

FAIR PHONES: IT'S YOUR CALL

Why Finnish mobile operators should be responsible for supply chains

September 2009



TITLE: Fair Phones: It's Your Call – Why Finnish mobile operators should be responsible for supply chains

AUTHOR: Päivi Pöyhönen (ex. Chs. 3, 4, 6, 7 shared with Fair Trade Center, Germanwatch and SOMO)

PUBLISHED BY: FinnWatch

COVER ILLUSTRATION: JUSTAR.nl

LAYOUT: JUSTAR.nl and Petri Clusius/Amfibi Ky

This report is published as part of the makeITfair campaign, a Europe-wide project on consumer electronics. MakeITfair aims to inform young consumers about human rights, as well as social and environmental issues along the supply chain. It also addresses consumer electronics companies that can contribute to change.



This document is licensed under the Creative Commons Attribution-NonCommercial-Share Alike 3.0 Unported License. To view a copy of this license visit: <http://creativecommons.org/licenses/by-nc-sa/3.0/>



FUNDING:

This document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of FinnWatch and can under no circumstances be regarded as reflecting the position of the European Union.

CONTACT DETAILS:

FinnWatch

Research partner of makeITfair

Tel: +358 (0)9 2280 8349

info2@finnwatch.org

www.finnwatch.org



MakeITfair is a Europe-wide project on consumer electronics, aiming to inform young consumers about human rights, as well as social and environmental issues along the supply chain. The project is co-ordinated by the Dutch organisation SOMO. Project partners are IRENE in the Netherlands, SwedWatch, Fair Trade Center, Church of Sweden 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 SACOM from China. Website: www.makeitfair.org.



FINNWATCH

FinnWatch observes and researches Finnish companies operating in developing countries, focussing on human and labour rights, the environment and social development. The FinnWatch network consists of eight organisations: Service Centre for Development Cooperation (Kepa), Trade Union Solidarity Centre of Finland, Central Organisation of Finnish Trade Unions, The Consumers, Friends of the Earth Finland, The Finnish Confederation of Salaried Employees, Finnish Association for Nature Conservation (FANC) and FinnChurchAid. Website: www.finnwatch.org.



The Finnish Association for Nature Conservation (FANC) is the largest non-governmental organization for environmental protection and nature conservation in Finland. Its objectives include the promotion of sustainable production and consumption patterns and the protection of biodiversity. FANC is the formal representative of FinnWatch, and supports coverage of environmental themes in its work. Website: www.sll.fi.



The Centre for Research on Multinational Corporations (SOMO) is a non-profit Dutch research and advisory bureau. SOMO investigates the policies of multinational enterprises and the internationalisation of business worldwide. Focus is placed on research into labour conditions in the global South and cooperation with local organisations and trade unions. Website: www.somo.nl.

TABLE OF CONTENTS

Summary	5
1. Introduction	7
2. Methodology	8
3. Mobile Network Operators – a global market analysis	9
4. Corporate Social Responsibility (CSR) issues in the mobile phone industry	12
5. Finnish mobile network operators and supply chain responsibility	15
6. Comparison of mobile network operators in four European countries	19
7. Conclusions and recommendations	24
<i>Annex 1: Mobile network operators in this study</i>	<i>26</i>
<i>Annex 2: Comparison supply chain policies</i>	<i>28</i>
<i>Annex 3: Company questionnaire</i>	<i>30</i>
<i>Annex 4: Sources of Table 1</i>	<i>31</i>

FOREWORD

This report is probably the first ever study of social and environmental supply chain responsibility of three Finnish and twelve other European mobile phone network operators. It is published as 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. Only recently has this branch of industry 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 for discussing various issues of globalisation with young consumers.

The 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 conducted with electronic brand companies to encourage them to take responsibility for working conditions and environmental issues throughout their entire supply chain. In this study makeITfair decided to focus on mobile network operators – important buyers and retailers of mobile phones – and shed light on their buying practices and supplier standards.

In the first year, makeITfair research reports pictured the conditions under which the raw materials for the manufacture of 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.

MakeITfair is funded by the European Union (EU) and led by a consortium of non-governmental organisations (NGOs) from Europe including SOMO, Germanwatch, Verbraucher Initiative, SwedWatch, Church of Sweden, Fair Trade Center, FinnWatch/Finnish Association for Nature Conservation and Karat. 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.

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 per cent.

A growing proportion of consumer electronic products such as mobile phones is manufactured in developing countries. 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: TeliaSonera, Elisa and DNA. It also compares them with the major operators in Germany (T-Mobile of Deutsche Telekom, Vodafone, E-Plus of KPN, O₂ of Telefónica), the Netherlands (KPN, T-Mobile of Deutsche Telekom, Vodafone, Tele2) and Sweden (TeliaSonera, Tele2, Telenor, Tre). Five of these groups belong to the global top ten: Vodafone, Telefónica, Telenor, TeliaSonera and T-Mobile.

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 (Elisa, the Dutch branch of Tele2, the German branch of Vodafone) 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 Dutch KPN. Due to a lack of information, it is not possible to assess the procurement volume of mobile phones. However, an indication is offered by the Finnish Communications Regulatory Authority: almost 30 per cent 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 Sweden 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).

RECYCLING AND RE-USE OF MOBILE PHONES

All the European 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. DNA stands out as a positive example: the company says that it sells the best of used appliances to consumers.

When asked about initiatives to stimulate environmental design of mobile phones with the manufacturers of mobile phones, eight out of the ten (group level) 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.

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.

SUPPLY CHAIN RESPONSIBILITY

In terms of supply chain responsibility, seven out of the ten (group level) mobile network operators studied have some sort of supply chain policy in place. This includes TeliaSonera. DNA is currently developing one. Only five of these ten telecom groups have systems in place to monitor the compliance with their policies, using supplier self-assessment questionnaires and site audits (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 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 and standards differs. Unfortunately TeliaSonera decided not to show their new supplier requirements to makeITfair, making it impossible to assess their quality. Only Vodafone, T-Mobile (Deutsche Telekom) 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 supplier site assessments.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 amounts of site assessments reported by them are small in comparison to Telenor and other companies in the electronics sector.

CONCLUSIONS AND RECOMMENDATIONS

Although all European mobile network operators except Tele2 Netherlands have 'hand-in' programmes 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. 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. Making SIM-only contracts more attractive to consumers than subscriptions 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, operators advertise tie-in contracts with a new mobile phone with most visibility.

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.

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 of room for improvement throughout the whole mobile phone supply chain and product life-cycle. 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.

3 Vodafone website, *Supply chains: 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

1. INTRODUCTION

Over the past decade, the market for mobile phones has increased rapidly. In 2008 alone, nearly 1.2 billion handsets were sold worldwide.⁵ 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, SOMO and SwedWatch released reports about the working conditions in seven mobile phone factories in China and the Philippines.⁶ 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 chain⁷, 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.⁸

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 technology that allow people to communicate with their mobile phones in the first place; without them 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 phone market as well as a responsibility to address the social and environmental problems in their supply chains.

This current report focuses on the three largest mobile network operators in Finland (TeliaSonera, Elisa and DNA), and compares their supplier policies, marketing strategies and recycling programmes between the practices of the largest mobile network operators in Germany, the Netherlands and Sweden. 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 an individual report has been produced that includes case studies of the largest national operators.

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

6 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*

7 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*

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

2. METHODOLOGY

This research examines the efforts made among ten leading mobile network operators in Finland, Germany, the Netherlands and Sweden 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 (Telefónica 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. This report presents the case studies collected in Finland.⁹ For each report, a comparison is made between the mobile network operators in the different countries.

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 3). Specific questions were added for certain companies. All in all, fifteen questionnaires (out of which three in Finland) were sent out to the national branches of mobile network operators 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.

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

3. 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 are 4.1 billion mobile phone subscribers worldwide.¹⁰ This equates to an average global penetration rate of 61 per cent (i.e. on average, about 61 per cent of the world population owns a registered mobile phone – 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.¹¹ 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. Today, the number of mobile phone subscriptions is nearly four times higher than fixed telephone line subscriptions. Only 19 per cent of the world population holds a fixed telephone line, and the increase over the past ten years has been marginal.¹²

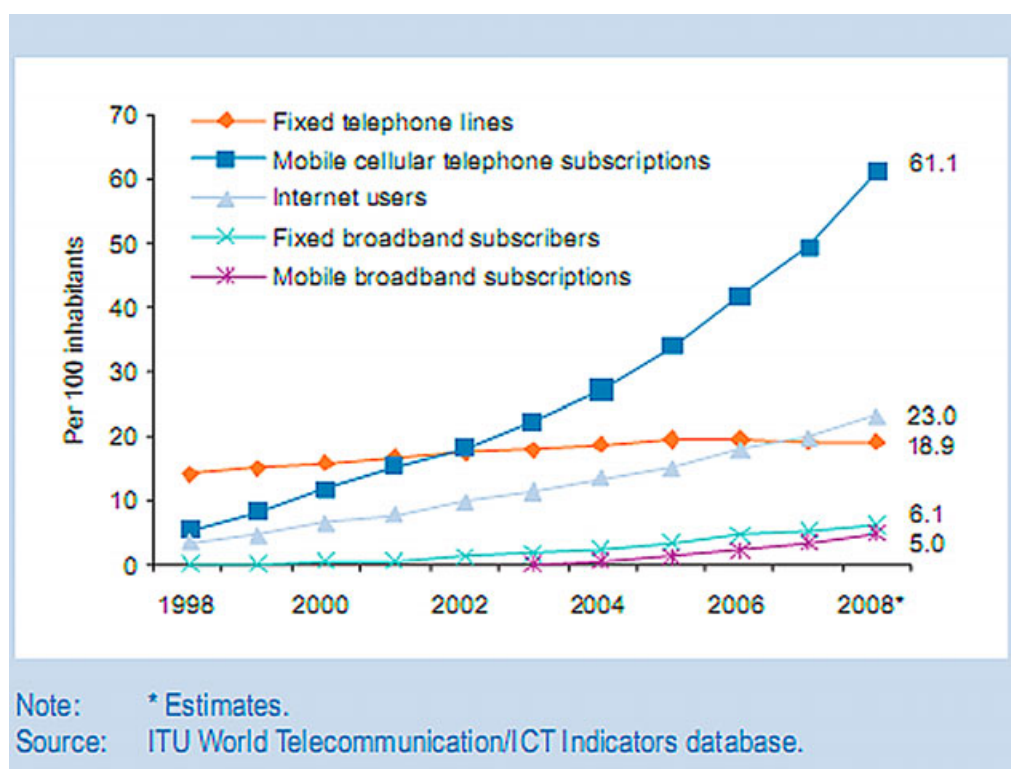


Figure 1: Global ICT developments 1998–2008¹³

Nevertheless, figures like the global penetration rate of 61 per cent might be somewhat misleading. On closer examination, there is a huge gap between developed and developing countries. While in developed countries the penetration rate was about 97 per cent in 2007, the penetration rate in developing countries was 45 per cent (see Figure 2). The penetration rate in Africa was only 28 per cent. Due to the (over)-saturation of subscriptions in developed countries – e.g. the 2008 penetration rates of the countries examined in this study are 129 per cent

10 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

11 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

12 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. 3–4

13 Ibid.

for Finland, 130 per cent for Germany, 121 per cent for the Netherlands and 119 per cent for Sweden¹⁴ – the growth rates of the mobile penetration in developing countries is considerably higher. Africa holds the top position with a growth rate of 32 per cent in 2007, which is not surprising as the continent currently has the world’s lowest penetration rate.¹⁵

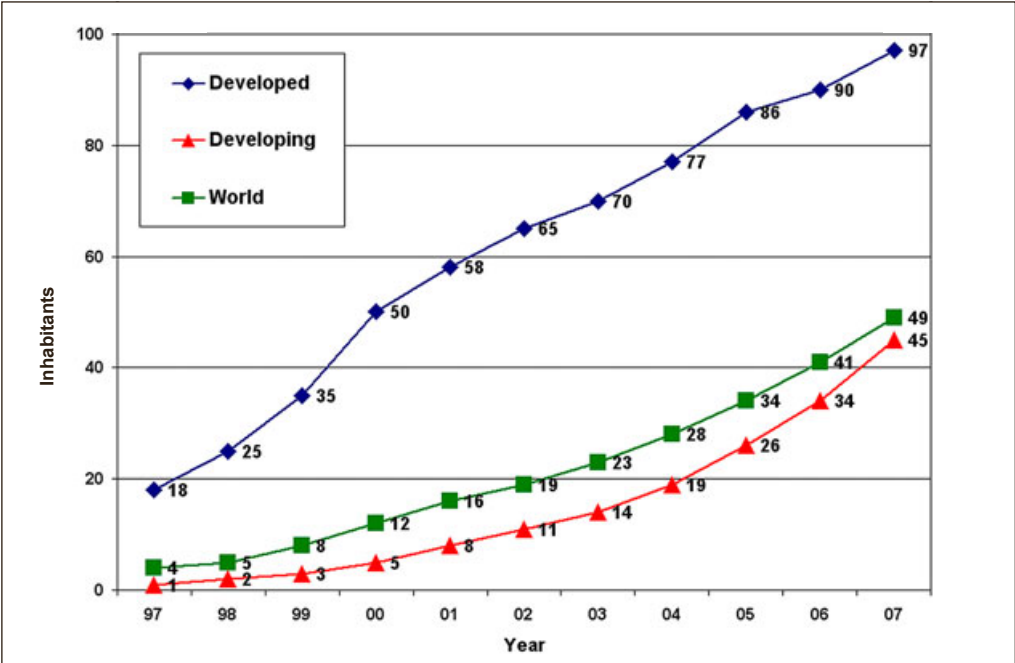


Figure 2: Mobile phone subscribers per 100 inhabitants 1997–2007¹⁶

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) cover a market share of about 46 per cent.¹⁷ Two out of the ten market leaders are Chinese, six out of them are European. Apart from China Unicom, each of the ten biggest mobile network operators are internationally active, not restricting their operations to one country only.

This study focuses on the major mobile network operators in Finland, Germany, the Netherlands and Sweden (see Table 1 and Annex 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 telecom groups that are included in this study are KPN,

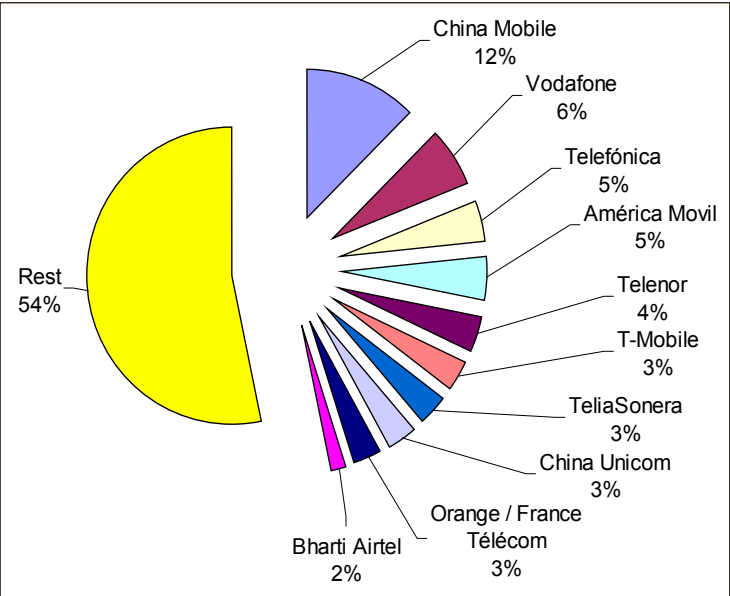


Figure 3: Largest mobile network operators in the world¹⁸

14 International Telecommunication Union, 2009. *World Telecommunication/ICT Indicators Database (2009): Mobile cellular subscriptions*; http://www.itu.int/ITU-D/ict/Reporting/ShowReportFrame.aspxReportName=WTI/CellularSubscribersPublic&RP_intYear=2008&RP_intLanguageID=1

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. 3

16 International Telecommunication Union, http://en.wikipedia.org/wiki/Digital_divide

17 Calculation is based on annual reports of companies, amount of 4,000,394,600 total mobile subscribers for 2008 given by ITU and http://en.wikipedia.org/wiki/List_of_mobile_network_operators

18 Ibid.

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 the four countries.

Table 1: **Markets and customers for operators in this study**¹⁹

Mobile Network Operator (Home Office)	Main markets (countries printed in <i>italics</i> have been studied in the report)	Subscribers in millions (globally/in respective countries studied) by end 2008
DNA (Finland)	<i>Finland</i>	Finland: 1.66
Elisa (Finland)	<i>Finland, Estonia</i>	Globally: 2.88 Finland: 2.54
KPN (Netherlands)	Belgium, <i>Germany, Netherlands</i> , France, Spain	Globally: 31.1 Germany: 17.78 Netherlands: 8.4
Tele2 (Sweden)	Austria, Croatia, Estonia, France, <i>Germany</i> , Latvia, Lithuania, <i>Netherlands</i> , Norway, Russia, <i>Sweden</i>	Globally: 19.40 Netherlands: 0.46 Sweden: 3.36
Telefónica (Spain)	Argentina, Brazil, Chile, Colombia, Czech Republic, Ecuador, El Salvador, <i>Germany</i> , 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, <i>Sweden</i> , Thailand, Ukraine	Globally: 164.0 Sweden: 1.9
TeliaSonera (Sweden)	Azerbaijan, Cambodia, Denmark, Estonia, <i>Finland</i> , Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Nepal, Norway, <i>Sweden</i> , Spain, Tajikistan, Uzbekistan	Globally: 134.8 Finland: 2.68 Sweden: 5.33
T-Mobile (Germany)	Albania, Austria, Bulgaria, Croatia, Czech Republic, <i>Germany</i> , Greece, Hungary, Macedonia, Montenegro, <i>Netherlands</i> , Romania, Slovakia, UK, US, Poland	Globally: 128.34 Germany: 39.1 Netherlands: 5.3
Tre/3 (Hutchison Whampoa -company in Hong Kong)	Australia, Austria, Denmark, Hong Kong and Macau, Ireland, Israel, Italy, <i>Sweden</i> , UK	Globally: 25.3 Sweden (together with Denmark): 1.231
Vodafone (UK)	Albania, Australia, Czech Republic, Egypt, Fiji, <i>Germany</i> , Ghana, Greece, Hungary, India, Ireland, Italy, Kenya, Malta, <i>Netherlands</i> , 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 telecommunication 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.²⁰ 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.²¹

¹⁹ See Annex 4 for the sources of the figures in Table 1.

²⁰ 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.

²¹ Second Republic, 2009. *Recognizing Shift in Consumer Behavior, Mobile Operators Pushing Netbook Bundles*; <http://www.secondrepublic.in/StoryDescription.aspx?mainid=1&storyid=300>

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

In 2008, 1,18 billion mobile phones were sold worldwide.²² The economic crisis has caused a slow-down in sales, but market analysts predict that sales will pick up already by 2010.²³

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 at 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.

PRODUCTION CHARACTERISED BY LOW WAGES AND ANTI-UNION TACTICS

Many consumers believe that it is the actual brand name companies that manufactures the phones bearing their logo, but this is not necessarily true. In 2007, 30 per cent of all mobile phones were designed or produced by so-called contract manufacturers, unknown to most consumers, like Flextronics, Foxconn, and BenQ.²⁴ Besides these contract manufacturers, a wide range of component producers exist that make parts for the final product.

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 phones (or their parts) in China and the Philippines in 2008 and 2009.²⁵ 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 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 has also a history of widespread anti-union tactics, which leads to a very low unionisation percentage and hardly any collective bargaining agreements. For example, less than 10 per cent of the Philippines' electronics firms are thought to have unions.

The largest mobile phone brands²⁶ have adopted codes of conduct stating that human and labour rights will be guaranteed for all workers producing for them. However, the situation at the factories looked at in makeITfair reports shows that this is not the case. The industry is trying to monitor random samples of the suppliers that lie closest to them, but much of the supply chain remains uncontrolled. The most severe problems are found further down the supply chain.

RAW-MATERIALS MINED IN POOR AND DANGEROUS CONDITIONS

A mobile phone may require up to 30 metals to function. The electronics industry is a significant consumer of many metals. 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. 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 mining of minerals for the electronics industry has contributed to the ongoing conflict in the Democratic Republic of Congo; militias control the trade routes of minerals and use the revenues to buy arms.

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

23 <http://www.eetimes.eu/uk/217600424>

24 Suppli 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

25 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*

26 The five largest brands – Nokia, Samsung, Motorola, LG and Sony Ericsson – held more than 80 % of the mobile phone market in 2008.

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.²⁷

The world's 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.²⁸

In 2007 makeITfair tracked the supply chains of some of these metals from mines to mobile phones and other electronic products.²⁹ Mining companies and processors are part of mobile phone companies' supply chain and the electronics industry therefore has an obligation and an opportunity to influence the mining sector.³⁰ 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, the electronics 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.

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.³¹ 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 three billion mobile phone users in the world today. 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 per cent of all consumers recycle their used phones.³²

EU legislation requires that the cost of properly disposing of electronic products must be paid by the pro-

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

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

29 FinnWatch, 2007. *Connecting Components, Dividing Communities*; SOMO 2007. *Capacitating Electronics*; SwedWatch 2007. *Powering the Mobile World*

30 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

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

32 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>

ducers, and that they must phase out some of the most hazardous substances.³³ This legislation, 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. 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.

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.³⁴ Parts of this hidden flow are exported for reuse, recycling or disposal in Asia and Africa, often illegally. 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.³⁵

MakeITfair claims that the lifecycle of mobile phones is far from sustainable at present, especially when effects in developing nations are taken into account. 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.

THE GLOBAL E-SUSTAINABILITY INITIATIVE (GESI) AND THE ELECTRONIC INDUSTRY CITIZENSHIP COALITION (EICC)³⁶

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, Deutsche Telekom (T-Mobile) 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-TASC, 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 the number of their suppliers already threshold standard of a code; the EICC Code does not include the full right to 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.

33 The WEEE and RoHS Directives

34 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)

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

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

5. FINNISH MOBILE NETWORK OPERATORS AND SUPPLY CHAIN RESPONSIBILITY

Mobile phone subscriptions continued to grow in 2008 at an annual rate of 12 per cent, with the number of subscriptions in Finland at year end totalling more than 6.8 million (the population of Finland is 5.3 million³⁷). This subscription figure includes post-paid subscriptions invoiced afterwards and prepaid subscriptions from households and companies. Prepaid subscriptions represented slightly over 10 per cent of all mobile subscriptions. Roughly 98 per cent of Finns aged 15–79 years claimed to be users of mobile phones.³⁸ Finland has the lowest priced mobile phone calls among the OECD countries.³⁹

TeliaSonera Finland Oyj, Elisa Oyj and DNA Oyj are the three largest mobile network operators in Finland. Out of these, Elisa refrained from answering the questionnaire sent by makeITfair, and therefore information on its corporate social responsibility programme is limited to what is available on its website. TeliaSonera's market share (in number of subscriptions) at the end of 2008 stood at 38 per cent, Elisa's at 37 per cent and DNA's at 23 per cent. The combined market share of independent service operators remained at around 2 per cent.⁴⁰

TeliaSonera is the leading supplier in the Finnish telecom market and provides services in the Nordic and Baltic countries, the emerging markets of Eurasia, including Russia and Turkey, and in Spain.⁴¹ In Finland, TeliaSonera's mobile phone services are offered under the brands Sonera and TeleFinland.⁴² The group's net income in 2008 rose 5.6 percent to SEK 21.4 billion (2 billion euros), a new record for TeliaSonera.

Elisa is a leading regional communications service provider with operations in the Nordic countries, the Baltics and Russia. The company's main market is Finland. Revenue in 2008 was 1.49 billion euros.⁴³ Elisa's global alliance partners are Vodafone and Telenor. Mobile phone services are provided under Elisa and Saunalahti brands.⁴⁴

DNA is a telecom group offering voice call, data, mobile phone and digital television services in Finland. DNA launched its mobile phone network operations in Finland in 2001, and its turnover in 2008 was 647 million euros (20 per cent growth from the previous year) and its profit was 69 million euros.⁴⁵

Table 2: Mobile phone subscriptions in Finland

Company	Number of subscriptions	Market share (2008)
TeliaSonera	2,676,000 ¹	38%
Elisa	2,542,000 ²	37%
DNA	1,663,000 ³	23%
Others	~ 150,000	2%

1 <http://www.teliaSonera.com/annualreport/2008/en/FinancialStatements/Tenyear-SummaryOperationalData.html>
2 http://www.elisa.fi/ir/docimages/attachment/Elisa_vuosikertomus_2008_suomi.pdf p. 14
3 <http://www.dna.fi/en/dnagroup/press/press-releases/Sivut/DNAGroupFinancialStatements2008.aspx>

With regard to the marketing of mobile phones, it is common practice for Finnish mobile operators to offer a mobile phone for free, or for a nominal price, with a new post-paid subscription (so called tie-in subscriptions). Pre-paid subscriptions do not come with free phones. When a subscription expires after one or two years, operators offer subscribers either a new phone or a 'reduced' subscription fee without a phone, which is referred to as a SIM-only subscription to prolong the contract. Of course, subscribers actually pay off the cost of their mobile

37 Finland Promotion Board, 2009. *this is FINLAND*; <http://finland.fi/Public/default.aspx?contentid=160032&nodeid=41803&culture=en-US>

38 Finnish Communications Regulatory Authority. *Communications Markets in Finland 2008 – Market Review*. p. 8

39 http://www.investinfinland.fi/news/2009/en_GB/Cheap_calls/

40 Finnish Communications Regulatory Authority. *Communications Markets in Finland 2008 – Market Review*. p. 10

41 TeliaSonera Annual Report 2008; <http://www.teliaSonera.com/annualreport/2008/en/Introduction/ThisIsTeliaSonera.html>

42 http://www.teliaSonera.com/about_teliaSonera/markets_and_brands/finland

43 <http://www.elisa.com/english/index.cfm?t=6&o=6700.00>

44 Elisa Annual Report 2008, p. 1

45 <http://www.dna.fi/en/dnagroup/Sivut/Default.aspx>

phone through their monthly subscription costs. At the time of writing, the cheapest deal to hire purchase a mobile phone is 2 euros per month for two years, plus the cost of calls.

A new act on package deals (2 April 2009) allows a telecom company to conclude a maximum of a two-year subscription contract with the customer. The number of tie-in subscriptions sold in Finland during the second half of 2008 totalled almost 290,000, accounting for almost 30 per cent of all mobile subscriptions sold.⁴⁶ This could mean that Finnish mobile network operators have sold more than a half million mobile phones in 2008. According to a Finnish Communications Regulatory Authority survey, 22 per cent of mobile phone users have a fixed-term contract, generally for two years (i.e. tie-in subscriptions).⁴⁷

SALES FIGURES AND PRODUCT INFORMATION

None of the Finnish mobile network operators disclose sales figures for the number of units of mobile phones sold. This lack of transparency appears to be common practice among mobile network operators in Europe, since only two of the fifteen companies that returned the questionnaire, German O₂ and Dutch KPN, publish these figures.

TeliaSonera says⁴⁸ that they sell mobile phones from several big brands such as Nokia, Sony Ericsson, Samsung, and Apple, but will not say which of them is the most popular brand. TeliaSonera introduced the Apple iPhone in 2008, giving the company a boost in the Nordic and Baltic region. The company is the sole distributor of the model in Finland. According to their website, data usage among Apple iPhone customers is significantly higher than among users of other handsets. DNA sells Nokia, Samsung and Sony Ericsson branded phones.⁴⁹ Elisa's website advertises Vodafone units in addition to these brands.

In the procurement of mobile phones, TeliaSonera takes social and environmental criteria into consideration as part of the request for quotation (RFQ) criteria and in the contractual phase. RFQ is a standard business process designed to involve suppliers in a bidding process. DNA says that when deciding which mobile phones to offer consumers, sustainable development is one criterion, but is not more specific. DNA is aware of increasing consumer interest in social, ethical and environmental issues related to the products they sell. TeliaSonera believes that consumer interest is increasing, but adds that they have not seen increasing interest regarding these matters towards the products they sell. On the other hand, TeliaSonera has seen a clear growth in interest in these issues among their corporate customers.

DNA sells one mobile phone model marketed as 'green', namely the Nokia 3110 Evolve. According to Nokia, the exterior cover of this phone is made of 50 per cent renewable raw materials and has 15 to 20 per cent lower than average energy consumption during its operational life than comparable products.⁵⁰ TeliaSonera does not sell phones marketed as 'green' in Finland, but plans to do so in Sweden. In their own words, TeliaSonera and DNA regularly discuss and review environmental design issues with electronics manufacturers.

RECYCLING AND RE-USE OF MOBILE PHONES

TeliaSonera indicated in its response that consumers can hand back their old electronic products to the company's shops. This is also the case in other Nordic and Baltic countries (in Eurasia, TeliaSonera does not sell mobile phones, only subscriptions i.e. SIM cards). According to TeliaSonera all the electronic products collected are sent for recycling to Kuusakoski (Finnish waste management company). TeliaSonera has re-used phones among their own personnel. In 2008 TeliaSonera promoted recycling of old phones by offering a gift voucher worth 20–40 euros to those who bring their old phone for recycling and buy a new 3G phone. In Sweden, TeliaSonera has promoted the 'Mobilkomposten' ("mobile phone compost") concept together with the Plan Sweden children's development organisation and Nokia.

On its website, DNA emphasizes the durability, life cycle and recovery of materials throughout the supply chain. The company says that materials are recycled and waste is sorted at their sites and retail outlets. Consumers can hand back old mobile phones at DNA shops. According to DNA, more than 90 per cent of electronic appli-

46 Finnish Communications Regulatory Authority. *Communications Markets in Finland 2008 – Market Review*. p. 10

47 Viestintävirasto; Suomen Kyselytutkimus Oy. *Telepalveluiden käyttötutkimus 2008*

48 TeliaSonera's reply to the makeITfair questionnaire, 25 June 2009

49 DNA's reply to the makeITfair questionnaire, 28 July 2009

50 <http://www.nokia.com/environment/we-create/devices-and-accessories>

ances collected are sent for recycling and less than 10 per cent of them are re-used. DNA says that it sells the best of used appliances (i.e. the 10 per cent) to consumers at low prices, but it remains unclear in which shops they can be bought.

Neither TeliaSonera nor DNA provides figures on recycling rates and the amount of old appliances collected.

SUPPLY CHAIN RESPONSIBILITY

According to **TeliaSonera**, it requires high corporate responsibility standards from its suppliers. In 2008 TeliaSonera launched group-wide supply chain requirements for environmental, social and ethical issues (including human rights), when selecting and evaluating suppliers and sub-contractors. These requirements are based on the ten UN Global Compact principles, TeliaSonera's CSR policy and its Code of Ethics. The requirements are also the result of demands from their customers, TeliaSonera says. The requirements were introduced in the group sourcing unit in the spring of 2008.^{51 52}

In spite of highlighting the importance of the new supplier requirements, TeliaSonera declined to send a copy to makeITfair for review or to give information on their content, explaining: "They are just recently being implemented so we do not want to answer your more specific questions yet". It is thus impossible to assess the quality of these standards and how far they cover labour rights and other conditions. TeliaSonera, however, says that these new supplier requirements are binding.

The TeliaSonera's CSR policy mentioned above refers to the UN Universal Declaration on Human Rights and the core ILO conventions. It declares that TeliaSonera encourages their suppliers to respect these standards. TeliaSonera's Code of Ethics includes chapters such as 'Doing the right thing', 'Being a good citizen' and 'Avoiding conflict of interest', etc. However, the only sentence in the code that appears to refer to international labour rights is that which forbids discrimination. TeliaSonera supports the UN Global Compact also through their membership of the European Telecommunications Network Operators' Association (ETNO).⁵³

TeliaSonera is currently in the first phase of monitoring its new supplier standards. According to TeliaSonera, these standards are currently reviewed through a self-assessment questionnaire and in some cases with additional site visits (among other criteria for sourcing). But the company does not give the number of self-assessments and audits or how many, if any, mobile phone companies participated. TeliaSonera, however, points out that it has long experience of supplier monitoring: in Sweden TeliaSonera has been screening its suppliers for environmental performance for over ten years. For example, TeliaSonera has used a list of prohibited substances to make sure that the products they buy do not include harmful substances. Use of environmental criteria has now been extended to the group level, the company says.

TeliaSonera invited FinnWatch to give a presentation in May 2009 for their buyers on CSR issues in the mobile phone industry and makeITfair research results. Some 25–30 employees participated in Finland, Sweden and Denmark through a videoconference. This shows a growing interest in the social and environmental issues in sourcing products such as mobile phones.

According to **DNA's** annual report, its corporate responsibility is divided into three sectors: financial, environmental and social. In the same report, DNA explains that environmental responsibility means emphasising the durability, life cycle and recovery of materials throughout the supply chain. DNA's social responsibility comprises customer service, relationships with partners and support for non-profit projects. The principles of corporate responsibility produce a set of shared policy guidelines and rules, DNA says. According to its website, the company monitors responsibility with the help of environmental indicators and partner audits.⁵⁴

In its reply, DNA did not answer the question about supplier code of conduct and how it is monitored or did it provide us with documents we had requested, such as its CSR policy. DNA did however reply to makeITfair's question on ethical criteria applied to mobile phone suppliers as follows: "No specific criteria for mobile phone suppliers are set, but we purchase only from main brands, so we can expect these issues to be ok." Although DNA mentions supplier audits on its website, DNA explained to makeITfair that they had just started a CSR

51 http://www.teliaasonera.com/about_teliaasonera/corporate_responsibility/crreport2008/fair-business/fact-files.html

52 http://www.teliaasonera.com/about_teliaasonera/corporate_responsibility/crreport2008/fair-business/index.html

53 TeliaSonera's reply to the questionnaire, X June 2009

54 DNA Annual Report 2008, p. 22–23

project and will audit their partners, and if needed also suppliers, later within the scope of this project. It seems that DNA has not yet set specific criteria on labour rights etc. for their suppliers and that some CSR issues have been reviewed only in the contractual phase.

After conversations by telephone and e-mail, and after hearing FinnWatch clarify the specifics and purpose of this study, **Elisa** decided not to participate, and has thus not returned the questionnaire. Only three out of fifteen European mobile network operators (or their national branches) that we approached refrained from answering the questionnaire, Elisa being one of them.

On its website Elisa divides its corporate responsibility into financial, environmental and social responsibility. Elisa says it promotes continuous dialogue and long-term relationships with equipment suppliers, customers, employees and other stakeholders. However, Elisa refers only to research projects and partners such as Tekes (National Technology Agency of Finland) and to its personnel policy. Elisa points out that it pays a substantial amount of tax that is spent promoting people's well-being, amounting to 250 million euros annually.⁵⁵ There is no online information available on possible supplier standards and monitoring.

None of the Finnish mobile network operators are a member of GeSI (see Box 2). Two out of the three Finnish operators, TeliaSonera and Elisa, are members of ETNO, but only TeliaSonera is a signatory of ETNO's Sustainability Charter, including a provision on ethical procurement (see Ch. 6). According to DNA it is an active participant in the Green ICT working group set up by the Finnish Federation for Communications and Teleinformatics (FiCom), promoting the environmental impact assessment according to the Global Reporting Initiative indicators. TeliaSonera however, said in its reply that it also belongs to the Green ICT network of FiCom, but did not know this is regarded as a CSR network.

PERCEIVED INFLUENCE ON MOBILE PHONE BRAND COMPANIES

Both TeliaSonera and DNA say generally they source mobile phones directly from brand companies, such as Nokia. As stated above, the Finnish Communications Regulatory Authority publishes the number of tie-in subscriptions (i.e. subscription packages with phones) sold in Finland. Based on that information, it can be estimated that Finnish mobile network operators have sold over 0.5 million mobile phones in 2008. That is a considerable amount, taking into account that sales of mobile phones in Finland totalled almost 2 million units in 2008.⁵⁶

As to ways of assessing the companies' influence on the ethical and environmental performance of the mobile phone manufacturers whose products they sell, TeliaSonera finds their role on a global level unfortunately quite limited. However, they say they want these issues to be included when discussing contracts with suppliers. DNA did not answer this question.

As TeliaSonera has the only initiative aiming to influence mobile phone companies to improve their social and environmental performance along their supply chains, the company has attached documents to their contracts. TeliaSonera adds though that it is impossible to measure the level of influence, since their manufacturer partners have so many customers. DNA says that the company has encouraged mobile phone companies to bring more environmental products to the market.

When looking at the start of the mobile phone supply chain; the extraction of raw materials, TeliaSonera acknowledges that there are several different metals in electronic products, but requires suppliers to conform only with local legislation and its prohibited substances lists. TeliaSonera feels that since there are several layers involved in the whole mobile phone supply chain, they cannot look at the whole supply chain in detail. TeliaSonera however, says that they are improving requirements set for their suppliers, but does not indicate whether this means including the extraction of raw materials. DNA is aware of metals used in electronic products, as well as working conditions in mines and factories along the supply chain as far as their vendors report on these issues, but does not specify their sphere of influence.

55 <http://www.elisa.com/english/index.cfm>

56 Kodintekniikka-alan tiedotusfoorumi KOTEK; <http://www.kotek.fi/tilastot/InEnglish011208.pdf>

6. COMPARISON OF MOBILE NETWORK OPERATORS IN FOUR EUROPEAN 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 3 for an example of this questionnaire). The mobile network operators chosen represent the market leaders in Finland, Germany, the Netherlands and Sweden. Some of these operators have branches in more than one of these countries. Table 3 provides an overview of the operators that were approached for this study in the four European countries in which they operate. The national network operators and branches of international network operators that returned the questionnaire are printed in italics. Tele2 operates also in Germany but was not approached by Germanwatch due to its small market share in Germany.

Table 3: Mobile network operators in four European countries examined in the study⁵⁷

Mobile Network Operator (Home Office)	Markets in four European countries	Subscribers in millions by end 2008
DNA (Finland)	<i>Finland</i>	Finland: 1.66
Elisa (Finland)	Finland	Finland: 2.54
KPN (Netherlands)	<i>Germany, Netherlands</i>	Germany: 17.78 Netherlands: 8.4
Tele2 (Sweden)	Netherlands, <i>Sweden</i>	Netherlands: 0.46 Sweden: 3.36
Telefónica/O₂ (Spain)	<i>Germany</i>	Germany: 14.93
Telenor (Norway)	<i>Sweden</i>	Sweden: 1.9
TeliaSonera (Sweden)	<i>Finland, Sweden</i>	Finland: 2.68 Sweden: 5.33
T-Mobile (Germany)	<i>Germany, Netherlands</i>	Germany: 39.1 Netherlands: 5.3
Tre/3 (Hutchison Whampoa -Hong Kong)	<i>Sweden</i>	Sweden (together with Denmark): 1.231
Vodafone (UK)	Germany, <i>Netherlands</i>	Germany: 36.17 Netherlands: 4.54

The table shows that ten mobile network operator groups were included in this study. Treating national branches of international operators as separate units, results in a total of 15 companies spread over Finland, Germany, the Netherlands and Sweden. 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, in parts of this comparative analysis, the necessary information is lacking.⁵⁸

⁵⁷ For sources of this table, see Annex 4

⁵⁸ 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>

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 Dutch 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 the lack of sales information on 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 per cent 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.⁵⁹ Since the mobile network operators choose to link mobile phone companies and consumers, by 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 Tele2 Sweden. This company provides a sales distribution of 60 per cent to Sony Ericsson, 25 per cent to Nokia and the remaining 15 per cent to other brands. Although information on 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 components made without 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 only awarded around 5 out of a possible 10 points to existing mobile phones. 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.⁶⁰ 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 and other materials used inside the phone.

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. Tele2 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; but it remains unclear why the company does not consider such a step 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 manufacturers to produce genuine 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 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 (KPN Germany) actually specifies the average number of queries it receives regarding these issues: an average number of ten queries per shop per year, mostly concerning SAR⁶¹ 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

59 See Table 1

60 Greenpeace, 2008. *Green Electronics... The search continues*, p. 9, 20

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

interest stemming from corporate customers (i.e. the business sector and public procurement). A third group of companies acknowledged increasing interest from customers. Companies that belong to this group are DNA, T-Mobile Germany, Vodafone Netherlands, Tele2 Sweden and O₂, although the latter specified that the increasing interest was with specific regard to the recycling of mobile phones.

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 have any places to hand in used mobile phones. When asked about mobile phone collection rates, the companies either did not answer the question or reported disappointingly low rates: T-Mobile Germany reported a 1 per cent collection rate of sales; O₂ 0.41 per cent; KPN responded that collection rates are “less than several percentages of sales”; E-Plus reported a total of 15,000 mobile phones collected; and Telenor said it had recycled 115,000 phones in 2008.

The very low collection rate of old 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.⁶² KPN, Vodafone Netherlands and both the Swedish and the Finnish offices of TeliaSonera state that they will launch campaigns to increase collection rates and thereby increase recycling and re-use in the near future.

Apart from these re-use and recycling programmes, another way companies can offer consumers with an incentive to use their mobile phones for longer 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 the environmental design of mobile phones with the manufacturers, 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 – indicated that they discuss environmental design with manufacturers during procurement. TeliaSonera further indicated it is planning to intensify its efforts in this regard. Telenor added that it has little influence over the production and design of mobile phones.

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 feature in 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 2 for a comparative assessment table of the supply chain policies). Tre responded 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 features 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 number of labour and human rights issues they address. Of the labour issues mentioned, security of employ-

62 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>

ment and wages feature the least; 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 supplier policies. For TeliaSonera this cannot be assessed since it is not willing to share its specific requirements. None of the mobile network operators refer 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 tasks 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.⁶³

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 use 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 reported that it had conducted 18 site assessments and made a total of 166 recommendations to suppliers for improvement.⁶⁴ Deutsche Telekom stated in its Corporate Responsibility Report 2009 that it held three site audits in China, Mexico and Taiwan in 2008.⁶⁵ 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.”⁶⁶ 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 provided a table with the key findings of the audits and the improvements achieved.⁶⁷ Telenor visited suppliers 382 times without warning during the period May–September 2008.⁶⁸ 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 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

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

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

65 Deutsche Telekom, 2009. *The 2009 Corporate Responsibility Report*

66 Deutsche Telekom website, *Global sourcing and supplier management*; <http://www.deutschetelekom.com/dtag/cms/content/dt/en/474196> (10 September 2009)

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

68 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>

mobile network operators. Furthermore, the amount of site assessments reported by Vodafone and Deutsche Telekom is 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.⁶⁹

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 Charter⁷⁰, which commits its signatories to 'continuously improve' and 'share best practices' with regard to procurement, observing human rights and labour conditions and implementing environmentally friendly product requirements. Signatories of the charter include five operators from this study, namely Deutsche Telekom, KPN, Telefonica (O₂), Telenor and TeliaSonera. It seems that the wording of the charter leaves a lot of room for interpretation.

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

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

7. CONCLUSIONS AND RECOMMENDATIONS

Collectively, the European 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.⁷¹ The three Finnish operators, from a group level perspective, had 140 million subscribers, TeliaSonera being by far the biggest. They are active in the global market (TeliaSonera operates in countries such as Cambodia and Nepal) or are planning to do so in the near future. As mobile phones and mobile networks are mutually dependent, and mobile network operators are important retailers of mobile phones, the mobile network operators 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 advertise package deals for customers with a new mobile phone when they sign up for a new subscription. Evidently, this type of marketing has an enormous impact on the amount of mobile phones that are circulating in the market, as well as on the mobile phone production processes, and the mounting volumes of e-waste.

Case studies of twelve market-leading mobile network operators in Finland, Germany, the Netherlands and Sweden, 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 makes suggestions for mobile network operators to improve the social and environmental conditions in the mobile phone supply chain.

The research indicated that most European mobile network operators are not transparent about their mobile phone sales, their major suppliers and their efforts to improve supply chain conditions. This is also the case in Finland. Of all the European 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'. The limited availability of 'green' mobile phones and the non-existence of 'fair' phones 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 are concerned about the social and environmental conditions under which their mobiles are produced, and are willing to pay 10 per cent more for 'fair' electronics.⁷²

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

72 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> (14 January 2008)

All the European mobile network operators included in this study have a re-use and recycling programme in place, with the exception of Tele2 Netherlands. Although 'hand in' programmes are in place, collection and recycling figures for mobile phones are still low. There is a lot of room for improvement here. None of the operators in Finland, unlike some of their European competitors, say that they export collected phones to developing countries. DNA stands out as a positive example: the company claims that it sells functioning quality used mobile phones to consumers in its shops. However, DNA does not provide us with sales figures nor can it point to any specific shops where used phones are on sale.

In terms of supply chain responsibility, seven out of the ten mobile network operators in the study (from a group level perspective) have some sort of supply chain policy in place. They include TeliaSonera. DNA is developing one. Only five of these seven operators have systems in place to monitor compliance with their policies, using supplier self-assessment questionnaires and site assessments, including TeliaSonera. However, TeliaSonera did not share its newly developed supplier standards with makeITfair, making it impossible to assess its quality and coverage of human rights. None of the European operators studied use independent, third party site assessments to monitor their suppliers. Most of the operators only stand at the beginning of developing criteria for and monitoring of their supplier policies. Vodafone and Deutsche Telekom/T-Mobile show the best performance in this regard.

MakeITfair considers independent, third party supplier audits an important instrument for supply chain monitoring. 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.⁷³ 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. 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. None of the three Finnish operators are members of GeSI, unlike their big European competitors. TeliaSonera however, is a signatory to the ETNO's Sustainability Charter.

To conclude, this research has shown that European mobile network operators have developed several initiatives to improve the social and environmental conditions in their supply chains. Some have progressed much further along this path than others. Overall, there is still plenty of 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 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 sensitise both consumers and suppliers to social and environmental issues. MakeITfair urges mobile network operators to pursue improvements in the mobile phone supply chain, and hopes this report will provide operators with a way forward and some pointers on how to do so.

ANNEX 1: MOBILE NETWORK OPERATORS EXAMINED IN THE STUDY

TELEFÓNICA

The Spanish Telefónica does business in 21 different countries; many of them are Latin American. In Europe it operates mostly under the O₂ brand. 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 per cent (all market shares refer to the number of mobile subscribers) and ranked fourth of the biggest operators.⁷⁴ Its worldwide standing is better; ranked third with a worldwide market share of about 5 per cent.⁷⁵

TELENOR

This Norwegian company has 143 million subscribers, representing a global market share of about 4 per cent. Worldwide it is the fifth largest provider.⁷⁶ 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 per cent.⁷⁷

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 per cent, it is ranked seventh in the worldwide comparison of mobile network operators.⁷⁸ The company's relevance to this report lies in its activities in Finland and Sweden, where it is market leader with market shares of about 38 and 40 per cent, respectively.⁷⁹

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 per cent.⁸⁰ 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 per cent.⁸¹ It is also the second largest mobile network operator in the Netherlands with a market share of about 27 per cent.⁸²

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 subscribers⁸³ by the end of 2008, suggesting a worldwide market share of approximately 6 per cent.⁸⁴ 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 33 per cent.⁸⁵ It is also the third largest operator in the Netherlands with 21 per cent market share.⁸⁶

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

75 Figure 3

76 Ibid.

77 1,9 million subscribers in Sweden, Telenor 2009; <http://www.telenor.com/en/investor-relations/company-facts/business-description/telenor-sweden>

78 Figure 3.

79 TeliaSonera, 2009. Annual Report 2008; http://www.teliasonera.com/investor_relations/reports/annual_report/2008/in_english.pdf; p. 17

80 Figure 3

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

82 5,3 million T-Mobile subscribers in the Netherlands; Deutsche Telekom, 2009. The financial year 2008; http://www.annualreport2008.telekom.de/gb08/backstage_04/documentpool/en/en.pdf; p. 71

83 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

84 Figure 3

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

86 4.252 million Vodafone subscribers in the Netherlands; 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

KPN

KPN is a Dutch company and market leader in the Netherlands with a market share of about 45 per cent.⁸⁷ 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 third biggest network operator in Germany, the E-Plus Group, with a market share of 17 per cent⁸⁸.

TELE2

Tele2 is a Swedish company and does not fully own the network it uses, and as such is a mobile virtual network operator. Furthermore, it operates in Austria, Croatia, Estonia, Germany, Latvia, Lithuania, the Netherlands, Norway, Russia and Sweden, where it is ranked second in terms of market share (30 per cent)⁸⁹. Apart from its large market share in Sweden, in the Netherlands it is ranked fourth (with a market share of about 2 per cent),⁹⁰ and is therefore included within this study.

TRE (OR '3')

Tre is a brand name for mobile network operators from Hong Kong. It is owned by the Hong Kong company Hutchison Whampoa.⁹¹ 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 and a market share of about 23 per cent. DNA launched its mobile phone network operations in Finland in 2001.⁹²

ELISA

Elisa is a Finnish telecommunication company, which was formerly called 'HPY' until 2000. According to its own 2008 annual report, Elisa holds a 50 per cent market share in '3G users' in Finland, which does not only include mobile customers, but also broadband internet and fixed telephony users.⁹³

87 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

88 Bundesnetzagentur (2009): Abbildung: Entwicklung Marktanteile Netzbetreiber; <http://www.bundesnetzagentur.de/media/archive/16876.pdf>

89 3,35 million Tele2 subscribers in Sweden; cp. Tele2 (2008): Full year report; <http://hugin.info/133413/R/1288826/291256.pdf>; p. 15

90 0,458 million Tele2 subscribers in the Netherlands; cp. Tele2 (2008): Full year report; <http://hugin.info/133413/R/1288826/291256.pdf>; p. 15

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

92 <http://www.dna.fi/en/dnagroup/Sivut/Default.aspx>

93 Elisa's Annual Report 2008; p. 1

ANNEX 2: 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	-	?
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	-	?
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	-	?

ASSESSMENT CRITERIA	TELIASONERA	TELE 2	TELENOR	TRE	T-MOBILE	VODAFONE	KPN / E-PLUS	TELEFONICA/O2	ELISA	DNA
specified?	no	according national law	according to national law	-	according to national laws and existing agreements	according to national law	no	no	-	?
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 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	-	?
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	-	?
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 toilets, 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 (answer in our questionnaire)	-	?
Site assessments	yes	no	yes	-	yes	yes	planned	yes	-	under development

ANNEX 3: COMPANY QUESTIONNAIRE

INFORMATION ABOUT YOUR COMPANY/ PRODUCTS

1. How many mobile phone subscriptions does your company have a) globally (if relevant) b) in Finland?
2. How many mobile phones did your company sell in Finland in 2008 a) separately and b) as part of a subscription package (tie-in sale)?
3. How many laptops/computers did your company sell in Finland in 2008 a) separately and b) as part of a subscription package (tie-in sale)?
4. What mobile phone brands do you sell in Finland and what are the three most popular brands?
5. Does your company offer a new mobile phone to consumers for free when their subscriptions are renewed or when a new phone model is issued?
6. Does your company sell mobile phones/computers marketed as green/fair products?
If yes: what models and how many did you sell in 2008?
If no: why not?
8. Do you take social, ethical and environmental criteria into consideration when deciding what mobile phones/computers you offer to consumers? How?
9. Is your company aware of the kinds of metals used in electronics products, as well as working conditions in mines and factories along the supply chain?

INFLUENCING MOBILE PHONE COMPANIES REGARDING CSR ISSUES IN THEIR SUPPLY CHAINS

MakeITfair has published several reports about labour/human rights and environmental problems related to the production of mobile phones, e-waste etc. (see <http://makeitfair.org/the-facts/reports>).

10. Does your company have ethical guidelines like a code of conduct and/or an environmental policy? Please send the latest versions.
11. Does your company set social, ethical and/or environmental conditions/requirements for your suppliers? If yes, please send a copy of the requirements and describe the supplier assessment system you have in place.
11. Do you purchase mobile phones directly from brand companies (such as Nokia, Samsung, Sony and Ericsson)? If not, who are your direct mobile phone suppliers?
12. Do you set social, ethical and/or environmental criteria for your mobile phone suppliers? Do your agreements with mobile phone producers require them to comply

with your ethical guidelines or international standards? If yes, please, describe further what kind of monitoring and verification you implement.

If not, why not?

13. How do you assess your influence on the social, ethical and/or environmental performance of the mobile phone manufacturers whose products you sell? Has the level of your influence changed over the past years, and if so, how?
14. Has your company tried to influence mobile phone companies to improve the social, ethical and/or environmental performance along their supply chains? If yes: please specify what type of initiatives and activities your company has employed.
15. Is your company a member of any CSR network or organisation such as the Finnish Business & Society FiBS, the Finnish Ethical Forum, UN Global Compact, or other? If yes, please specify.

REUSE & RECYCLING

16. Can consumers in Finland hand in old electronic products in your company's shops? Can they do so in other countries where your company operates?
17. How do you see your role in the ICT Producer Co-operative established by Elker Oy?
18. What percentage of your collected electronic products are being
a) sent for recycling? Please write where they are sent.
b) subject to reuse? Please specify who sells them on and where.
19. Does your company have (or plan to have) any incentives for consumers to use their mobile phones/computers for longer periods?
20. Does your company have (or plan to have) any incentives for consumers to increase the return rate of old appliances?
21. Do you discuss environmental design with electronics manufacturers of the products you sell (for instance: higher energy efficiency, longer product life)?
22. Please describe other activities your company is involved in related to re-use and recycling of used mobile phones/computers.

PERCEPTION OF CONSUMER INTEREST IN ETHICAL AND ENVIRONMENTAL ISSUES

23. How do you perceive consumers' interest in social, ethical and environmental issues related to the products you sell (existent/non-existent, increasing/decreasing, etc.)?

ANNEX 4: SOURCES OF TABLE 1 *(on page 11)*

Mobile network operator	Sources used
DNA	<ul style="list-style-type: none"> – DNA Group, 2009. DNA Group Financial Statement; http://www.dna.fi/en/dnagroup/press/pressreleases/Sivut/DNAGroupFinancialStatements2008.aspx – http://www.dna.fi/en
Elisa	<ul style="list-style-type: none"> – Elisa, 2009. Elisa 's financial statement 2008; http://www.elisa.com/english/docimages/attachment/090213FINANCIAL%20STATEMENTS%202008.pdf; p. 5 – Elisa (2008). Annual Report 2008; http://www.elisa.com/english/docimages/attachment/Elisa_vuosikertomus_2008_englanti.pdf; p. 14
KPN	<ul style="list-style-type: none"> – KPN, 2008. Back to Growth – Annual Report 2008; http://www.kpn.com/reporting08/report08/downloads/pdf/KPN_AnnualReport08.pdf; p. 146 – 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 – KPN (2008): KPN Profile; http://www.kpn.com/web/file?uuid=b6af77ba-e4e6-4a54-a734-57383d4b5551&owner=08dcb4d5-bffa-4aef-ba43-1bc972772aac; p. 2 – E-Plus – press release 27.01.2009: E-Plus Gruppe erzielt 2008 Rekordergebnis; http://www.eplus-gruppe.de/Presse/Presseinformationen/Presseinformationen.asp – KPN, 2009. Interim financial report Q2 2009 – Subscribers for June 2009 instead of end of 2008; http://www.kpn.com/web/file?uuid=3ae40687-9a11-4685-a2e2-ae3f25985c5b&owner=75704ec4-0ad4-489b-8f25-f30cdefe3be0
Tele2	<ul style="list-style-type: none"> – Tele2, 2009. Interim Report January – June; http://hugin.info/133413/R/1330141/314322.pdf; p. 6 ff. – Tele2, 2008. Full year report 2008; http://hugin.info/133413/R/1288826/291256.pdf; p. 15
Telefónica	<ul style="list-style-type: none"> – Telefónica, 2009. Telefónica Worldwide; http://www.telefonica.com/en/telefonica_worldwide/telefonica_worldwide.shtml – Telefónica, 2009. January – June Results; http://www.telefonica.com/en/shareholders_investors/pdf/rdos09t2-eng.pdf; p. 3 – Telefónica, 2009. Telefónica O Germany – First half operating review; http://www.o2.com/about/germany_operating_review.asp
Telenor	<ul style="list-style-type: none"> – Telenor Group, 2009. Business Description; http://www.telenor.com/en/investor-relations/company-facts/business-description/ – Telenor, 2009. Interim report January – December 2008; http://www.telenor.com/en/resources/images/2008-q4-telenor-report_tcm28-37362.pdf; p. 1 – Telenor, 2009. Telenor Sweden; http://www.telenor.com/en/investor-relations/company-facts/business-description/telenor-sweden
TeliaSonera	<ul style="list-style-type: none"> – 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. – TeliaSonera, 2009. TeliaSonera January-December 2008; http://www.teliasonera.com/press/pressreleases/item.page?prs.itemId=408567 – TeliaSonera, 2009. Annual Report 2008; http://www.teliasonera.com/annualreport/2008/en/CompanyDescription/MarketsandBrands.html
T-Mobile	<ul style="list-style-type: none"> – 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 – Deutsche Telekom, 2009. Deutsche Telekom übertrifft Finanzziele 2008; http://www.telekom.com/dtag/cms/content/dt/de/82408?archivArticleID=623924 – 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 – Deutsche Telekom, 2009. The financial year 2008; http://www.annualreport2008.telekom.de/gb08/backstage_04/documentpool/en/en.pdf; p. 71
Tre/3	<ul style="list-style-type: none"> – Hutchison Whampoa, 2003: http://www.hutchison-whampoa.com/eng/about/overview.htm – Mobil, 2009. Svenska Mobiloperatörernas 2008
Vodafone	<ul style="list-style-type: none"> – 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



for people everywhere