives to improve the social and environmental conditions in their supply chains. Some have progressed much further on this pathway than others. Overall, there is still a lot room for improvement throughout the whole mobile phone supply chain and product life-cycle: in the design of mobile phones, the manufacturing process, the marketing of phones and the recycling. Considering the crucial and unique role of the mobile network operators in the mobile phone supply chain, it is very unfortunate that the companies, as retailers, do not fully capitalise on their opportunity to influence both consumers and suppliers on social and environmental issues. MakeITfair urges mobile network operators to pursue improvements in the mobile phone supply chain, and hopes this report will provide the operators with some ideas about how to do so.

INTRODUCTION

Over the past decade, the market for mobile phones has increased rapidly. In 2008 alone, nearly 1.2 billion handsets were sold worldwide.⁶ But in spite of this enormous success, the reality is harsh for many mobile phone factory workers. In 2008 and 2009, makeITfair organisations FinnWatch, SACOM (Students and Scholars Against Corporate Misbehaviour), SwedWatch and SOMO (Centre for Research on Multinational Corporations) released reports about the working conditions in seven mobile phone factories in China and the Philippines.⁷ The reports revealed severe violations of labour laws and rights in factories producing multimedia phones and items such as chargers and Bluetooth headsets for the big mobile phone brands. Other makeITfair reports have addressed the early stages of the supply chain,⁸ namely the appalling working conditions at the mines that extract valuable metals for producing mobile phones and other electronic equipment, and the negative effects of dumping e-waste in developing countries.⁹

In this report, makeITfair focuses on the role and responsibility of mobile network operators (i.e. telecommunication companies that provide services for mobile phone subscribers) in the supply chain of mobile phones. These companies provide the networks and network technology that allow people to communicate with their mobile phones in the first place; without mobile network operators, there would be no mobile phone market. In addition, they are important buyers and retailers of mobile phones. As such they have considerable influence on the mobile telephone market as well as a responsibility to address the social and environmental problems in their supply chains.

The report compares the supplier policies, marketing strategies and recycling programmes of the largest mobile network operators in the Netherlands, Germany, Sweden and Finland. Although equally important, some issues (e.g. health aspects linked to radiation, debt traps for teenagers and young adults) are not addressed because of time and budget constraints. For each country involved – the Netherlands, Germany, Sweden and Finland – an individual report has been produced that includes case studies of the largest national operators. This current report is international in scope. For case studies of the operators in each country, please refer to the makeITfair website: www.makeitfair.org

The report is organized as follows. In chapter 1, the global market for mobile network operators is analyzed, and each company that is included in this study is shortly introduced. Chapter 2 gives an overview of the main social and environmental issues in the mobile phone supply chain. In chapter 3, the sales, recycling efforts and supply chain responsibility of ten European mobile network operators is compared. Finally, in chapter 4, the main research findings are presented and suggestions are made how to improve the social and environmental conditions in the mobile phone supply chain.

⁶ <http://www.idc.com/getdoc.jsp?containerId=prUS21659209>

⁷ SOMO and SwedWatch, 2008. *Silenced to Deliver – Mobile phone manufacturing in China and the Philippines*; FinnWatch, SACOM and SOMO, 2009. *Playing with Labour Rights – Music player and game console manufacturing in China*.

⁸ Finnwatch, 2007. *Connecting components, dividing communities. Tin Production for Consumer Electronics in the DR Congo and Indonesia*; SOMO, 2007. *Capacitating Electronics. The corrosive effects of platinum and palladium mining on labour rights and communities*; SwedWatch, 2007. *Powering the Mobile World. Cobalt production for batteries in the DR Congo and Zambia*.

⁹ SwedWatch, 2009. *Out of Control: E-waste trade flows from the EU to developing countries*.

METHODOLOGY

This research examines the efforts made among ten leading mobile network operators in Finland, Germany, Sweden and the Netherlands to take responsibility for their supply chains.

The selected companies are Vodafone, Telefónica, Telenor, TeliaSonera, T-Mobile, KPN, Tele2, Tre, Elisa and DNA. As data was collected at the national level, and Vodafone, T-Mobile, Tele2, TeliaSonera and KPN have operations in more than one of the selected countries, a total of 15 case studies were conducted. In Finland, TeliaSonera, Elisa and DNA were studied. In Sweden, TeliaSonera, Tele2, Telenor and Tre were analysed. In the Netherlands, Vodafone, T-Mobile, KPN and Tele2 were studied. And in Germany, Vodafone, T-Mobile, KPN's subsidiary E-Plus, and O₂ (Telefonica Germany) were examined.

For each country, an individual report has been published, including case studies on the market-leading mobile network operators in that respective country. A comparison is made between the mobile network operators in the different countries. In this international version of the report, the individual case studies are not included.¹⁰

Data collection methods used for the report included literature and online searches, as well as questionnaires. A standard questionnaire was used for all companies (see Annex 2 for the standard questionnaire). Specific questions were added for certain companies. Fifteen questionnaires were sent out to the national branches of mobile network operators in Finland, Germany, the Netherlands and Sweden in June 2009. Twelve questionnaires were returned.

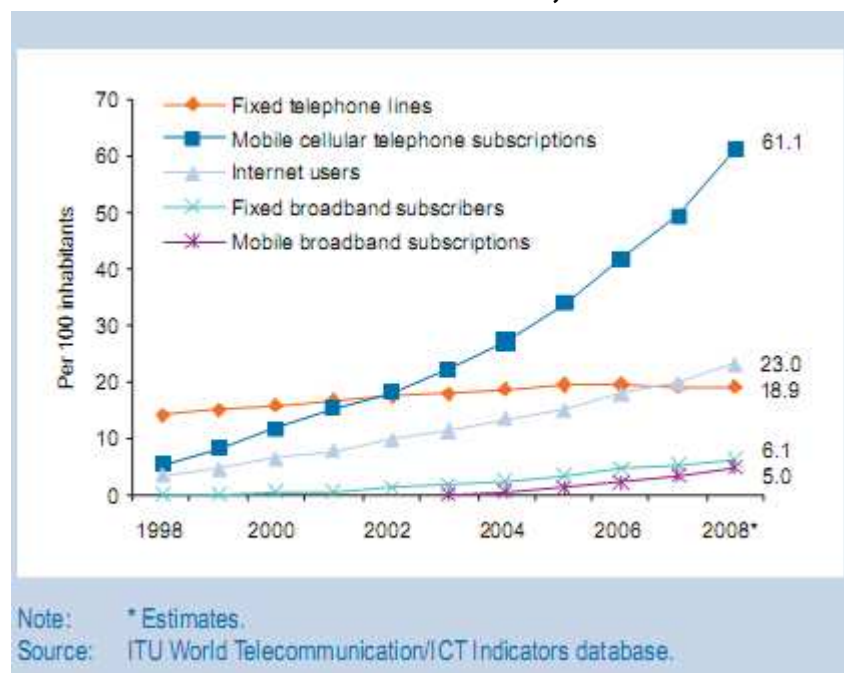
The mobile network operators that participated in this study by returning the questionnaire were given the opportunity to respond with comments and corrections of factual errors in their profiles. Their comments were integrated in the final reports.

¹⁰ For the national versions of this report, please visit the makeITfair website: <http://makeitfair.org/the-facts/reports>

1. MOBILE NETWORK OPERATORS – A GLOBAL MARKET ANALYSIS

Over the past ten years, the worldwide use of mobile telephony has increased rapidly. In 2008, the International Telecommunication Union (ITU) estimated that there were 4.1 billion mobile phone subscribers worldwide.¹¹ This equates to an average global penetration rate of 61.1% (i.e. on average, about 61% of the world population owns a registered mobile telephone – see Figure 1). Compared to the global penetration rate in 1998 – when the ITU registered 318 million mobile subscribers – the figure has multiplied more than tenfold.¹² There has been a clear shift from fixed telephone lines towards mobile telephone usage. In 1998, the number of fixed telephone lines was almost three times higher than the number of mobile phone subscriptions (838 million fixed lines compared to 318 million mobile subscriptions). Today, the number of mobile phone subscriptions is nearly four times higher than fixed telephone line subscriptions. Only 19% of the world population holds a fixed telephone line, and the increase over the past ten years has been marginal.¹³

FIGURE 1: GLOBAL ICT DEVELOPMENTS, 1998–2008¹⁴



Nevertheless, figures like the global penetration rate of 61% might be somewhat misleading. On closer examination, there is a huge gap between developed and developing countries. While in Europe the

¹¹ International Telecommunication Union, 2009. *Measuring the Information Society*. The ICT Development Index; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 4

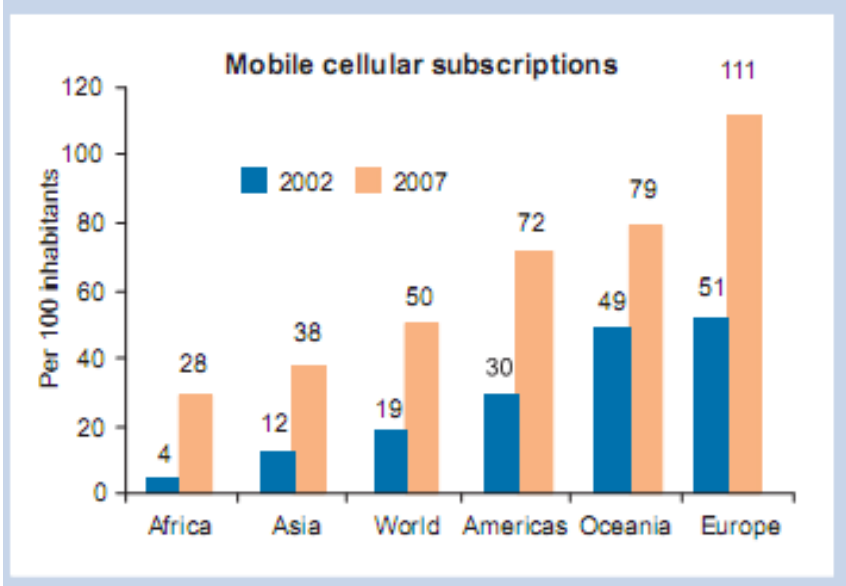
¹² International Telecommunication Union, 2009. *Key Global Telecom Indicators for the World Telecommunication Service Sector*; http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom99.html

¹³ International Telecommunication Union, 2009. *Measuring the Information Society*. The ICT Development Index; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 3

¹⁴ Ibid.

penetration rate was about 111% in 2008 (i.e. on average every inhabitant owned more than one mobile phone), the penetration rate in Africa was only 28%. In 2008, 38% of people living in Asia were mobile phone subscribers, while in America 72% were subscribers and in Oceania 79% of inhabitants were subscribers.¹⁵ Due to the (over)saturation of subscriptions in developed countries – e.g. the 2008 penetration rates of the countries examined in this study are 130% for Germany,¹⁶ 129% for Finland,¹⁷ 121% for the Netherlands¹⁸ and 119% for Sweden¹⁹ – the growth rates of the mobile penetration in developing countries is considerably higher. Africa holds the top position with a growth rate of 32% in 2008, which is not surprising as the continent currently has the world’s lowest penetration rate.²⁰

FIGURE 2: MOBILE SUBSCRIPTIONS – PENETRATION RATE BY REGION



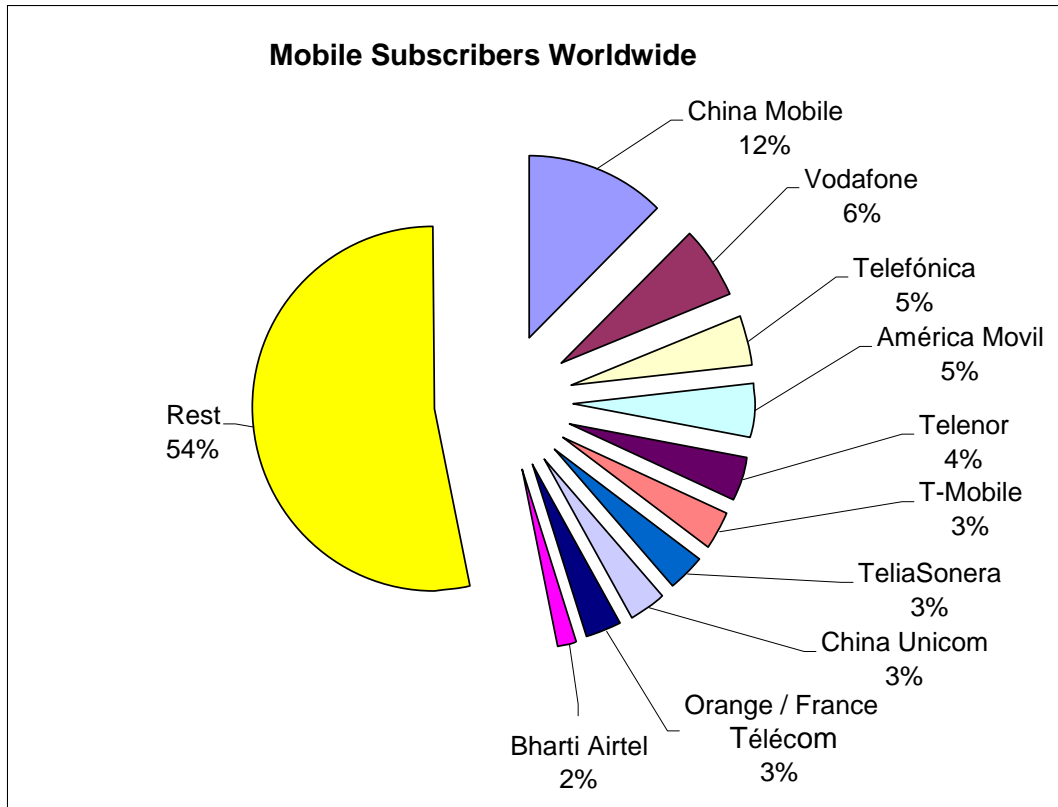
Source: ITU World Telecommunication²¹

When adopting a global perspective, the market for mobile telephony services presents the following picture: worldwide the ten biggest mobile network operators (measured in the number of subscribers)

¹⁵ International Telecommunication Union, 2009. *Measuring the Information Society. The ICT Development Index*; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 4
¹⁶ International Telecommunication Union, 2009. *World Telecommunication/ICT Indicators Database (2009): Mobile cellular subscriptions*; http://www.itu.int/ITU-D/icteye/Reporting/ShowReportFrame.aspx?ReportName=/WTI/CellularSubscribersPublic&RP_intYear=2008&RP_intLanguageID=1
¹⁷ Ibid.
¹⁸ Ibid.
¹⁹ Ibid.
²⁰ International Telecommunication Union, 2009. *Measuring the Information Society. The ICT Development Index*; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 3.
²¹ International Telecommunication Union, 2009. *Measuring the Information Society. The ICT Development Index*; <http://www.itu.int/ITU-D/ict/publications/idi/2009/index.html>; p. 4.

cover a market share of about 46%.²² Two out of the ten market leaders are Chinese. Apart from China Unicom, each of the ten biggest mobile network operators is internationally active, not restricting their operations to one country only.

FIGURE 3: LARGEST NETWORK OPERATORS IN THE WORLD



Source: Own calculations²³

This study focuses on the major mobile network operators in Finland, Germany, Sweden and the Netherlands (see Table 1). Among them are some of the major global players: Vodafone is ranked second globally, Telefónica third, Telenor fifth, TeliaSonera seventh and T-Mobile eighth. Other companies that are included in this study are KPN, Tele2, Tre, Elisa and DNA. These companies are not listed in the top ten of the world’s largest mobile network operators. Nevertheless they are examined in this study as they are major players on the national mobile network markets of Finland, Germany, Sweden and/or the Netherlands.

²² Calculation based on Annual Reports of companies and amount of 4,000,394,600 total mobile subscribers for 2008 http://www.itu.int/ITU-D/icteye/Reporting/ShowReportFrame.aspx?ReportName=/WTI/CellularSubscribersPublic&RP_intYear=2008&RP_intLanguageID=1, see also Figure 3.

²³ Calculation based on amount of subscribers; figures taken from Annual Reports 2008 of respective companies – only for Bharti Airtel: figures from 31 March 2009.

1.1. MOBILE NETWORK OPERATORS EXAMINED IN THE STUDY

TABLE 1: MARKETS AND CUSTOMERS FOR OPERATORS IN THIS STUDY²⁴

MOBILE NETWORK OPERATOR (HOME OFFICE)	MAIN MARKETS	SUBSCRIBERS IN MILLIONS (GLOBALLY/IN RESPECTIVE COUNTRIES STUDIED) BY END 2008
DNA (Finland)	Finland	Finland: 1.66
Elisa (Finland)	Finland, Estonia	Globally: 2.88 Finland: 2.54
KPN (Netherlands)	Belgium, Germany, Netherlands, France, Spain	Globally: 31.1 Germany: 17.78 Netherlands: 8.4
Tele2 (Sweden)	Austria, Croatia, Estonia, France, Germany, Latvia, Lithuania, Netherlands, Norway, Russia, Sweden	Globally: 19.401 Netherlands: 0.458 Sweden: 3.36
Telefónica (Spain)	Argentina, Brazil, Chile, Colombia, Czech Republic, Ecuador, El Salvador, Germany, Guatemala, Ireland, Mexico, Morocco, Nicaragua, Panama, Peru, Puerto Rico, Slovakia, Spain, UK, Uruguay, USA, Venezuela	Globally: 182.82 Germany: 14.93
Telenor (Norway)	Bangladesh, Denmark, Hungary, India, Malaysia, Montenegro, Norway, Pakistan, Russia, Serbia, Sweden, Thailand, Ukraine	Globally: 164.00 Sweden: 1.9
TeliaSonera (Sweden)	Azerbaijan, Cambodia, Denmark, Estonia, Finland, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Nepal, Norway, Sweden, Spain, Tajikistan, Uzbekistan	Globally: 134.8 Finland: 2.68 Sweden: 5.33
T-Mobile (Germany)	Albania, Austria, Bulgaria, Croatia, Czech Republic, Germany, Greece, Hungary, Macedonia, Montenegro, Netherlands, Romania, Slovakia, UK, US, Poland	Globally: 128.34 Germany: 39.1 Netherlands: 5.3
Tre/ 3 (Hutchison Whampoa) (Hong Kong)	Australia, Austria, Denmark, Hong Kong and Macau, Ireland, Israel, Italy, Sweden, UK	Globally: 25.3 Sweden (together with Denmark): 1.231
Vodafone (UK)	Albania, Australia, Czech Republic, Egypt, Fiji, Germany, Ghana, Greece, Hungary, India, Ireland, Italy, Kenya, Malta, Netherlands, New Zealand, Poland, Portugal, Romania, Spain, Turkey, UK, Qatar	Globally: 255.74 Germany: 36.17 Netherlands: 4.54

The core business of mobile network operators is to offer mobile communication services. Some of the operators own their mobile network infrastructure, while others rent part or all of their network infrastructure from the owning operators. This latter group is growing rapidly.²⁵ It is common for mobile network operators to offer mobile devices along with the service contracts as a subscription package. A new trend among mobile network operators is to offer note- or netbooks with internet subscription packages, as they have begun to offer internet access and services.²⁶

²⁴ Please refer to Annex 1 for the sources for the figures in this table.

²⁵ These companies are often referred to as 'mobile virtual network operators', but in this report we will use the term 'mobile network operator' to refer to all companies selling mobile communication services alike.

²⁶ Second Republic, 2009. *Recognizing Shift in Consumer Behavior, Mobile Operators Pushing Netbook Bundles*; <http://www.seconpublic.in/StoryDescription.aspx?mainid=1&storyid=300>

Telefónica

The Spanish corporation Telefónica does business in 21 different countries; many of them are Latin American. In Europe it operates mostly under the O₂ brand (Republic of Ireland, UK, Germany, Czech Republic and Slovakia). Its activities in Germany – due to its acquisition of O₂ Germany in 2006 – make it relevant to this report. Telefónica is represented on the German market with a share of about 14% (all market shares refer to the number of mobile subscribers), ranked fourth of the four biggest providers.²⁷ Its worldwide standing is remarkably better; ranked third with a worldwide market share of about 5%.²⁸

Telenor

This Norwegian company has 143 million subscribers, representing a global market share of about 4%. Worldwide it is the fifth largest provider.²⁹ It operates in Europe and Asia. In this report it is of interest as the third largest provider in Sweden, with a market share of about 17%.³⁰

TeliaSonera

TeliaSonera is the result of a merger between a Finnish company (Sonera) and a Swedish company (Telia) in 2003. With about 135 million subscribers and a global market share of about 3%, it is ranked seventh in the worldwide comparison of mobile network operators.³¹ The company's relevance to this report lies in its activities in Sweden, where it is market leader with a market share of about 40%,³² and Finland, where it is market leader as well with an approximate market share of 39%.³³

T-Mobile

T-Mobile, the mobile services division of the German company Deutsche Telekom, operates in 11 different countries (see Table 1). Its various activities on a global level result in a global market share of about 3%.³⁴ For this report, T-Mobile is of interest because of its role as market leader in Germany, where it holds a market share of 36.5%.³⁵ It is also the second largest mobile network operator in the Netherlands with a market share of about 27%.³⁶

Vodafone

The Vodafone Group is based in the UK and operates in 21 different countries (see Table 1). According to its 2009 annual report, it had about 255.74 million subscribers³⁷ by the end of 2008, suggesting a

²⁷ Bundesnetzagentur, 2009. *Abbildung Entwicklung Marktanteile Netzbetreiber*, <http://www.bundesnetzagentur.de/media/archive/16876.pdf>, in: www.bundesnetzagentur.de

²⁸ Figure 3.

²⁹ Ibid.

³⁰ 1.9 million subscribers in Sweden; cp. Telenor (2009): Telenor Sweden; <http://www.telenor.com/en/investor-relations/company-facts/business-description/telenor-sweden>

³¹ Figure 3.

³² TeliaSonera (2009): *Annual Report 2008*;

http://www.teliasonera.com/investor_relations/reports/annual_report/2008/in_english.pdf; p. 17

³³ Ibid.

³⁴ Figure 3.

³⁵ Bundesnetzagentur, 2009. *Abbildung: Entwicklung Marktanteile Netzbetreiber*, <http://www.bundesnetzagentur.de/media/archive/16876.pdf>

³⁶ 5.3 million T-Mobile subscribers in the Netherlands; cp. Deutsche Telekom, 2009. *The financial year 2008*; http://www.annualreport2008.telekom.de/gb08/backstage_04/documentpool/en/en.pdf; p. 71

³⁷ Vodafone, 2009. *Vodafone announces results for the year ended 31 March 2009*;

http://www.vodafone.com/etc/medialib/preliminary_results.Par.1085.File.dat/prelim_2009_final.pdf; p. 35

worldwide market share of approximately 6%.³⁸ The company is included in this study due to its activities in the Netherlands and in Germany. In Germany, Vodafone is the second largest operator, with a market share of about 32.6%.³⁹ It is also the third largest operator in the Netherlands with 21% of market share.⁴⁰

KPN, Tele2, Tre, DNA and Elisa Oyi are not listed in the top ten of the world's largest mobile network operators. Nevertheless they are of relevance as actors on the national mobile network markets of Germany, Sweden, Finland and the Netherlands, the countries examined in this study.

KPN

KPN is a Dutch company and market leader in the Netherlands with a market share of about 45%.⁴¹ Furthermore, it operates in Belgium, France, Spain and Germany. It appears twice in this study, due to its role as market leader in the Netherlands, and due to the fact it owns the fourth biggest network operator in Germany, the Eplus Group, with a market share of 17%.⁴²

Tele2

Tele2 is a Swedish company and does not fully own the network it uses, and as such is a mobile virtual network operator. Tele2 operates in Austria, Croatia, Estonia, Germany, Latvia, Lithuania, the Netherlands, Norway, Russia and Sweden, where it is ranked second in terms of market share (approximately 30%).⁴³ Apart from its large market share in Sweden, in the Netherlands it is ranked fourth (with a market share of about 2%),⁴⁴ and is therefore included within this study.

Tre

Tre (or "3") – is a brand name for mobile network operators from Hong Kong. It is owned by the Hong Kong company Hutchison Whampoa.⁴⁵ With about 19 million subscribers worldwide, its global market share is relatively small. Nevertheless, Tre is the fourth largest operator in Sweden and is therefore a subject of this study.

DNA

DNA is a Finnish company and is included due to its role as the third largest mobile network operator in Finland, with 1.7 million subscribers in Finland and a market share of about 20%.⁴⁶

³⁸ Figure 3.

³⁹ Bundesnetzagentur, 2009. *Abbildung: Entwicklung Marktanteile Netzbetreiber*, <http://www.bundesnetzagentur.de/media/archive/16876.pdf>

⁴⁰ 4.252 million Vodafone subscribers in the Netherlands; cp. Vodafone, 2009. *Vodafone announces results for the year ended 31 March 2009*; http://www.vodafone.com/etc/medialib/preliminary_results.Par.1085.File.dat/prelim_2009_final.pdf; p. 35

⁴¹ 8.9 million KPN subscribers in the Netherlands; Results for the half year ending 30. June 2007; http://www.kpn.com/upload/2003060_9475_1188386544242-Press_Release_KPN_Q2.pdf; p. 13

⁴² Bundesnetzagentur, 2009. *Abbildung: Entwicklung Marktanteile Netzbetreiber*, <http://www.bundesnetzagentur.de/media/archive/16876.pdf>

⁴³ 3.35 million Tele2 subscribers in Sweden; see Tele2, 2008. *Full year report*; <http://hugin.info/133413/R/1288826/291256.pdf>; p. 15

⁴⁴ 0.458 million Tele2 subscribers in the Netherlands; see Tele2, 2008. *Full year report*, <http://hugin.info/133413/R/1288826/291256.pdf>; p. 15

⁴⁵ Hutchison Whampoa, 2009. *About HWL Overview*, <http://www.hutchison-whampoa.com/eng/about/overview.htm>

⁴⁶ 1.245 million DNA subscribers; see DNA Group, 2008. *DNA records strong financial performance in 2007 with a bright outlook for 2008*;

<http://www.dna.fi/en/dnagroup/press/pressreleases/Sivut/DNArecordsstrongfinancialperformancein2007withabrightoutlookfor2008.aspx>

Elisa Oyi

Elisa Oyi is a Finnish telecommunication company, which was formerly called ‘HPY’ until 2000.

According to its own 2008 annual report, Elisa Oyi holds a 50% market share in ‘3G’ (i.e. 3rd generation network) users in Finland, which does not only include mobile customers, but also broadband internet and fixed telephony users.⁴⁷

⁴⁷ Elisa, 2008. *Annual Report*; http://www.elisa.com/english/docimages/attachment/Elisa_vuosikertomus_2008_englanti.pdf; p.

2. CORPORATE SOCIAL RESPONSIBILITY (CSR) ISSUES IN THE MOBILE PHONE INDUSTRY

In 2008, 1.18 billion mobile phones were sold worldwide.⁴⁸ The economic crisis has caused a slow-down in sales, but market analysts predict that sales will pick up already by 2010.⁴⁹

A growing proportion of consumer electronics is manufactured in developing countries or countries in transition. Every second mobile phone is made in China. Most of the workers on the production lines are young women who often carry a heavy burden as the main breadwinners of their families. Yet they are often denied many of their basic rights and earn wages that are very difficult to live on. In addition, raw materials (metals) used to make mobile phones are often extracted in poor conditions. And e-waste flows to developing countries create health and environmental problems.

2.1. PRODUCTION CHARACTERISED BY LOW WAGES AND ANTI-UNION TACTICS

Many consumers believe that it is the actual brand name companies that manufacture the phones bearing their logo, but this is not necessarily true. In 2007, 30.1% of all mobile phones were designed or produced by so-called contract manufacturers, unknown to most consumers, like Flextronics, Foxconn, and BenQ.⁵⁰

Besides these contract manufacturers, a wide range of component producers exist that make parts for the final product. The supply chain of the mobile phone industry has a high degree of outsourcing. Over the years, production centres have moved from one country to another in search of lower costs and to get closer to booming new markets. Between 1995 and 2006, the Asia Pacific area's share of global electronic production increased from 20% to 42%, while production in Western Europe, the US and Japan continues to decline.⁵¹

The most common problems in the manufacture of mobile phones include low wages, excessive working hours, disrespect of union rights, health and safety issues and growing job insecurity through temporary contracts and agency work. MakeITfair has examined working conditions in seven factories that make mobile phone (or their parts) in China and the Philippines in 2008 and 2009.⁵² These factories are suppliers for Apple, LG, Motorola, Nokia, Samsung and Sony Ericsson. In China, all studied factories paid new workers a basic wage equal to the legal minimum, 75-85 Euros per month, for full-time work. In both countries workers worked compulsory overtime of up to 100-180 hours per month – a gross violation of the local labour laws and International Labour Organization (ILO) conventions. Workers were often fined if they made mistakes or fell asleep at work. The electronics industry also has a history of widespread anti-union tactics, which leads to a very low unionisation percentage and hardly any collective bargaining agreements. In the Export Processing Zones in the Philippines, where many of the electronics

⁴⁸ <http://www.idc.com/getdoc.jsp?containerId=prUS21659209>

⁴⁹ <http://www.etimes.eu/uk/217600424>

⁵⁰ iSuppli Corp, 2008. *Outsourcing Strategies Separate Winners From Losers in the Mobile-Handset Market*. For more information about the different types of actors within the mobile phone industry, please see Haan, E. and Wilde, J. 2006. *The High Cost of Calling: Critical Issues in the Mobile Phone Industry*, p. 12-13.

⁵¹ SwedWatch, 2008. *Silenced to deliver: Mobile phone manufacturing in China and the Philippines*.

⁵² SOMO and Swedwatch. 2008. *Silenced to Deliver – Mobile phone manufacturing in China and the Philippines*; Finnwatch, SACOM and SOMO, 2009. *Playing with Labour Rights – Music player and game console manufacturing in China*.

factories can be found, a ‘no union – no strike’ policy is very effectively applied. Less than 10% of the Philippines’ electronics firms are thought to have unions.

All of the five largest mobile phone brands – Nokia, Samsung, Motorola, LG and Sony Ericsson⁵³ – have adopted codes of conduct stating that human rights and the labour rights of workers will be guaranteed for all workers producing for them. However, the situation at the factories looked at in the makeITfair report shows that this is not the case. Four out of the five largest mobile phone companies claim that they monitor compliance with their ethical guidelines by their suppliers.⁵⁴ However, in reality a large part of the companies’ supply chains are left uncontrolled, since the four companies that carry out audits mainly monitor random samples of the suppliers that are closest to them (so-called first and second tier suppliers), while the most severe problems are found further down the supply chain.

BOX1: SUPPLY CHAIN RESPONSIBILITY AND CODES OF CONDUCT

Over the last decade, companies have been put under increasing pressure to make sure that the products they sell are made under good social and environmental conditions. They should not only apply this to their own companies, but also to the companies that supply them with parts and products. Mobile phone companies and many others have adopted codes of conduct for this purpose, and have put efforts into monitoring and auditing their suppliers.

According to makeITfair, codes of conduct should be based on international standards such as the International Labour Organization (ILO) conventions. The ILO’s core labour standards are freedom of association, right to collective bargaining, no discrimination of any kind, no forced or slave labour, and a minimum employment age. There are several other generally accepted labour standards; health and safety measures, a maximum working week of 48 hours and voluntary overtime of 12 hours maximum, a right to a living wage and the establishment of an employment relationship.⁵⁵

The world’s five leading mobile phone companies acknowledge, to varying degrees, that they have a responsibility for labour conditions in their supply chains. The companies’ codes of conduct stipulate the rights of the workers. Most of them refer to abiding to national laws and make references to international norms in general. However, the codes lack effective implementation measures, since companies primarily rely on self assessment by suppliers.⁵⁶

2.2. RAW MATERIALS MINED IN POOR AND DANGEROUS CONDITIONS

A mobile phone may require up to 30 metals to function. For example, half of the world's tin is used in electronic solders, and one fourth of its cobalt is used in portable products such as mobile phone batteries. These metals often come from mines in Africa and Asia. They are frequently mined in breach of several international conventions.⁵⁷ Many miners work in poor and dangerous conditions, and the environment suffers, with subsequent harm to the communities around the mines. In some cases, the

⁵³ These ‘big five’ held more than 80% of the mobile phone market in 2008.

⁵⁴ In 2008, LG and Samsung did not do audits for their suppliers regarding ethical and social demands. Samsung states that it has started doing audits of some of its suppliers regarding ethical demands in 2009. For more information and a comparison of the mobile phone companies’ CSR-work, see: Torstensson, A. and Riddselius, C. 2008: *En rapport om mobiler - de största företagens etikarbete*, Fair Trade Center and SOMO, 2008. *Mobile connections, Supply Chain Responsibility of 5 Mobile Phone Companies* SOMO Paper.

⁵⁵ SOMO, 2009. *Configuring Labour Rights – Labour conditions in the production of computer parts in the Philippines*, p. 32.

⁵⁶ SOMO and Swedwatch, 2008. *Silenced to Deliver – Mobile phone manufacturing in China and the Philippines*, p. 59, 63.

⁵⁷ Swedwatch, 2007. *Powering the Mobile World*; SOMO, 2007. *Capacitating Electronics*; Finnwatch, 2007. *Connecting Components, Dividing Communities – Tin production for consumer electronics in the DR Congo and Indonesia*.

mining of minerals for the electronics industry has contributed to the ongoing conflict in the Democratic Republic of Congo; militias sold the minerals destined for manufacturing electronics, and used the revenues to buy arms.⁵⁸

In 2007, makeITfair tracked the supply chains of some of these metals from mines to mobile phones and other electronic products.⁵⁹ Mining companies and processors are part of the mobile phone companies' supply chain and the electronic industry therefore has an obligation and an opportunity to influence the mining sector.⁶⁰ Income generated by mining operations in resource-rich countries such as the DR Congo and Zambia are crucial to combat poverty and create development, but only when they are sourced and traded in a responsible way.

In 2007, the electronic industry told makeITfair that the metal used in mobile phone production was out of its sphere of influence and that the industry was an insignificant consumer compared to other sectors. But after conducting its own research, and after continuous dialogue with makeITfair, industry associations accepted a shared responsibility for the situation at the mining level. They started to explore possible collaboration in multi-stakeholder initiatives on social and environmental conditions in the mining industry, and also started looking into tracing specific metals. MakeITfair is in dialogue with the companies to pursue this issue further.

2.3. E-WASTE 'DISAPPEARS' TO DEVELOPING COUNTRIES

The increased consumption of electronic items like mobile phones has caused a parallel increase in discarded products. The UN estimates that up to 50 million tonnes of electronic waste, so-called 'e-waste', may be generated worldwide each year.⁶¹ Although they are small, mobile phones contain a vast range of both potentially dangerous substances and precious metals. It is therefore important that the recycling is done properly and thoroughly. If more phones were recycled, fewer metals would have to be mined and there would be fewer dangerous substances harming the environment.

There are over four billion mobile phone users in the world today.⁶² If each of them handed in one unused phone, 240,000 tonnes of raw materials could be saved. This would be the equivalent in greenhouse gas emissions as taking four million cars off the road. However, research presented by Nokia shows that globally only 3% of all consumers recycle their used phones.⁶³

EU legislation requires that the cost of properly disposing of electronic products must be paid by the producers, and that they must phase out some of the most hazardous substances.⁶⁴ This legislation,

⁵⁸ FinnWatch, 2007. *Connecting Components, Dividing Communities – Tin production for consumer electronics in the DR Congo and Indonesia*.

⁵⁹ Finnwatch, 2007. *Connecting Components, Dividing Communities – Tin production for consumer electronics in the DR Congo and Indonesia*; SOMO, 2007. *Capacitating Electronics – The corrosive effects of platinum and palladium mining on labour rights and communities*; SwedWatch, 2007. *Powering the Mobile World – Cobalt production for batteries in the DR Congo and Zambia*; SwedWatch, 2009. *Out of Control: E-waste trade flows from the EU to developing countries*.

⁶⁰ makeITfair has developed a list of principles on the CSR issues in the extraction phase. These can be found at: makeitfair.org/companies/list-of-principles/view?searchterm=list%20of%20principles

⁶¹ Greenpeace International, 2008: *Toxic Tech: Not in Our backyard*, p 16.

⁶² International Telecommunication Union, 2009. *Measuring the Information Society*. The ICT Development Index; http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf; p. 4

⁶³ Nokia press release, *Global consumer survey reveals that majority of old mobile phones are lying in drawers at home and not being recycled*, 8 July 2008. Available at <http://www.nokia.com/A4136001?newsid=1234291>

⁶⁴ The WEEE Directive and the RoHS Directive.

together with a stronger focus on environmental issues in Western markets, has made several mobile phone companies produce more eco-friendly products that are easier to recycle when they reach their end-of-life. In June 2009, Sony Ericsson presented a new eco-friendly model in Sweden. A day later, Nokia started marketing a new eco-model that was due to be launched in the third quarter of 2009.⁶⁵ Increased production and sales of more eco-friendly electronics will have global effects, since the electronics market and its production processes are global. However, in order to move this development forward, there needs to be a visible demand from consumers for sustainably produced electronics. The mobile phone operators can play an important role here.

Since several developing countries in Asia and Africa lack proper systems for recycling and disposal, they are presently experiencing increasing problems with handling e-waste. In many of these countries (for example, China and Ghana) e-waste is being handled by unprotected workers in the informal sector, a dangerous situation that also causes great damage to the environment. Yet mountains of e-waste are growing by the day in these countries. The most important reason is that consumption of electronics is increasing in these countries. Furthermore, e-waste is exported from the rich world to developing nations.⁶⁶ The average annual e-waste collection rate within the EU is about five kilos per person, while it is expected that each inhabitant generates 15 kilos of e-waste annually.⁶⁷ Parts of this hidden flow are exported for reuse, recycling or disposal in Asia and Africa, often illegally.

MakeITfair claims that the lifecycle of mobile phones is far from sustainable at present, especially when effects in developing nations are taken into account – effects caused by the mining of metals, manufacturing in Asia and final waste treatment. The production of consumer goods and mining of raw materials give developing countries the opportunity to develop their economies and societies, if companies respect labour and human rights and the environment, and take responsibility for their supply chains. MakeITfair believes that mobile network operators have the responsibility to address the concerns that were described in this chapter. As retailers of mobile phones, mobile network operators can urge mobile phone companies to adopt solutions that will improve the situation throughout their supply chains.

⁶⁵ www.mobil.se *Sony Ericsson lanserar miljömobil*, 4 juni 2009 och *Nokia kontrar - lanserar 6730 Classic*, 5 juni 2009.

⁶⁶ Swedwatch, 2007. *Out of control – E-waste trade flows from the EU to developing countries*.

⁶⁷ Huisman J. et al., 2007, 2008. *Review of Directive 2002/96 on Waste Electrical and Electronic Equipment*, p. 247 and Eklkretsen, Sverige i världstopp i insamling av elavfall, 29 February 2008.

BOX 2: THE GLOBAL E-SUSTAINABILITY INITIATIVE (GESI) AND THE ELECTRONIC CITIZENSHIP COALITION (EICC)⁶⁸

In 2001, the Global e-Sustainability Initiative (GeSI) was established to promote sustainable development in the ICT sector. At the time of writing, GeSI has 24 members. Of the ten mobile network operators included in this study, KPN, Vodafone Group, Deutsche Telekom and Telefónica (O₂) are GeSI members. Some of GeSI's general principles for its members include:

- meeting or exceeding, where appropriate, requirements of all applicable legislation;
- minimising a company's own operational impacts on the environment; and
- maximising our contribution to the societies in which we operate.

GeSI has established a number of working groups, including a supply chain working group. This group explores ways in which ICT companies can work more closely together to improve management of the social and environmental risks in their supply chains. In partnership with another industrial initiative (involving many computer companies), the Electronic Industry Citizenship Coalition (EICC), GeSI has developed common tools, including E-TASC⁶⁹, a web-based self-assessment tool for suppliers, and a shared audit programme.

These standard industry approaches are designed to encourage electronics suppliers to improve labour and environmental issues by presenting an industry-wide call to improve and by avoiding duplication between customers. However, they have been criticised because there is no clear strategy that ensures the active involvement of representative groups of stakeholders on all decision-making levels. Stakeholder meetings cannot replace a true multi-stakeholder process.

Many GeSI and EICC members have developed own code of conducts based on the EICC Code of Conduct. The EICC Code refers to issues like forced and child labour, wages, working hours, non-discrimination and freedom of association. Review processes on the EICC Code have been carried out with input from civil society organisations. So far, this has not led to improvements and the EICC Code is falling well short of what is considered to be threshold standard of a code; the EICC Code does not include the full right to organizing and no collective bargaining, a living wage and a clear limit on normal working hours and overtime hours. Although joint audits are being done, follow up is not coordinated, which means that it is left to the individual companies to each come up with a corrective action plan - or not - and does not require working together on it.

⁶⁸ <http://www.gesi.org>; SOMO paper, 2009. *Computer Connections*, p. 4; SOMO, 2006. *High Cost of Calling*, p. 102-103.

⁶⁹ See: <http://e-tasc.achilles.com/default.aspx>

3. COMPARISON OF MOBILE NETWORK OPERATORS IN FOUR DIFFERENT COUNTRIES

In this chapter, the sales and product information, recycling efforts and responsible management of the supply chain of mobile network operators are compared. The comparison is based on public information and the operators' answers to our questionnaire (see Annex 2 for an example of this questionnaire). The selected mobile network operators represent the market leaders in Germany, Sweden, Finland and the Netherlands. Some of these operators have branches in more than one of these countries. Table 2 provides an overview of the operators that were approached for this study, and the main markets in which they operate. The national network operators and branches of international network operators that were approached for inclusion in the study are printed in italics; printed in bold are the companies that returned the questionnaire.

TABLE 2: MOBILE NETWORK OPERATORS INCLUDED IN COMPARISON

MOBILE NETWORK OPERATOR	MAIN MARKETS
DNA	<i>Finland</i>
Elisa	<i>Finland, Estonia</i>
KPN (includes E-Plus)	Belgium, Germany, Netherlands , France, Spain
Tele2	Austria, Croatia, Estonia, France, Germany, Latvia, Lithuania, <i>Netherlands</i> , Norway, Russia, Sweden
Telefónica (O2)	Argentina, Brazil, Chile, Colombia, Czech Republic, Ecuador, El Salvador, Germany , Guatemala, Ireland, Mexico, Morocco, Nicaragua, Panama, Peru, Puerto Rico, Slovakia, Spain, UK, Uruguay, USA, Venezuela
Telenor	Bangladesh, Denmark, Hungary, India, Malaysia, Montenegro, Norway, Pakistan, Russia, Serbia, Sweden , Thailand, Ukraine
TeliaSonera	Azerbaijan, Cambodia, Denmark, Estonia, Finland , Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Nepal, Norway, Sweden , Spain, Tajikistan, Uzbekistan
T-Mobile	Albania, Austria, Bulgaria, Croatia, Czech Republic, Germany , Greece, Hungary, Macedonia, Montenegro, Netherlands , Romania, Slovakia, UK, US, Poland
3 ('Tre')	Australia, Austria, Denmark, Hong Kong and Macau, Ireland, Israel, Italy, Sweden, UK
Vodafone	Albania, Australia, Czech Republic, Egypt, Fiji, <i>Germany</i> , Ghana, Greece, Hungary, India, Ireland, Italy, Kenya, Malta, Netherlands , New Zealand, Poland, Portugal, Romania, Spain, Turkey, UK, Qatar

The table shows that ten mobile network operators were included in this study. Treating national branches of international operators as separate units, this results in a total of 15 companies spread over Germany, Sweden, Finland and the Netherlands. Each of these 15 companies was approached to fill in a questionnaire; 12 returned it. Unfortunately, the Dutch branch of Tele2, the German branch of Vodafone and Finnish operator Elisa did not participate and did not return the questionnaire, showing poor

transparency. This means that, at some points in this comparative analysis, the necessary information is lacking.⁷⁰

3.1. SALES FIGURES AND PRODUCT INFORMATION

Insight into the sales figures of mobile phones by mobile network operators is crucial to assess the relative influence of each of the operators in the mobile phone supply chain. Unfortunately, most mobile network operators do not disclose sales figures of mobile phones. The only exceptions from the 12 companies that returned the questionnaire are O₂ (Telefónica Germany) and KPN. O₂ provides sales figures of 3.6 million mobile phones in Germany in 2008. KPN states that it sold more than 100,000 mobile phones in the Netherlands in 2008. Because of lacking sales information of mobile phones by mobile network operators, it is not possible to assess their procurement volume of mobile phones. However, an indication is offered by the Finnish Communications Regulatory Authority: almost 30% of mobile phones sold in Finland in 2008 were distributed by mobile network operators. Furthermore, it is clear that the companies included in this report collectively represent nearly 1 billion subscribers.⁷¹ Since the mobile network operators choose to occupy the link between mobile phone companies and consumers, acting as retailers, they must accept responsibility for the social and environmental conditions in the supply chain of mobile phones.

Because mobile phone sales figures are generally not disclosed, there is no further information available on the distribution of mobile phone sales for new subscriptions and renewals. DNA and TeliaSonera Finland are the only companies that state that they do not issue new free phones with subscription renewal.

Mobile network operators generally do not provide sales percentages per brand, with the exception of Tele 2 Sweden. This company provides a sales distribution of 60% to Sony Ericsson, 25% to Nokia and the remaining 15% to other brands. Although information on the sales distributions per brand is often not provided, the brands that the operators frequently mention as the most popular are Nokia, Samsung, Sony Ericsson and Apple.

A fairly recent development is the marketing of so-called 'green' mobile phones. Such phones have environmentally friendly characteristics such as avoiding hazardous chemicals, a high degree of recyclability and energy-efficiency. However, makeITfair thinks it is too early to call these phones 'green'. Some of them might be more environmentally friendly than others, but a recent product survey from Greenpeace could only award around 5 out of a possible 10 points to existing mobile phones.⁷² Greenpeace states that, using the technologies employed by the current market leaders, and thus combining the best characteristics of the submitted products, a significantly greener product could already be on the market.⁷³ Furthermore, makeITfair also considers responsible mining an important aspect of creating a 'green' product. However, this is still not an aspect of 'green' phones. The content of recycled materials so far mainly refers to the plastics of the mantle of the phone and the packaging, but not the metals used inside the phone.

⁷⁰ For profiles of these companies, please refer to the national versions of this report. These can be found on the makeITfair website: <http://makeitfair.org/the-facts/reports>

⁷¹ See Table 1 earlier in this report.

⁷² Greenpeace, 2008. *Green Electronics... The search continues*, p. 20.

⁷³ *Ibid.*, p. 9.

There are only four (branches of) mobile network operators in our selection that explicitly sell ‘green’ mobile phones: T-Mobile Netherlands, Tele2 Sweden, Telenor and DNA. T-Mobile Netherlands recently started marketing its first ‘green’ model in the Netherlands: the Samsung S3030 Eco. Tele 2 Sweden and Telenor market the Sony Ericsson Greenheart C901 as a ‘green’ phone on the Swedish market. DNA sells the Nokia 3110 Evolve in Finland. TeliaSonera plans to sell green mobiles in Sweden later in 2009; it remains unclear why the company does not consider such steps in Finland. Whereas T-Mobile Netherlands already sells a green phone, T-Mobile Germany is of the opinion that there is no green phone on the market yet. T-Mobile Germany told makeITfair that it is encouraging the manufacturers to produce really green phones.

The mobile network operators differ with regard to the perceived customer interest in social and environmental issues related to mobile phones. The companies that have responded to this question can be divided into the three groups. The first group, consisting of TeliaSonera Sweden and E-plus answered that there was either no customer interest or very little interest. E-plus actually specifies the average number of queries it receives regarding these issues: an average number of ten queries per shop per year, mostly concerning SAR⁷⁴ and recycling. The second group comprises of Tre, Telenor Sweden, T-Mobile Netherlands and TeliaSonera Finland. These companies have not registered any (increasing) consumer interest, but do register a growing interest stemming from professional customers (i.e. the business sector and public procurement). A third group of companies does register increasing interest from customers. Companies that belong to this group are DNA, T-Mobile Germany, Vodafone Netherlands, Tele2 Sweden and O₂, although the latter specifies it registers this increasing interest with specific regard to the recycling of mobile phones.

3.2. RECYCLING AND RE-USE OF MOBILE PHONES

Consumers can hand in their old mobile phones for re-use or recycling at the shops of all the operators included in this study, excluding Tele2 Netherlands. In the absence of its own shops, Tele2 Netherlands does not operate any mobile phone hand-in points. When asked about mobile phone collection rates, the companies either did not answer the question or report disappointingly low rates: T-Mobile Germany reports a 1% collection rate of sales; O₂ 0.41%; KPN responds that collection rates are “less than several percentages of sales”; E-plus reports a total amount of 15,000 mobile phones collected; and Telenor reports it has recycled 115,000 phones in 2008.

The very low collection rate of mobile phones is a commonly acknowledged state of affairs in the sector. This seems to have a lot to do with the size of the product; it is easy to store an old mobile phone that still works in your drawer ‘just in case’ and forget about it for years.⁷⁵ KPN, Vodafone Netherlands and both the Swedish and the Finnish offices of TeliaSonera state that they will launch campaigns to increase collection and thereby increase recycling and re-use rates in the near future.

⁷⁴ SAR stands for ‘specific absorption rate’, a physical variable measuring the absorption of electromagnetic field by organic tissue. In Germany there is considerable concern about electromagnetic radiation that might be harmful to customers’ health.

⁷⁵ www.mobil.se, Mobilkomposten håller insamlingskampanj för gamla mobiler, 3 April 2008; Nokia press release, *Global consumer survey reveals that majority of old mobile phones are lying in drawers at home and not being recycled*, 8 July 2008. Available at <http://www.nokia.com/A4136001?newsid=1234291>

Apart from these re-use and recycling programmes, another way companies can be said to provide consumers with an incentive for longer use of their mobile phone is by offering SIM-only subscriptions against 'discounted' rates. Of all the mobile network operators in this study, Telenor seems to provide the biggest incentive: the company offers a gift voucher of 25 Euros for each returned mobile phone, and additionally, reduced costs per minute when the service contract is renewed.

When asked about initiatives to stimulate environmental design of mobile phones with the manufacturers of mobile phones, eight out of the ten companies that answered this question – i.e. KPN, Vodafone Netherlands, E-Plus, T-Mobile Germany, Telenor, DNA and TeliaSonera Sweden and Finland – indicate that they discuss environmental design aspects in their communication with manufacturers during procurement. TeliaSonera further indicates it is planning to intensify its efforts in this regard. Telenor adds that it feels it has little influence over the production and design of mobile phones.

3.3. SUPPLY CHAIN RESPONSIBILITY

Mobile network operators organise their supply chain management at group level, since much of their procurement is done at this level. This means the policy is applicable to all the branches of an internationally operating company. Of the ten mobile network operators that were studied for this report (taking a group level perspective), seven have some sort of supply chain policy in place that sets social and environmental requirements for their suppliers. These are TeliaSonera, T-Mobile, Vodafone, KPN (including E-Plus), Tele2, Telenor and Telefónica (known as 'O2' in Germany). (See Annex 3 for a comparative assessment table of the supply chain policies). Tre responds that it does not have a supply chain policy; DNA does not have one yet but reports it is currently developing one, and, while somewhat uncertain because Elisa did not return the questionnaire, no such policy is available in Elisa's public information. Most of the seven mobile network operators that have a supply chain policy in place indicate that it is binding in the sense that the supplier requirements they set are part of the formal contracts with suppliers. Only the supply chain policy of KPN and its subsidiary E-Plus is not binding (yet).

The content of the supply chain policies varies. Of the seven companies that have a policy, six refer to ILO conventions and five refer to the UN Declaration of Human Rights as a basis for their policies. Only Tele2's policy refers to neither of these important international frameworks. The policies also differ with regard to the scope of the labour and human rights issues they address. Of the labour issues mentioned, security of employment and wages are least mentioned; only four out of the seven companies that have some sort of supplier policy refer to wage requirements for the workers in their supply chain; Tele2 and Telenor do not include the subject of wages in their policies as a demand to their suppliers, and for TeliaSonera this cannot be assessed since it is not willing to share its specific requirements. None of the mobile network operators refers to security of employment.

The policies also vary with regard to the level of detail of the supplier requirements (i.e. specifying what criteria they will use to assess compliance of their suppliers with their policy). For instance, six companies state that they reject the use of child labour anywhere in their supply chain, but only four of them make clear what they understand as child labour: the minimum age according to national laws. Vodafone and Telenor further specify that they will not allow workers in their supply chain to perform hazardous work under the age of 18.

When the mobile network operators specify the criteria accompanying their supplier requirements, most companies state that they will comply with national laws. Such a commitment cannot be regarded as very ambitious. First of all, compliance with national laws is obligatory for all companies operating in that country, so a public commitment to these laws should be unnecessary, and raises eyebrows to say the least. In the absence of such a public commitment, we should be concerned whether companies would abide by the law. Secondly, makeITfair research has shown that national laws do not always protect workers sufficiently. For instance, the minimum wage in the Philippines has been shown to be insufficient for workers to cover their basic needs.⁷⁶

Companies differ considerably with regard to their efforts in monitoring and verification of their supplier requirements. Out of the ten mobile network operators that we assessed, and out of the seven that have a supply chain policy, only five –Telenor, TeliaSonera, T-Mobile, Vodafone and O₂– report that they use self-assessment questionnaires to assess their suppliers. These same five companies report the use of supplier site assessments. None of the mobile network operators uses third party independent audits.

Self-assessment questionnaires can hardly be considered an effective tool to monitor supplier compliance; self-monitoring provides the supplier with the opportunity to paint a better picture than reality at the production site. Site assessments have a greater potential in this regard, although the objectivity of the results depends on the assessment procedures. As far as makeITfair is aware, off site interviews with workers are not standard procedure in these supplier assessments, which creates the risk that no balanced information about labour conditions is gathered.

Only Vodafone, Deutsche Telekom (to which T-Mobile belongs) and Telenor are transparent about the number of audits in 2008. Vodafone and Deutsche Telekom also report the main results of the audits. Vodafone reports it conducted 18 site assessments and made a total of 166 recommendations to suppliers for improvement.⁷⁷ Deutsche Telekom states in its Corporate Responsibility Report 2009 that it held three site audits in China, Mexico and Taiwan in 2008.⁷⁸ Furthermore, on its website it is stated that “Deutsche Telekom has already held several supplier audits and plans to make greater use of this method in its future supplier management activities. The company’s target is to cover the majority of the Group’s procurement volume with audited suppliers”.⁷⁹ In response to the questionnaire, T-Mobile said that so far, each audit meant that there needed to be a Corrective Action Plan. Furthermore, the company provides a table with the key findings of the audits and the improvements achieved.⁸⁰ Telenor visited suppliers 382 times without warning during the period May–September 2008.⁸¹ Such information is lacking for Telefónica, and TeliaSonera has indicated that it is only in the early stages of implementing its supplier requirements. Because of this lack of information, it is impossible to assess how many of the audited suppliers are actually mobile phone manufacturers. Vodafone has indicated that its site assessments are mainly targeted

⁷⁶ SOMO, 2009. *Configuring Labour Rights – Labour conditions in the production of computer parts in the Philippines*.

⁷⁷ Vodafone website, *Supply chain: Progress*, <http://www.vodafone.com/static/cr_report09/issues/supply-progress-have.html> (30 July 2009).

⁷⁸ Deutsche Telekom: *The 2009 Corporate Responsibility Report*, June 2009.

⁷⁹ Deutsche Telekom website, *Global sourcing and supplier management*, <<http://www.deutschetelekom.com/dtag/cms/content/dt/en/474196>> (9 September 2009)

⁸⁰ <http://cr-report.telekom.de/site09/en/verantwortungsbereiche/lieferanten/audits/index.php?page=1>

⁸¹ Telenor Website, *Status for Telenor’s work on health, safety, security and environment (HSSE)*, <http://www.telenor.com/en/news-and-media/news/2008/status-for-telenors-work-on-health-safety-security-and-environment-hsse.jsp>

at high-risk manufacturers that manufacture components for its Vodafone branded products. Since the supply chain responsibility of Vodafone and Deutsche Telekom is the most developed, and even the number of site assessments performed by these operators is relatively small, it can be expected that this number will not be higher for the other mobile network operators. Furthermore, the amount of site assessments reported by Vodafone and Deutsche Telekom are small in comparison to Telenor and other companies in the electronics sector. For example, Philips audited 277 supplier facilities and Apple 83 facilities in 2008, mainly in China.⁸²

Four of the (group level) operators studied in this report are members of GeSI (see Box 2). The European Telecommunications Network Operators' Association (ETNO) also has a Sustainability Charter⁸³, which commits its signatories to 'continuously improve' and 'share best practices' with regard to procurement, in observation of human rights and labour conditions and implementation of environmentally friendly product requirements. Signatories of the Charter include five operators from this study, namely DT, KPN, Telefonica (O₂), Telenor and TeliaSonera. It seems that wording of the Charter leaves a lot of room for interpretation.

⁸² FinnWatch, SACOM and SOMO, 2009. *Playing With Labour Rights – Music player and game console manufacturing in China*, p. 23.

⁸³ ETNO website, *Sustainability*, <<http://www.etno.be/Default.aspx?tabid=1935>> (10 September 2009).

4. CONCLUSIONS AND RECOMMENDATIONS

Collectively, the mobile network operators included in this report had nearly 1 billion subscribers in 2008, implying they represent almost one quarter of all global subscriptions for mobile communication networks.⁸⁴ As mobile phones and mobile networks are mutually dependent, and mobile network operators are important retailers of mobile phones, the mobile network operators in this report play a significant role in the mobile phone market.

Earlier makeITfair research has signalled that severe environmental and social problems persist in the mobile phone supply chain, stressing the need for increased responsibility and accountability in the chain. The mobile network operators' position in the supply chain is particularly crucial since these companies are an important retail channel of mobile phones for consumers. It is common practice for mobile network operators to offer customers a 'free' new mobile phone when they sign up for a new subscription, or renew their subscription. Evidently, this type of marketing has an enormous impact on the amount of mobile phones that are circulating on the market, as well as on the mobile phone production processes, and the mounting volumes of e-waste. Although the operators are an important retail channel for mobile phones, their core business is the sale of network services (i.e. the use of mobile network technology), giving them a unique opportunity to release some of the pressure on the mobile phone supply chain without harming their own core business. A decrease in mobile phone sales and production would not necessarily impact mobile network operators' revenues (as long as calling minutes are not reduced), but would reduce mining, overtime for manufacturers, and e-waste, to name a few issues.

Case studies of ten market leading mobile network operators in Finland, Germany, the Netherlands and Sweden,⁸⁵ and a comparative analysis of the operators' supply chain responsibility revealed their policies and practices in terms of mobile phone marketing, recycling and supply chain management. Based on the main research findings, in this final chapter makeITfair develops suggestions for mobile network operators to improve the social and environmental conditions in the mobile phone supply chain.

The research has indicated that most mobile network operators are not transparent about their mobile phone sales, major suppliers, supplier relationships and results of their efforts to improve supply chain conditions. Of all the mobile network operators included in this study, only Vodafone and T-Mobile provide insight into the number and results of their supplier audits. And only KPN and O₂ provided us with sales figures for mobile phones. MakeITfair urges mobile network operators to collectively change this secretive culture, since insight into sales figures and supply chain management practices is of utmost importance for industry and civil society alike to define responsibilities and assess progress.

The research indicated that only four (branches of) mobile network operators in our selection – T-Mobile Netherlands, Tele2 Sweden, Telenor and DNA – sell mobile phones marketed as 'green' mobile phones, although it is doubtful whether these phones deserve the label 'green'. In fact, T-Mobile notes in its

⁸⁴ Based on the ITU estimate of 4.1 billion subscribers in 2008 globally.

⁸⁵ Since some mobile network operators operate in more than one of the included countries, a total of 15 case studies were conducted. For the national level case studies of each of the mobile network operators, please refer to the national versions of this report. These can be found on the makeITfair website: <http://makeitfair.org/the-facts/reports>

Corporate Responsibility report that it is putting effort into getting more environmentally friendly products on the market, but still awaits the first real green phone on the market. The limited availability of 'green' mobile phones and the non-existence of 'fair' ones may be partly explained by the fact that consumer interest in 'green' or 'fair' attributes of mobile phones is perceived as low by most operators. However, market research by makeITfair published in 2008 revealed that a majority of young European consumers is concerned about the social and environmental conditions under which their mobiles are produced, and are willing to pay 10% more for fair electronics.⁸⁶ Furthermore, even in cases of low consumer demand, products are often 'pushed' on the market only to create consumer demand after introduction. With a smart and strategic marketing campaign, the same can be done for green and/or fair mobiles. At the procurement side, environmentally friendly design and socially fair production could become an active demand towards manufacturers. Particularly when operators market phones under their own brand (like T-Mobile and Vodafone do), the operators have the opportunity to place manufacturing orders that create new mobile phone models.

All the mobile network operators included in this study have a re-use and recycling programme in place, with the exception of Tele2 Netherlands. Since Tele2 does not operate shops in every country, it should start a recycling programme by mail in those countries. Other operators (e.g. Vodafone, KPN) already provide customers with a return option by mail, so there is no reason why Tele2 could not follow this example.

Although 'hand in' programmes are in place, collection and recycling figures of mobile phones are still dramatically low. There is a lot of room for improvement here. The first step seems to be to raise awareness about the existence of recycling opportunities; currently most consumers are unaware of the opportunity to hand in their old mobile phone at the mobile network operator shops. Since recycling does not seem to be an element of competition between the operators, they might even consider a joint awareness raising campaign. Another way to promote recycling that is already used by Telenor is to offer gift vouchers on products and/or subscriptions when customers hand in their old mobile phone. Such 'hand in' programmes also need to be developed outside Europe. Consumers in developing countries often get money for their discarded mobile phones if they sell them to the informal recycling sector, where the phones are recycled improperly. MakeITfair believes that mobile network operators with operations in these regions must consider economic incentives for proper recycling in the emerging markets.

A promising opportunity for mobile network operators to address several issues in the chain simultaneously – i.e. less mining of precious metals, less time-pressure and thus overwork in manufacturing, less e-waste – is to make SIM-only contracts more attractive to consumers than subscription renewals in combination with a mobile phone. In the current marketing of subscription renewals, most operators present consumers with two alternatives: a 'reduced' SIM-only tariff or a new mobile phone. Operators could do several things to promote the SIM-only option. They could make the SIM-only subscription more visible by marketing it more actively than the new phone option, or they could skip the option for receiving a new phone with a renewal altogether. Another option is to demand

⁸⁶ MakeITfair website, *Young consumers are willing to pay more for fair electronics*, <http://makeitfair.org/the-facts/news/young-consumers-are-willing-to-pay-more-for-fair>, 10 September 2009.

handing in the old phone as a condition of receiving a new mobile phone with a subscription renewal. Each of these options could be accompanied with a message that highlights the environmental and social benefits of the SIM-only or ‘new-for-old’ alternatives, which may enhance the company’s image.

When mobile phone operators sell used phones on instead of recycling them directly, it is very important that they make sure that collected phones are not exported to countries without proper recycling systems. Used products will sooner or later end up as waste (so called ‘e-waste’). In several low-income countries in Asia and Africa, there is a lack of integrated systems for recycling and waste management. The recycling is often done without protective equipment by workers in the informal sector, with devastating effects on health and the environment. Therefore, it is very important that mobile network operators include the entire life-cycle of products in their supply chain management, and that they assume responsibility for the responsible recycling of the products they sell, even after they have begun a second life in low-income countries.

In terms of supply chain responsibility, seven out of the ten studied mobile network operators have some sort of supply chain policy in place. Only five of them have systems in place to monitor the compliance with their policies by suppliers, using supplier self-assessment questionnaires and site assessments of suppliers (i.e. Telenor, T-Mobile, Vodafone, Telefónica and TeliaSonera). None of the operators in this report uses independent, third party site assessments to monitor their suppliers. Most of the operators only stand at the beginning of developing criteria for, and monitoring and verification systems of, their supplier policies. In the case of companies that use site assessment as part of their supply chain monitoring, the number of audits remains small. This number needs to be increased considerably to cover all high-risk suppliers, ensuring compliance with the social and environmental supplier criteria that are codified in policies.

MakeITfair considers independent, third party supplier audits an important instrument for supply chain monitoring. Such audits are costly in terms of time and personnel for both the supplier and the customer company. An opportunity to perform thorough supplier audits while saving costs and enhancing coverage at the same time is the performance of shared audits. Although GeSI and EICC are in the process of developing an auditing service for its members to share, the effectiveness of this specific tool remains to be seen.⁸⁷ Its effectiveness in improving the social and environmental conditions in the supply chain is dependent on the supplier assessment criteria, the code of conduct, audit procedure and follow-up procedures to improve performance by suppliers. MakeITfair is of the opinion that supplier monitoring systems and improvement plans must include representatives of workers from the South, to provide a balanced insight into the suppliers’ performance, as well as an employee perspective on the attainability and desirability of improvement measures.

Working in a multi-stakeholder setting would increase the possibility of taking on labour issues as a company initiative, in a way that the auditing service from the EICC and GeSI cannot. Furthermore, to work towards long-term improvements, the supply chain management system should also include a complaint mechanism for stakeholders along the supply chain.

⁸⁷ GeSI website, *ICT sustainability through innovation. GeSI activity report*, June 2009, <<http://www.gesi.org/LinkClick.aspx?fileticket=nCDkpySzT08%3d&tabid=60>>

To conclude, this research report has shown that mobile network operators have developed several initiatives to improve the social and environmental conditions in their supply chains. Some have progressed much further on this pathway than others. Overall, there is still a lot room for improvement throughout the whole mobile phone supply chain and product life-cycle: in the design of mobile phones, the manufacturing process, the marketing of phones and the recycling. Considering the crucial and unique role of the mobile network operators in the mobile phone supply chain, it is very unfortunate that the companies, as retailers, do not fully capitalise on their opportunity to influence both consumers and suppliers on social and environmental issues. MakeITfair urges mobile network operators to pursue improvements in the mobile phone supply chain, and hopes this report will provide the operators with some ideas about how to do so.

ANNEX 1: TABLE 1, INCLUDING REFERENCES

TABLE 1: MARKETS AND CUSTOMERS OF OPERATORS IN THIS STUDY

MOBILE OPERATOR (HOME OFFICE)	MAIN MARKETS	SUBSCRIBERS IN MILLIONS (GLOBALLY/IN RESPECTIVE COUNTRIES STUDIED) BY END 2008
DNA (Finland)	Finland	Finland: 1.66 ⁸⁸
Elisa (Finland)	Finland ⁸⁹ , Estonia ⁹⁰	Globally: 2.88 ⁹¹ Finland: 2.54 ⁹²
KPN (Netherlands)	Belgium, Germany, Netherlands ⁹³ , France, Spain ⁹⁴	Globally: 31.1 ⁹⁵ Germany: 17.78 ⁹⁶ Netherlands: 8.4 ⁹⁷
Tele2 (Sweden)	Austria, Croatia, Estonia, France, Germany, Latvia, Lithuania, Netherlands, Norway, Russia, Sweden ⁹⁸	Globally: 19.401 ⁹⁹ Netherlands: 0.458 ¹⁰⁰ Sweden: 3.36 ¹⁰¹
Telefónica (Spain)	Argentina, Brazil, Chile, Colombia, Czech Republic, Ecuador, El Salvador, Germany, Guatemala, Ireland, Mexico, Morocco, Nicaragua, Panama, Peru, Puerto Rico, Slovakia, Spain, UK, Uruguay, USA, Venezuela ¹⁰²	Globally: 182.82 ¹⁰³ Germany: 14.93 ¹⁰⁴
Telenor (Norway)	Bangladesh, Denmark, Hungary, India, Malaysia, Montenegro, Norway, Pakistan, Russia, Serbia, Sweden, Thailand, Ukraine ¹⁰⁵	Globally: 164.00 ¹⁰⁶ Sweden: 1.9 ¹⁰⁷

⁸⁸ DNA Group, 2009. DNA Group Financial Statement;

<http://www.dna.fi/en/dnagroup/press/pressreleases/Sivut/DNAGroupFinancialStatements2008.aspx>

⁸⁹ <http://www.dna.fi/en>

⁹⁰ Elisa, 2009. *Elisa's financial statement 2008*;

<http://www.elisa.com/english/docimages/attachment/090213FINANCIAL%20STATEMENTS%202008.pdf>; p. 5

⁹¹ Ibid.

⁹² Elisa (2008). *Annual Report 2008*;

http://www.elisa.com/english/docimages/attachment/Elisa_vuosikertomus_2008_englanti.pdf; p. 14

⁹³ KPN, 2008. *Back to Growth – Annual Report 2008*;

http://www.kpn.com/reporting08/report08/downloads/pdf/KPN_AnnualReport08.pdf; p. 146

⁹⁴ Via the networks of Orange España and Bouygues Télécom under the brand name 'SIMYO'; see Telecompaper, 2009. *KPN to launch Simyo in France on 11 January*; <http://www.telecompaper.com/news/article.aspx?cid=652453>

⁹⁵ KPN (2008): KPN Profile; <http://www.kpn.com/web/file?uuiid=b6af77ba-e4e6-4a54-a734-57383d4b5551&owner=08dcb4d5-bffa-4aef-ba43-1bc972772aac>; p. 2

⁹⁶ E-Plus – press release 27.01.2009: *E-Plus Gruppe erzielt 2008 Rekordergebnis*; <http://www.eplus-gruppe.de/Presse/Presseinformationen/Presseinformationen.asp>

⁹⁷ KPN, 2009. *Interim financial report Q2 2009 – Subscribers for June 2009 instead of end of 2008*;

<http://www.kpn.com/web/file?uuiid=3ae40687-9a11-4685-a2e2-ae3f25985c5b&owner=75704ec4-0ad4-489b-8f25-f30cdefc3be0>

⁹⁸ Tele2, 2009. *Interim Report January – June*; <http://hugin.info/133413/R/1330141/314322.pdf>; p. 6 ff.

⁹⁹ Tele2, 2008. *Full year report 2008*; <http://hugin.info/133413/R/1288826/291256.pdf>; p. 15

¹⁰⁰ Ibid

¹⁰¹ Ibid

¹⁰² Telefónica, 2009. *Telefónica Worldwide*; http://www.telefonica.com/en/telefonica_worldwide/telefonica_worldwide.shtml

¹⁰³ Telefónica, 2009. *January – June Results*; http://www.telefonica.com/en/shareholders_investors/pdf/rdos09t2-eng.pdf; p. 3

¹⁰⁴ Telefónica, 2009. *Telefónica O2 Germany – First half operating review*; http://www.o2.com/about/germany_operating_review.asp

¹⁰⁵ Telenor Group, 2009. *Business Description*; <http://www.telenor.com/en/investor-relations/company-facts/business-description/>

¹⁰⁶ Telenor, 2009. *Interim report January – December 2008*; http://www.telenor.com/en/resources/images/2008-q4-telenor-report_tcm28-37362.pdf; p. 1

TeliaSonera (Sweden)	Azerbaijan, Cambodia, Denmark, Estonia, Finland, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Nepal, Norway, Sweden, Spain, Tajikistan, Uzbekistan ¹⁰⁸	Globally: 134.8 ¹⁰⁹ Finland: 2.68 ¹¹⁰ Sweden: 5.33 ¹¹¹
T-Mobile (Germany)	Albania, Austria, Bulgaria, Croatia, Czech Republic, Germany, Greece, Hungary, Macedonia, Montenegro, Netherlands, Romania, Slovakia, UK, US, Poland ¹¹²	Globally: 128.34 ¹¹³ Germany: 39.1 ¹¹⁴ Netherlands: 5.3 ¹¹⁵
Tre/ 3 (Hutchison Whampoa) (Hong Kong)	Australia, Austria, Denmark, Hong Kong and Macau, Ireland, Israel, Italy, Sweden, UK ¹¹⁶ Hutchison Whampoa is the name of the holding company, based in Hong Kong ¹¹⁷ .	Globally: 25.3 ¹¹⁸ Sweden (together with Denmark): 1.231 ¹¹⁹
Vodafone (UK)	Albania, Australia, Czech Republic, Egypt, Fiji, Germany, Ghana, Greece, Hungary, India, Ireland, Italy, Kenya, Malta, Netherlands, New Zealand, Poland, Portugal, Romania, Spain, Turkey, UK, Qatar ¹²⁰	Globally: 255.74 ¹²¹ Germany: 36.17 ¹²² Netherlands: 4.54 ¹²³

¹⁰⁷ Telenor, 2009. *Telenor Sweden*; <http://www.telenor.com/en/investor-relations/company-facts/business-description/telenor-sweden>

¹⁰⁸ TeliaSonera (2009): Interim Report January – June 2009;

<http://feed.ne.cision.com/wpyfs/00/00/00/00/00/0F/45/CD/wkr0011.pdf>; p. 9 ff.

¹⁰⁹ TeliaSonera, 2009. *TeliaSonera January-December 2008*,

<http://www.teliasonera.com/press/pressreleases/item.page?prs.itemId=408567>

¹¹⁰ TeliaSonera, 2009. *Annual Report 2008*;

<http://www.teliasonera.com/annualreport/2008/en/CompanyDescription/MarketsandBrands.html>,

¹¹¹ Ibid.

¹¹² Deutsche Telekom, 2009. *Konzern-Zwischenbericht 1. Januar – 30. Juni 2009*; http://www.download-telekom.de/dt/StaticPage/72/03/78/090806_dtag_h1_2009.pdf_720378.pdf; p. 20

¹¹³ Deutsche Telekom, 2009. *Deutsche Telekom übertrifft Finanzziele 2008*;

<http://www.telekom.com/dtag/cms/content/dt/de/82408?archivArticleID=623924>

¹¹⁴ Deutsche Telekom, 2009. *Konzern-Zwischenbericht 1. Januar bis 30. Juni 2009*; http://www.download-telekom.de/dt/StaticPage/72/03/78/090806_dtag_h1_2009.pdf_720378.pdf; p. 18

¹¹⁵ Deutsche Telekom, 2009. *The financial year 2008*;

http://www.annualreport2008.telekom.de/gb08/backstage_04/documentpool/en/en.pdf; p. 71

¹¹⁶ Hutchison Whampoa, 2003: <http://www.hutchison-whampoa.com/eng/about/overview.htm>

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ Mobil, 2009. *Svenska Mobiloperatörernas 2008*;

http://www.mobil.se/ArticlePages/200902/12/20090212094308_MOB627/20090212094308_MOB627.dbp.asp

¹²⁰ Vodafone News Release: *Vodafone announces results for the year ended 31 March 2009*;

http://www.vodafone.com/etc/medialib/preliminary_results.Par.1085.File.dat/prelim_2009_final.pdf; p. 35

¹²¹ Ibid.

¹²² Ibid.

¹²³ Ibid.

ANNEX 2: STANDARD QUESTIONNAIRE

Questionnaire [Mobile network operator name]

Respondent's name:

Position:

Phone:

Fax:

Email:

1. Sales Figures

Please provide figures for the [country name: Finnish/ German/ Dutch/ Swedish] market

1. How many mobile phones did you sell to consumers during 2008?

Please specify the number of mobile phones that were sold

- a) individually
 - b) as part of a subscription package
 - c) as part of a subscription prolongation
 - d) on which your company brand logo has been engraved
2. What percentage of customers that renewed their subscription during 2008, received a new phone with their renewed subscription?
3. Please enclose a sales breakdown to the proportion of individual brands for your mobile phones sold.
4. Is it also part of [company name]'s mobile phone marketing strategy to offer new customers free additional electronics like netbooks, notebooks or TVs?

If yes, what kind of electronics and how many of these products were provided to customers in 2008?

2. Mobile phone product information

Please focus your answer on the [country name] market as much as possible

5. Which criteria do you take into account when selecting the mobile phones you will sell to consumers? Do you pursue any policy that sets social and environmental conditions of the production process as selection criterion?
6. Does your company offer mobile phones marketed as 'green' and/or 'fair' at the moment?

If yes: Please provide us with information about what models and the numbers sold in 2008.

7. How do you perceive consumers' interest for environmental and social issues related to the products you sell? (existent/non-existent, increasing/decreasing, etc) Please also add information about what kind of questions you receive from consumers regarding these issues.
8. What kind of consequences does this perception have for your strategies?

3. Recycling & reuse

Please answer this question for the [country name] market if possible

9. Does [company name] offer consumers the opportunity to return old electronic appliances?
10. How big is the proportion of mobiles that have been collected according to the total number of mobiles sold in 2008?
11. Which percentage of the products collected are being
 - a) sent to recycling, please write where they are sent.
 - b) subject to reuse, please specify who sells them on and where.
12. Do you have any future strategies to set incentives for the increased return of old appliances?
13. Do you have any future strategies to set incentives for a longer consumer utilisation period of consumer electronics devices?

4. Supply chain responsibility

MakeITfair has published several reports about social and environmental problems related to electronics production and waste (see further at <http://makeitfair.org/the-facts/reports>).

14. How do you assess your reach of influence on the social and environmental performance along the value chain of the mobile phone manufacturers whose products you sell? Has your range and your level of influence changed over the past years, and if so, how?
15. Has your company tried to influence mobile phone companies to work more on environmental and social issues along their supply chains?

If yes: please specify what type of initiatives and activities your company has employed
16. Do your agreements with suppliers include any reference to social and environmental conditions in the production process?

If yes, please elaborate on the monitoring and verification instruments used.
17. Do you engrave your own brand logo on (some) mobile phones you sell? If so, are requirements stricter when you engrave your own brand logo on mobile phones?
18. Do you communicate with manufacturers about environmental design criteria for the products you sell (for instance: higher energy efficiency and longer user time for mobile phones)?

5. Further points you would like to raise in this context?

19. If there are any further points you would like to raise in the context of this research, you are invited to do so.
20. Please enclose policy information and other relevant documents if needed.

ANNEX 3: COMPARISON SUPPLY CHAIN POLICIES

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
Supply chain policy	yes	yes	yes	no	yes	yes	yes	yes	unknown	under development
Policy document	Corporate Social Responsibility Policy	Code of Conduct	Code of Conduct/ Supplier Conduct Principles	-	Social Charter	Code of Ethical Purchasing	Supplier Code of Conduct	Ethische Beschaffungsrichtlinie	-	?
Binding (i.e. part of supplier contract?)	yes	yes	yes	-	yes	yes	no	yes	-	?
Reference to international standards, treaties etc.	ILO conventions, UN Human Right Charter	no	ILO, Declaration of Human Rights	-	ILO, OECD, Global Compact	ILO, Declaration of Human Rights, UN Convention on the Rights of the Child	ILO, UN Human Right Charter	ILO, UN Universal Declaration of Human Rights, UN Conventions on the Rights of the Child	-	?
Reference to forced labour	yes	no	yes	-	yes	yes	yes	yes	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
specified?	no	no	"All labour shall be voluntary and workers shall be free to leave upon reasonable notice. Employees shall not be required to lodge deposits of money or identity paper with their employer."	-	no	"Forced, bonded or compulsory labour is not used and employees are free to leave their employment after reasonable notice. Employees are not required to lodge deposits of money or identity papers with their employer"	no	no	-	?
Reference to child labour	yes	no	yes	-	yes	yes	yes	yes	-	?
specified?	no	no	minimum age according to national laws, no hazardous work.	-	minimum age according to national laws	min. age according to national laws, and no hazardous work under 18.	no	minimum age according to national laws	-	?
Reference to discrimination	yes	yes	yes	-	yes	yes	yes	yes	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
specified?	no	according national law	"free from any discrimination based on race or disability and free from bullying, harassment or similar."	-	"in favour of the promotion of equal opportunities and diversity of all employees, taking due account of cultural and legal particularities"	"Forms of discrimination may include race, colour, sex, sexual orientation, religion, political opinion, nationality, social origin, social status, indigenous status, disability, age and union membership"	no	"should be no discrimination on employment, payment, retraining, promotion, quitting and retirement on race, social stratum, national origin, religion, age, invalidity, gender, family status, sexual orientation, trade union- or political membership"	-	?
Reference to freedom of association ?	yes	yes	yes	-	yes	yes	yes	yes	-	?
specified?	no	according national law	according to national law	-	according to national laws and existing agreements	according to national law	no	no	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
Reference to right to collective bargaining?	yes	yes	yes	-	yes	no	yes	yes	-	?
specified?	no	according national law	according to national law	-	according to national laws and existing agreements. "Deutsche Telekom also declares itself in favour of cooperating with legitimate democratic employee representations in an open and trusting manner based on a constructive social dialog with the aim of achieving a fair balance of interests"	no	no	no	-	?
Reference to overtime?	yes	no	yes	-	yes	yes	yes	yes	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
specified?	no, only "agreements on working time"	no	no limit, only "shall not be excessive"	-	according national law	according to national law and no excessive hours	according to national laws	"according to national law and national standards at current industries"	-	?
Reference to wages?	no	no	no	-	yes	yes	yes	yes	-	?
specified?	no	no	no	-	according to national law	according to national law and "fair and reasonable" pay	according to national laws	"according to national or local legal standards"	-	?
Reference to health and safety?	yes	yes	yes	-	yes	yes	yes	yes	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN/ E-PLUS	TELEFONICA/O2	ELISA	DNA
specified?	according national law	according national law	according international accepted standards and applicable laws	-	"compliance at least with the standards applicable in each country at sites all over the world should be ensured and the further development thereof should be supported to improve the working environment"	according to national and international law and standards + requirements to accommodation and training	no	"health and safety trainings, clean toilettes, clean drinking water and sanitary facilities for storage of foodstuffs"	-	?
Reference to security of employment?	no	no	no	-	no	no	no	no	-	?
specified?	no	no	no	-	no	no	no	no	-	?
Monitoring and Verification:										
Self Assessment Questionnaire	yes	no	yes	-	yes	yes	no	yes	-	?
Site assessments	yes	no	yes	-	yes	yes	planned	yes	-	under development



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