Stichting Onderzoek Multinationale Ondernemingen
Centre for Research on Multinational Corporations

Changing Industrial Relations in India's Mobile Phone Manufacturing Industry

Cividep

September 2010

Changing Industrial Relations in India's Mobile Phone Manufacturing Industry

Cividep

September 2010

Colophon

Changing Industrial Relations in India's Mobile Phone Manufacturing Industry
Author: Cividep
September 2010

Cividep-India
Workers' Rights and Corporate Accountability

Financed by:
This report is a publication of Cividep. SOMO financed this report and gave advise on the content of this report.

Publishes by:
SOMO
Stichting Onderzoek Multinationale Ondernemingen
Centre for Research on Multinational Corporations

Sarphatistraat 30
1018 GL Amsterdam
The Netherlands
Tel: + 31 (20) 6391291
Fax: + 31 (20) 6391321
E-mail: info@somo.nl
Website:www.somo.nl

Content

Abbreviations and acronyms

CAGR	Compound Annual Growth Rate
CDMA	Code Division Multiple Access handsets
CSR	Corporate Social Responsibility
EICC	Electronic Industry Citizenship Coalition
EMS	Electronics Manufacturing Services
ESI	Employees' State Insurance
FQA	Final Quality Audit
GDP	Gross Domestic Product
GeSI	Global e-Sustainability Initiative
GSM	Global System for Mobile handsets
ICA	Indian Cellular Association
IT	Information Technology
ITES	Information Technology Enabled Services
ITI	Industrial Training Institute
LEED	Leadership in Energy and Environmental Design
OME	Original Equipment Manufacturer
SEZ	Special Economic Zones
SIPCOT	State Industries Promotion Corporation of Tamil Nadu
TEMA	Telecom Equipment Manufacturers' Association
TRAI	Telecom Regulatory Authority of India

Introduction

There have been a few dramatic changes in the mobile manufacturing industry since our last report on the mobile phone sector in India in 2008.[1] These changes have been shaped in part by factors beyond the industry such as the global recession, and in part by driving forces within the industry itself and its response to pressure from various quarters.

One of the most remarkable developments in the industry has been the unionization of the world's top mobile manufacturer, Nokia. Nokia's workforce in South India formed a union as a result of a resoundingly successful strike in August 2009, followed by two more strikes in January and July 2010. An attempt to improve employment conditions in the leading company in the mobile phone market, both globally and nationally, has tremendous implications for industrial relations within the whole industry. This is especially important because the Indian electronics industry employs around 4.4 million people at present and this figure is expected to rise steeply to 16.1 million in 2014 and 27.8 million in 2020.[2] Of the total workforce in the electronics industry, the manufacturing segment accounts for the highest number of people. This report is an attempt, therefore, to understand the broader industrial context within which the strikes at Nokia took place and to grapple with its implications for workers in the rest of the industry in India.

The research is based upon interviews with managers of mobile manufacturing plants, workers and community-based organizations which have a stake in the industry either through relations with the companies or services provided to workers and their families. Essentially, the study indicates that decent employment is still an elusive concept as mobile manufacturing continues to expand in India with the active support of the central and state governmental bodies which are bending over backwards to draw and retain the industry within their jurisdiction. Precarious employment in the form of temporary, contract, probationary and apprentice jobs is the norm. This is extremely difficult to challenge. Yet, workers are vociferously protesting the intense working conditions prevalent in the industry and the great disparity that exists between promises made to new recruits and the shop-floor realities.

The key concerns now are;

- How workers' grievances can be redressed systematically through policy and practice by industry leaders
- How the nascent attempts of workers to unionize in one company can be expanded so that labour standards are enforced throughout the highly lucrative and rapidly expanding industry
- How can civil society ensure that workers' and community rights are at the core of central and state governments' development agendas?

These questions frame the two primary sections of this report. The first section describes the powerful engine of growth that the telecommunications sector in general represents in the Indian economy and describes the ambivalent impact of the global recession on the manufacturing of mobile phones. It also outlines the role of the government in the industry, with specific reference to special economic zones (SEZs) which is currently the model of economic development in vogue, despite its highly controversial nature within the country. The second section highlights workers' issues related to their

[1] See "Corporate Geography, Labour Conditions and Environmental Standards in the Mobile Phone Industry in India", September 2009 available on http://goodelectronics.org/news-en/conditions-and-standards-in-the-mobile-phone-manufacturing-industry-in-india

[2] Chowdhry, A. (2009) Report of Taskforce to suggest measures to stimulate the growth of IT, ITES, and Electronics Hardware manufacturing in India, 1 December, p. 41.

employment and living conditions in order to explore the potential of unionization of the mobile manufacturing workforce in India and beyond.

1. Mobile Phones – India's Growth Engines?

Telecommunications is considered the "key driver for development and growth"[3] in the Indian economy as it has grown in leaps and bounds as a significant component of foreign direct investment inflows. The telecommunications sector ranks third highest for the amount of FDI attracted, and the amount invested in the telecommunications sector broadly has been more than double each consecutive year. As indicated in Table 1, the percentage of total inflows in telecommunications between 2006 and 2009 was 9%, which was the same as the computer sector (including both hardware and software together) and was second only to the whole services sector.

Table 1: Top three Sectors attracting the highest FDI°

	Sector	2006-07*	2007-08*	2008-09*	2009-10**	Cumulative Inflows (April '00 to Sept. '09)	% age to total Inflows (In terms of rupees)
1	Services (financial & non-financial)	21,047 (4,664)	26,589 (6,615)	28,411 (6,116)	12,782 (2,627)	97,235 (21,876)	22 %
2	Computer software & hardware	11,786 (2,614)	5,623 (1,410)	7,329 (1,677)	2,107 (434)	41,603 (9,388)	9 %
3	Telecom (radio paging, cellular mobile, basic telephone services)	2,155 (478)	5,103 (1,261)	11,727 (2,558)	9,815 (2,010)	38,182 (8,386)	9 %

° Amount: Rupees in crores (US$ in million); * Financial year April to March; ** Financial year April – September, 2009
Source: http://www.dipp.nic.in/fdi_statistics/india_FDI_September2009.pdf

Of the various segments of electronics production, the communications and broadcasting segment has achieved the highest production figure for the year 2008-2009 estimated to be Rs. 26 crores in comparison to Rs. 25,990 crores in the consumer electronics segment; Rs. 13,490 in computers; Rs. 12,740 crores in Control, Instrumentation and Industrial equipment; Rs. 9,630 crores in electronic components sector; and Rs. 6,840 in strategic equipment.

The reasons for this are easy to understand. India now has the second largest mobile network in the world with a total of over 488 million wireless subscribers at the end of Oct 2009.[4] Based on the number of new monthly subscribers added, India's telecom market demonstrates the fastest growth rate in the world with more than 10 million new subscribers each month.[5] According to Telecom Regulatory Authority of India (TRAI), a record number of 16.67 million new mobile subscribers registered in the month of October 2009 alone.[6]

Global analyst firm Gartner expects the Indian telecom sector to continue its growth trajectory to surpass the 770-million mark from about 450 million currently and to generate revenues of over $30 billion by 2013. The manufacturing segment contributed nearly one-fourth of the total telecom equipment revenue at $5.04 billion recording a growth of 7% in the year 2007-2008.[7]

3 MIT Annual Report 2008-2009, p. 9
4 IBEF (2009) "Telecom operators register record subscribers in October 2009" 23 November.
5 http://www.knowindia.net/telecom.html
6 http://www.theindusview.com/vol4Issue9/index.html accessed 2 December, 2009
7 http://www.avistaadvisory.com/images/white-paper-3.pdf, p. 3

Although the Indian mobile industry is no longer in its former "hyper growth mode," senior analysts at Gartner foresee consistent double-digit growth rates for the next three years as mobile service operators focus on rural parts of the country.[8] According to the investment bank Rothschild, the telecom industry in India may be consolidated through mergers and acquisitions in the near future. It foresees an increase in inward investment as foreign companies seek to acquire minority stakes in Indian businesses, and the manufacturing industry is a prime candidate for this investment due to the high growth potential there.[9]

In fact, the attempt of Chinese 'grey market' mobile phone manufactures to carve a niche for themselves in the Indian market has pushed the China-India rivalry up a notch. India is the largest export market for this sector, which accounted for 20% of the global volume numbering 1.14 billion sets in 2009, and these 'bandit handset' (cheap imitations of popular brands) makers are looking for political legitimacy in India. The Shenzhen Mobile Communication Association aims to produce 10 million units in India so that the Indian government can find no reason to reject their bids in government tenders and infrastructure development projects. "We must be seen as producing Indian handsets, with Shenzhen manufacturing know-how," said Tang Ruijin, the Association's Executive President.[10]

The India Brand Equity Foundation (IBEF) estimates that mobile phone production will grow at a compound annual growth rate (CAGR) of 28.3% from 2006 to 2011, totaling 107 million handsets by 2010, with a growth of revenues at a CAGR of 26.6% during the same period, reaching US$ 13.6 billion.[11] Even within the Indian economy generally, the communications sector is the fastest growing sector. A study conducted by Nokia India revealed that the communication sector grew by nearly 26% during the period 2001 to 2008, and its share of the total GDP increased from 0.7% in the 1980s, 1% in the 1990s to 3.6% during 2001-08.[12] In 2007-08, the sector accounted for 5.7% of the GDP. Nokia estimates that the communication sector may be "a major driver" of the Indian economy in the next five years with a 15.4% of the GDP. [13]

Nokia SEZ – Setting the Trend

As discussed in an earlier report,[14] a number of multinational mobile manufacturers have established their plants in different parts of India since 2006. These include: Elcoteq in Bangalore's Electronics City; Samsung in Gurgaon, near Delhi; Alcatel's base station production plant in Rae Bareili; LG near Pune in Maharashtra; and Ericsson's mobile switching equipment plant in Jaipur. Furthermore, Xenitis in Kolkata plans to set up a mobile phone manufacturing plant near the city.[15]

However, the pivotal industrial cluster in the mobile manufacturing industry is the Special Economic Zone (SEZ) in Sriperumbudur near Chennai in south India. This 210-acre zone has been dubbed "ground zero of electronic manufacturing in India."[16] It houses three types of manufacturers: Original Equipment Manufacturers (OEMs) such as Nokia and Motorola; Electronics Manufacturing Services

---

8 The Economic Times (2009) "Telecom sector earnings may cross $300 bn by 2013," 19 June. http://www.ibef.org/artdisplay.aspx?cat_id=466&art_id=23157

9 Economic Times, 19 November 2009

10 Hille, K. (2010) "Bandit Handset makers seek legitimacy," Financial Times, 21 February, http://www.ftchinese.com/story/001031357/en

11 September, 2009 http://ibef.org/industry/telecommunications.aspx

12 See also: http://www.knowindia.net/telecom.html accessed 3 December 2009

13 Mookerji, N. (2009) "Nokia to make high-end phones at Chennai factory," DNA, August 20.

14 See "Corporate Geography, Labour Conditions and Environmental Standards in the Mobile Phone Industry in India", September 2009 available on http://goodelectronics.org/news-en/conditions-and-standards-in-the-mobile-phone-manufacturing-industry-in-india

15 http://www.knowindia.net/telecom.html accessed 3 December 2009.

16 Jayaram, A. (2006) "How Sriperumbudur is emerging as India's telecom manufacturing hub" The Business World, 28th August.

(EMSs) providers such as Flextronics and Foxconn; and component suppliers to both such as Salcomp, Aspocomp and Perlos.

At the heart of this SEZ is the Finnish mobile manufacturer Nokia's state-of-the-art mobile phone manufacturing plant which is the largest in the company's global network encompassing, besides India, Finland, China, Korea, Mexico, Brazil, Romania and Hungary. Nokia's factory in Sriperumbudur reportedly produces over 100 million handsets every year.[17] The GSM mobile phones made in Chennai are sold in over 50 countries including the Middle East, Southeast Asia Pacific, Australia and Africa even though the product dynamics vary according to the demands of each market.

Together with other companies in the SEZ, Nokia has established the Nokia Telecom SEZ Society[18] in order to provide infrastructure such as transport buses and canteens that serves all companies. There are also plans to build a crèche, dormitory, healthcare centre, and club to be built and operationalised in phases in the non-processing area of the SEZ with Nokia and the suppliers named as co-developers. Components for Nokia are supplied by other telecommunications equipment producers such as Aspocomp Group (HDI printed circuit boards), Perlos (handset mechanics/mouldings), Salcomp (chargers), Foxconn (mobile phones), Flextronics (mobile handsets, base stations and other electronic items), Sanmina-SCI (network components), Laird (antennas, battery packs and EMI shielding products), Jabil and Wintek.

Nokia continues to dominate the market with 54% of the total phones currently in use and a whopping 63% of the mobile consumers who buy GSM phone models buyers. LG is the leader in the CDMA market with 48% of the buyers and the 2nd most popular mobile phone manufacturer in India overall. Table 1 below shows the market shares of the leading handset brands in the Indian market.[19]

Table 2: India Urban Mobile Phone Users in Quarter ending April 2009

Brands	Current users*		
	GSM	CDMA	Total (GSM + CDMA)
LG	4.4%	47.6%	14.4%
Motorola	7.8%	5.4%	7.2%
Nokia	62.6%	24.3%	53.7%
Samsung	9.0%	11.2%	9.5%
Sony-Ericsson	8.9%		6.8%

* Total surveyed = 5,775

Signs of Slow-down

In general, commentaries about the impact of the global recession on India suggest that "India was less hurt than others," as the Reserve Bank of India Governor D. Subbarao asserted during a presentation on 'India and the Global Financial Crisis: Collateral Damage and Response' at the Indian Business School.[20] A few surveys indicate that although there has been a slump, the recovery has been equally remarkable. For example, the Markit Purchasing Managers' Index (PMI), an indicator of manufacturing activity in the country based on a survey of 500 companies, has registered an upsurge at 55.3 for July 2009 from a low of 44.37 in December 2008. The new orders index also rose to 59.75 in July 2009, its highest in nine months, from 58.56 in June 2009.

[17] Economic Times, 12 June, 2009
[18] Also referred to as the Nokia SEZ Park Society (see http://www.hindu.com/2007/07/21/stories/2007072157902000.htm)
[19] Source: http://www.pluggd.in/india-mobile-phone-market-research-nokia-dominates-gsm-market-lg-leads-cdma-297/ accessed 2 December, 2009
[20] http://www.stockwatch.in/indias-recovery-recession-fragile-economic-fundamental-strong-rbi-governor-24160#ixzz0YYLfvaPk accessed 2 December 2009.

A survey of manufacturing firms across 100 sectors conducted by the Confederation of Indian Industry (CII) revealed that India was gradually emerging from the economic slump in 2009. Whereas in the first quarter of 2009, only 32 percent of the firms surveyed had reported that they were witnessing signs of recovery, this figure mounted to over 48 percent of the firms which confirmed that business recovery was faster during the months of July to September 2009.[21]

While these studies may be seen as an attempt on the part of government and the private sector to boost India Inc's marketability and attraction to foreign investment, there are certainly sound reasons to believe that the telecommunications sector specifically has not been badly hit. For instance, the telecom industry is listed as one of the ten sectors of the economy to perform well despite the global recession since the mobile subscriber base has not yet reached saturation point in India, especially in the rural areas.[22] There are other signs too that India's mobile industry is flourishing in comparison to that elsewhere. For example, LG is looking at making India its global manufacturing hub for its mobile handsets, and will soon be exporting mobile phones to Europe and the Commonwealth Independent States (CIS) from India.[23]

Nevertheless, such positive and cheery prognosis of recessionary times cannot disguise the shifts taking place in mobile manufacturing in India. Regardless of whether these are wholly related to the global slump, manufacturing companies have been "in silent mode and refused to divulge specific details on the new manufacturing initiatives and their operations outlook.[24]
However, evidence shows that management practices have been influenced by the global recession. Skill assessment tools which have traditionally been used in the recruitment phase have now assumed a new role to provide companies with an 'objective' way of identifying staff for further training or for promotions, but also more recently, or downsizing their workforce. MeritTrac has noticed a sharp rise in enquiries since October 2008 and nearly 60% of the demand was from IT and ITeS companies.[25]
There are also hints of the recession's impact in India from changes in corporate location strategies. There are reports, for example, of Flextronics' plan to shift some of its components production from Chennai to Bangalore.[26] However, the company denies that it will close shop in Chennai. The company had announced that it would invest $200 million in phases at the special economic zone (SEZ) in Sriperumbudur for which the Tamil Nadu government had allotted 250 acres. In early 2009, Flextronics launched Flex Power, a power chargers manufacturing unit at the Chennai Industrial Park (SEZ). In addition to the Chennai factory, the company also operates a repair services unit in Bangalore and a Global Shared Services Centre (GSSC) in Chennai. The centre has three premises and has a headcount of over 1,200 regular employees doing high-end IT and finance work mainly.[27] Flextronics in the SEZ employs 1,600 people, and the regular employees account for approximately 40% of the site headcount.

Jabil Circuit shut down its plant in the Sriperumbudur SEZ in the first quarter of 2009 in response to the global economic recession and changes in its customers' demands. It was a key component supplier to Nokia of moulded products such as the outside cover of a cell, the internal cover, and covers of the mobiles fitted with cameras. It had announced its plans to restructure its global operations in January 2009 by cutting its manufacturing capacity and reducing its worldwide workforce from 85,000 to about 3,000. Its Chennai plant was one of ten sites affected by its restructuring plans.[28] Jabil had invested $100 million in the Chennai facility, where over 600 workers were

[21] 23 November 2009; http://headlinesindia.mapsofindia.com/business-news/indian-economy/manufacturing-sector-showing-signs-of-recovery-due-to-stimulus-cii-28996.html
[22] http://ezinearticles.com/?10-Indian-Industry-Sectors-to-Perform-Well-in-Current-Global-Recession&id=1916736
[23] http://www.grimsby.ac.uk/epc2009/documents/AEPCWeds/Raju.pdf
[24] G. Srikanth (2009) "Slowing Down" October 01 http://voicendata.ciol.com/content/service_provider/109100103.asp
[25] "Hiring tools used for firing," http://www.currentitmarket.net/2009/09/hiring-tools-used-for-firing.html 29 September, 2009
[26] Siliconindia news bureau "Flextronics may shift some operations from Chennai" Tuesday, 21 July 2009
[27] Ibid
[28] Press Release, "Jabil Announces Restructuring Plan," 28 January 2009 www.jabil.com

employed, in addition to its acquisition in 2007 of Celetronix located in the Madras Export Processing Zone, adding over 5,000 plus employees and 2.70 lakh sq ft of manufacturing space in three locations namely Mumbai, Chennai and Puducherry.[29] At present, it has only one manufacturing plant in India which is in Pune.

Even OEMs have felt the pinch globally. In early 2009, Motorola for example, announced 3,000 job cuts in its global mobile business division in order to reduce costs and expected to save about $1.2 billion in 2009.[30] Similarly, Nokia's global market fell two notches from 40% to 38% and the company's second quarter earnings in 2009 had fallen 66% due to the global recession. It had shipped 15% less handsets in the quarter than it had during the corresponding period the previous year.[31]

While mobile sales worldwide dipped 6.1% in June 2009, the Indian market showed resilience and remained 'flat'.[32] To understand the resilience of the mobile manufacturing sector in India in face of the global recession, one needs to pay closer attention to the type of product and the markets targeted. Connectivity remains a need in India and the versatility of a handset is widely recognized as an asset. The demand for mobile phones in India remains high and the penetration level is still quite low, especially beyond the metropolitan areas.

However, cost is a determining factor in the still untapped rural markets. Therefore, it is no surprise that the sale of low-end mobile models remain consistently high, whereas that of the mid-tier models has slowed down. Another factor that affected the financial performance of mobile manufacturers was the sharp decline in average selling price during the first half of the year. This affected the companies which focus on low-end and mid-tier models where margins are already narrow. Furthermore, the replacement market in India is not showing the same level of growth as it did earlier since the recession dampened replacement sales in both the emerging and mature markets. The distribution channel's response to the decrease in demand and financial pressure was to hold off new production orders while nearly 14 million units already in the marketing pipeline were sold to the final customers.

But also Ramping-up

Interestingly enough, India's mobile manufacturing sector remains optimistic and companies continue to strategize innovatively for the long haul beyond the present slump. The Indian Cellular Association (ICA) with a membership comprising the world's top cell phone makers is targeting a domestic production volume of 250 million mobile handsets by 2012. Several presentations have been made within the last year to the Department of Telecommunications by the ICA's manufacturing advisory committee about the Association's aim to generate an additional 1 lakh (100,000) jobs during 2009-14 in cell phone manufacturing, assembly, R&D and design.[33]

Nokia has been a leading player in this quest to ramp-up production in the mobile industry in India. During a visit to India, global Nokia's CEO Olli-Pekka Kallasvuo admitted the company's ambition to have the greatest possible share of the communications sector's contribution to India's GDP, which is expected to be the single largest component at 15.4% by 2014, according to a study conducted by Nokia.[34]

---

[29] "Jabil Circuit to move lock, stock and barrel to China from Chennai" 16 February 2009 http://www.globalsmtindia.in/index2.php?option=com_content&do_pdf=1&id=2608

[30] "Motorola announces further job cuts in mobile devices business" 16 January, 2009, http://www.emasiamag.com/article-4952-motorolaannouncesfurtherjobcutsinmobiledevicesbusiness

[31] Mookerji, N. (2009) "Nokia to make high-end phones at Chennai factory," DNA, August 20.

[32] Anonymous (2009) "Worldwide mobile phone sales declined; India remains flat" http://voicendata.ciol.com/content/news/109081801.asp August 18.

[33] Economic Times, 12 June, 2009

[34] "Nokia gets strong signals from Indian market," The Financial Express, August 20, 2009. http://www.ibef.org/artdisplay.aspx?cat_id=466&art_id=23700

One of Nokia's strategies in order to consolidate and expand its control of the Indian market is to increase the economic accessibility of a mobile phone in villages. Toward this end, Nokia launched a pilot micro-finance project in Andhra Pradesh and Karnataka by selling handsets on a weekly installment of Rs 100 over 25 weeks. The scheme received a tremendously positive response generating 27,000 applications from 2,500 villages. Nokia now plans to rollout the micro-finance scheme in 12 other states.[35] According to Nokia, India will remain the top growth market since 81% of the country's mobile users were in urban areas and were driving demand for high-end phones, while the rural market represented a huge expansion area. Therefore, another company strategy for growth has been to increase its stakes in other segments of the market by expanding its production from just low-end phones to the high-end mobile phone series.[36]
Nokia's ambition and drive to expand its grip over the Indian market have pushed its production rate, and by extension, have implications for workers and working conditions on the shop-floor. According to an unnamed company spokesperson, the production volume of the Chennai factory has seen an "unprecedented growth" within a three-year span and "fastest ever ramp-up" among Nokia's nine factories.[37] It is equally noteworthy that India is Nokia's second largest revenue contributor after China. Moreover, the Sriperumbudur plant has become the company's largest producer of mobile phones surpassing even the volume of Nokia's plant in China. Taken together; India's growing importance in the global landscape of mobile phone manufacturing, Nokia's world-wide dominance of the handset market, and the central place of the company's SEZ plant in Sriperumbudur within the Indian and the global industry makes industrial relations at the Nokia SEZ in Sriperumbudur of critical significance.

1.1 Government Policy

The Department of Information Technology within the Government of India constituted the Task Force in August 2009 to suggest measures to stimulate the growth and development of IT, ITES and Electronics Systems Design Manufacturing Industry in the country.[38] Some of the top priorities for the Task Force were to: (a) expand existing clusters such as Sriperumbudur and Noida, and create "islands of excellence" with an industrial ecosystem that includes all segments of the value chain in one place. For this purpose, the government was expected to "provide contiguous land and infrastructure to the industry" within these clusters; (b) rationalization of the tax structure to make it "stable" in order to attract long term investment from the private sector; and (c) flexible labour regulation especially in relation to over-time and contract work to correspond to fluctuating production cycles.[39]

The Nokia SEZ has been lauded for its "world-class manufacturing ecosystem" as proof of India's capability as a "low cost manufacturing country" without any mention of the fact that it is workers and communities which are bearing the brunt of the low-wage, high-intensity, precarious jobs that are created. Workers' role in subsidizing the industry's profits margins through their intense labour and low compensation is over-shadowed in the official narrative of industrial growth. Instead, the "success of Sriperumbudur" is attributed to an "enabling bureaucracy, which expedites the processes of land acquisition and other procedures" such as the single-window clearance scheme. If this is indeed the case, the state is jointly responsible for aiding the corporate sector to trample on basic human rights at work as it neglects due processes in place to protect workers' and communities' interests in the path toward industrialisation. Furthermore, the Task Force recommended the replication of the "success of Sriperumbudur" in other parts of India. It is therefore, all the more important to document

[35] Ibid.
[36] Mookerji, N. (2009) "Nokia to make high-end phones at Chennai factory," DNA, August 20
[37] Economic Times, 12 June, 2009
[38] Chowdhry, A. (2009) Report of Taskforce to suggest measures to stimulate the growth of IT, ITES, and Electronics Hardware manufacturing in India, 1 December.
[39] Ibid, p. 55

in detail and disseminate the under-side of this 'success' from the workers' perspective. On the other hand, the Task Force does acknowledge the need for a harmonization of national standards for energy efficiency of electronics products with international standards, and it called for new legislation on e-waste management and the minimization of hazardous materials in the production process.[40]

Echoing the Task Force report, the central government aims to make India "a hub for telecom manufacturing by facilitating more and more telecom specific SEZs." Its two other goals in telecom manufacturing is to quadruple production in 2010 and achieve exports of 10 billion during the 11th Five Year Plan.[41] In order to achieve these goals, the central government has set up two bodies: the Telecom Equipment and Services Export Promotion Council, and the Telecom Testing and Security Certification Centre (TETC). The government has taken many initiatives to facilitate the rapid growth of the Indian telecom industry, such as:

- 100 per cent foreign direct investment (FDI) is permitted through the automatic route in telecom equipment manufacturing.
- Foreign Direct Investment (FDI) ceiling in telecom services has been raised to 74 per cent.
- Introduction of a unified access licensing regime for telecom services on a pan-India basis.
- Introduction of mobile number portability in a phased manner, starting in the fourth quarter of 2008.
- The Department of Telecommunications (DoT) has stated that foreign telecom companies can bid for 3G spectrum without partnering with Indian companies. Only after winning a bid, would they need to apply for unified access service license (UASL) and partner with an Indian company in accordance with the FDI regulations.

The target for the 11th Plan period (2007-12) is 600 million phone connections with an investment of US$ 73 billion.[42]

Demands of the Corporate Sector

Banking on the image of IT as a modern, technologically superior and extremely lucrative industry, industrial associations such as Telecom Equipment Manufacturers' Association (TEMA) continue to lobby relentlessly for more concessions and special treatment of manufacturing activities in India. Industrialists have complained to sympathetic governmental officials about long procedural delays at immigration counters at the airport involved in their overseas travel, power shortages and interruptions in supply despite memoranda of understanding (MoU) with state governments that SEZs will get uninterrupted power supply.
A major problem that the electronics industry generally faces in India is the long clearance procedures at the airport for imported components, upon which the mobile manufacturing relies almost exclusively since components are not produced locally. For example, average clearing time at the Chennai airport, considered the best in the country, is one day, in comparison to the two hour clearance at Singapore airport. This delay caused by unnecessary procedures from the industrialists' perspective, increases production time. As Sachin Saxena, operations director of Nokia India has pointed out at a conference organised by TEMA: "We require only four hours to convert raw materials into finished goods but time taken in the whole procedure makes the whole process as long as two days."

Another problem Saxena pointed out was the role of unions and collective action in their business: "There is no one bothered [about an] airport strike. Our material keeps lying in the rain, and no one is bothered about it. If we put some extra people we get threat[s] from [the] union leader, "don't touch it,

[40] Ibid, p. 64.
[41] http://www.dot.gov.in/osp/Brochure/Brochure.htm accessed 3 December 2009.
[42] Source: http://ibef.org/industry/telecommunications.aspx

you will lose your life." Then tell me should I export?"[43]
In a related vein, he points out that the low cost of labour in India is inaccurately presented as an advantage of manufacturing in the country. In his words: "The expectation level of people has gone up. When we sit down and discuss wages at our SEZ in Sriperumbudur, where minimum wage is not more than Rs 4,000 a month, their temptation is that they can get as much as Rs 10,000 per month."[44]
While the industry complains endlessly about the poor public support system and the demands of workers and their organizations, industry representatives fail to acknowledge the tremendous subsidies they receive from the state - workforce recruitment and training, and a blind eye to labour legislation, for example - which go unaccounted in corporate finances.

There are many other explicit and implicit ways in which the government bankrolls the corporate sector. For instance, the State Industries Promotion Corporation (SIPCOT) of Tamil Nadu has taken upon itself the responsibility of providing hostels and even a crèche for migrant women workers.[45] But this clearly contradicts the much trumpeted CSR initiatives publicized by the employers which make it seem as if it is the employers who are providing these facilities for workers. In practice, as pointed out by one community activist, "the corporate employers seem to shed more and more of their responsibilities and expect the government to house, feed, bathe and deliver the workers to them! They even want the government to babysit the children of workers!" Nowhere is this more obvious than in the Special Economic Zones (SEZs).

SEZs – Workers and Communities Betrayed

The Special Economic Zones (SEZ) Act from 2005, which came into effect in 2006, offers a host of incentives and facilities to units in SEZs in order to promote additional economic activity, attract domestic and foreign investment, promote exports of goods and services, generate employment and develop infrastructure. These include: duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units, 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years, exemption from Central Sales Tax, exemption from Service Tax and single window clearance mechanism for establishment of units.[46]
In the case of the Nokia SEZ in Sriperumbudur, research based on the Right to Information (RTI) has shown that the alleged success of Nokia and other companies has been based on two forms of public costs. The first is the direct expenditure made by the Tamil Nadu government in terms of the land allotments, infrastructure development and reimbursement of Nokia's value-added tax (VAT) payments. The second is the loss of revenue that the state would have acquired if the normal taxes had been applied. Indeed, the Citizens' Research Collective on SEZ estimates that the Tamil Nadu government has paid Nokia is Rs. 645.4 crores.[47]

1.2 Companies' CSR Policies

India, as one of the low labour cost countries has been a popular destination for mobile phone manufacturing companies. In order to attract foreign direct investment the state and central government have offered companies umpteen tax benefits. However, questions that arise are what benefits do these companies provide to the local people? Do they assess their impact on the community and environment? How seriously do the companies implement Corporate Social

[43] Srivastava, P. (2008) "Nokia questions manufacturing sustainability in India," 24 March http://www.efytimes.com/e1/fullnews.asp?edid=25570.
[44] Ibid.
[45] Anand, N. (2009) "SIPCOT planning two more hostels for migrant workers," The Hindu, 9 October.
[46] http://india.gov.in/sectors/commerce/sezs.php
[47] Dutta, M. (2009) "Nokia SEZ: Public Price of Success," *Economic and Political Weekly*, 3 October, pp. 23-25.

Responsibility (CSR) policies, where they commit to local and international laws as well as social and environmental standards?
In the course of research for this report Cividep had contacted all major mobile phone manufacturing companies in India as well as their suppliers in 2009 to conduct interviews on the companies' corporate responsibility policies and performance. The companies that were contacted included: LG , Samsung, Nokia, Motorola, Sony Ericsson (all Original Equipment Manufactures), Laird, Foxconn, Flextronics (Electonics Manufacturing Service Suppliers) and component suppliers Perlos, Apsocom and Wintek. Out of these 11 companies only Foxconn and Flextronics were available for an interview. All other companies declined or did not even respond to the interview request. Motorola however, did provide substantial information from their website. CSR information from the other companies' websites was insufficient in order to be portrayed here.

Motorola[48]

The Motorola Manufacturing facility at Sriperumbudur, set up with an initial investment of Rs. 172.4 crores (US$ 43,1 million), supports an integrated telecom products portfolio. The facility is spread over 270,000 square feet and has a capacity for producing over 12 million mobile phones each year. Worldwide Motorola (NYSE: MOT) had sales of US $22 billion in 2009.

Motorola has a company code of conduct and a separate Supplier code of conduct which has been implemented since 2003. The specifications of the codes are consistent with the tenets of the International Labour Organization's core conventions and the United Nations Universal Declaration of Human Rights. These encompass:

- Comply with the law
- Reject corruption
- Do not engage in unfair business practices
- Do not discriminate
- Prohibit harsh or inhumane treatment
- Do not use forced labor or child labor
- Allow workers to choose to join an association or bargain collectively
- Avoid excessive overtime
- Pay workers wages and benefits that meet basic needs
- Operate a safe and healthy work environment
- Operate an environmental management system
- Disclose materials contained in the products they supply
- Adopt or establish a management system that supports this code

Additionally, Motorola requires that tier-one suppliers also have an environmental management system in accordance with ISO 14001 or an equivalent standard.

In 2008, Motorola made the following updates to strengthen the supplier code:

- Expanded freedom of association clause to include recognition of worker's rights to collective bargaining
- Added detail on forced labour, including explicitly forbidding holding worker passports
- Implemented new requirement to provide wages and benefits that meet basic needs
- Referenced ILO fundamental conventions and universal declaration of human rights

[48] Source of information accessed 06.07.2009:
http://responsibility.motorola.com/index.php/suppliers/scoc/
http://responsibility.motorola.com/index.php/suppliers/monitoring/
http://responsibility.motorola.com/index.php/suppliers/industrycollab/
http://mediacenter.motorola.com

- Set new 60-hour work week limit standard to address situation where more restrictive legal requirements do not exist
- Clarified that workers under age 18 should not perform hazardous work and should be restricted from night work if it interferes with educational needs
- Added requirement for suppliers to establish a management system that supports the content of this code

In 2009, Motorola monitored compliance with their code through an assessment and audit program, including 40 detailed on-site supplier audits. Motorola assesses potential and existing suppliers for conformance with the supplier code of conduct in two ways:

1. Through a self-assessment questionnaire, using the online tool, E-TASC, in which suppliers provide information on their environmental and labour policies and management systems. This information is used to determine the level of risk presented by suppliers, to identify areas for improvement and to target on-site audits;
2. Through on-site audits conducted by a third-party firm commissioned by Motorola.

The company has set up a system of monitoring and capacity-building of suppliers in order to improve labour and environmental conditions based on the recognition that a termination of contracts would have a detrimental effect on workers.

Through Motorola's supplier agreements, the Company requires its tier-one suppliers (suppliers from which it buys directly) to monitor the corporate responsibility performance of their suppliers. Motorola also requires the tier-one suppliers to provide a list of their suppliers (Motorola's tier-two suppliers) on request. Tier-two suppliers are not included in the regular audit schedule, although Motorola may take part in joint audits with its tier-one suppliers in response to specific reports of issues at their suppliers.

The company addresses e-waste through material selection process and a construction and operation waste management plan. Motorola participates in the Global e-Sustainability Initiative (GeSI) and co-leads the organization's supply chain working group which is developing tools to assess and improve supply chain corporate responsibility practices. The company has designed and implemented a program around the best practices identified by GeSI in collaboration with the Electronic Industry Citizenship Coalition (EICC). Through the GeSI/EICC extractives workgroup, Motorola launched a project in 2009 to improve visibility in the minerals supply chain, with particular focus on identifying sources of specific minerals and understanding how the minerals move through their lifecycle – from the mine to electronics manufacturing.

Flextronics[49]

Flextronics has established an Industrial Park in Chennai in the year 2006. The Chennai Industrial Park, located in Sunguvarchatram, manufactures Mobile Chargers, Mechanical Enclosures and printed circuit board (PCB) Assemblies for both domestic and overseas customers. According to the senior manager interviewed, given the current economic environment, the chances of another manufacturing plant in India are slim.

Flextronics Chennai Industrial Park is a notified SEZ Developer and as such, the company is entitled to benefits as provided under SEZ Act. These include tax immunity for a specified period, no customs and excise duty since the product is sold to other SEZ customers and the finished product is not subject to custom duty or sales tax. The company would be liable to customs duty and sales tax if it imported materials and sold the product to a local customer.

[49] All information derived from an interview with Flextronics CSR manager, 7 July, 2009.

Flextronics buys its components locally and from overseas vendors approved by its customer. Further subcontracting work is based on business considerations and value creation; however it can further erode the profit margin. Flextronics is engaged in business with many OEMs and has worked with Sony Ericsson and Nortel in the past as well as Xerox and Dell worldwide. Due to the non-disclosure agreements with customers the company is unable to provide more details about its customers. However, at the time of the interview it was supplying only to one OEM.

Flextronics employs approximately 1600 employees with a gender ratio of 60-40 men to women in three categories: unskilled, skilled and multi-skilled. The majority of the workforce falls into the skilled category because they have completed a minimum of 6 months to one year of work, and the line leaders are multi or highly skilled workers. Men are usually doing technical work such as fitters, mechanics, electronic welders, due to their technical qualifications from the Industrial Training Institute (ITI). Women are trained in electrical engineering and computer operation.

The company has 3 divisions: Flexpower, where mobile phone chargers are produced and women are in the majority; PCB Assembly, where mobile phones are assembled, caters to OEM customers; and the mechanical division.

The company's workforce consists of 40% permanent employees and 60% contract employees. The average age of the workers is 20 years. Workers are engaged through contractors who recruit them young when they have finished their schooling or ITI training. Workers on the contractor pay rolls are provided with an instructor-led as well as on-the-job training. The curriculum includes aspects like the code of conduct, safety and basics of electronic manufacturing etc. They are entitled to wage increases in accordance with the terms of the labour contract.

Those who were directly engaged by the company started as trainees for a year and then moved up the career ladder. Currently, employees join the company directly on the rolls and there is no specific training period, since only skilled employees are recruited. The workforce turnover is high with only 1-2 day notices given by the contract workforce before they resign. The regular workforce has a 1-2 month notice period by mutual agreement. Due to the high turnover of the contract staff, they are placed primarily in the unskilled category. The company currently works with four labour contractors. The regular work shift is 8 hours a day and 48 hours a week. Due to the current economic climate, there is no overtime. Workers' wage levels meet the Minimum Wages Act, and currently contract employees' wages stand higher than that stipulated by the Minimum Wages Act.

At the point of interview in 2009, the minimum wage in Tamil Nadu was Rs. 3,345 per month in the unskilled category and the company paid Rs. 3,485 at that time. The skilled category received Rs. 3,965 per month or about 15% higher than unskilled workers. However, the company claims that present minimum wages they pay are much higher.

Wage revisions are automatic dependent upon the consumer price index or inflation, not on the performance of workers. Flextronics complies with overtime regulations specified under Factories Act, 1948, i.e. overtime compensation is paid with leave.

Workers have 24 days of annual leave, 8 days sick leave and 8 days of casual leave, which is above the legal requirement of one day for every 30 working days, or 15-16 days to a maximum of 18 days in a year according to the Factories Act 1948. Maternity leave is also as per the law of pre- and post-natal for a total of 12 weeks.

The company has a full-fledged medical centre with trained nurses round the clock and a doctor on call at the nearby hospital. The doctor comes twice a week for consultation. The nurses' team is

equipped to handle any medical emergency and there is a fully equipped ambulance stationed at the facility everyday throughout the week.

The medical centre is 100% free for the workers. Since the area is not been covered under ESI, Flextronics has ensured all employees via the company and provides free medical facilities against injuries. The medical centre is not for occupational injuries alone but for common illness. The health and safety team investigates each and every incident in the company.

The other facilities that Flextronics offers its workers is a crèche, which is not heavily availed of because the workforce is young and not yet parents; transportation facilities which are 98% subsidized by the company; and subsidized canteens.

Flextronics' CSR programme is called the FlexPledge Plan which is deployed in all the company sites and has four quadrants, namely people, environment, society and legal compliances. The company has a code of conduct. The company does a self assessment and is also assessed by its corporate global team or its customers from time to time. Reports of compliance vary according to the customer's needs. Certain customers insist on a report, some audit the company themselves, some only ask for a self assessment questionnaire. Internal audit reports are done on a quarterly basis and these are made available to customers. Since Flextronics is a part of the Electronic Industry Citizenship Coalition (EICC), the audit management system has been developed according to EICC guidelines, along with the value systems and ethical management practices.

The same code of conduct is extended to suppliers, which are trained on the code of conduct and required by contract to comply with all the laws, specifically, labour laws. Suppliers are not required to be part of the EICC since the supplier base in India for the electronic industry is developing, but Flextronics insists that they follow the company's code of conduct.

An audit of the finalized suppliers is conducted after the company's sourcing team finalizes the list. If there are any gaps, a gap closure plan is given to them. If required, trainings are also given by the Final Quality Audit (FQA) team. The gaps are audited based on the action plan the suppliers come up with. It depends on the intensity of the issue/problem. For instance, if suppliers do not pay minimum wages Flextronics does not work with them. If certain things are in place but not documented properly, Flextronics suggests to suppliers that they come up with a documentation plan that is auditable. The suppliers are assessed the same way as Flextronics' customers assess the company. Flex Pledge includes a supplier compliance management programme for all direct suppliers, which also includes a supplier quality assurance team. "We have put in place effective mechanisms to ensure that our vendors and suppliers strictly adhere to eco-friendly standards. And since our inception we have supported all policies, standards and directives, such as EHS, RoHS and WEEE."

Flextronics is one of the founding members of EICC and subscribes to the GESI Global Environmental Sustainability Initiative. It is certified by ISO 14001 (covering EHS and RoHS) and ISO 9000 with external and internal audits. Each certificate is valid for 2 years. Audits and corporate reporting for the re-certification of ISO standards are done on a regular basis with fixed schedules. In addition to the sites' ISO14001 management system certification, Flextronics has 13 global EHS standards that are mandatory for all sites to implement. These standards are to further strengthen the sites' existing ISO14001 management system and to drive for continuous improvement and to protect the health and safety of all employees.

On the demand from industries that some of the labour-related regulation be relaxed, the manager acknowledged that labour laws are intended to protect workers but need to be modified, not overhauled, to preserve the flexibility companies have in employment practices.

On workers' representation, Flextronics has a safety committee and another one called Team Sunshine, which is an employees' forum (for blue and white collar employees) which gets employees together and organises recreational activities, entertainment and celebrations. While there is no special committee on sexual harassment yet, but there is an informal group called the Eve's Council which meets and deliberates in case of a complaint. They interact with employees without identifying themselves as being part of Eve's Council. They inform HR and the concerned people so that corrective actions can be taken.

There are three types of communication systems to handle workers' grievances. One is an employee conclave on the shop floor, wherein employees directly interact with the management and air their grievances. The managers also go to the shop-floor at least once in a month in order to meet with employees face to face and exchange ideas and grievances in a dialogue. Second is a formal forum like coffee talk or town hall anchored by the site leadership and the general manager. The coffee talk is for white collar employees and the town hall is for all employees in which they interact and communication takes place. Third is both internal and corporate, the internal one is a suggestion scheme/drop box and the corporate one is an anonymous reporting program called Ethics Point for employees to anonymously provide feedback, concerns, and grievances either online or via a toll free number. The calls are received in the US, where the company has a dedicated person who handles complaints of breaches of ethic. The Ethics Point program is also made available to external parties like suppliers, customer and other stakeholders to report any ethical issues. Apart from these initiatives, the site has also established regular skip level and focus group meetings with the site's General Manager. Besides that regular GM open hour discussions are hold wherein all employees are provided an opportunity to personally interact with the GM at his office.

According to management, since the Flextronics plant is a very young unit, there is no union. The concept of collective bargaining is also absent because pay increments are automatic. "The company is committed to EICC principles. However, our business, the EMS business worldwide does not operate with the union-management mechanism. That is why we have forums like Eves' Councils and created opportunities for employees such as Team Sunshine. We have also a safety committee and interact extensively with employees in different ways, so that the employees can reach out to the management and whatever issue they have can be resolved. I do not think unions are the only way to get your concerns and grievances addressed, there are so many other ways."

Foxconn[50]

Foxconn is a Taiwan based company with its headquarters in China. It operates and holds manufacturing units in different countries including China, India, Brazil, Hungary and Romania. Foxconn had one plant in the Nokia Tech Park in Sriperumbudur since 2007. Earlier in 2006, Foxconn had another division in SIPCOT SEZ next to Nokia Tech Park where it was manufacturing mobile phone parts for Sony Ericsson and Motorola. This division was closed down recently. Almost all employees are said to be transferred to the Nokia Tech Park plant. Another supplier Jabil has recently closed its unit in the park. Among these suppliers, Perlos and BYD (a Chinese company) are direct competitors to Foxconn as they also assemble mobile phones and covers in particular.

Foxconn produces mobile covers, metal parts and plastic injection moulding. While 8% of the production is exported to other Foxconn sites, 90% of the production is supplied to Nokia India Private Limited. The company benefits from the SEZ package of incentives such as a specific tax regulation.

The Nokia Sourcing Team provides a list of approved vendors and suppliers. Die-cut parts are directly approved by Foxconn through internal audit mechanisms. Production inputs at Foxconn are

[50] All information derived from interview with Foxconn supply chain manager, 7 June, 2009.

determined by Nokia with 90% of the materials procured from Nokia itself or Nokia approved suppliers.

Mobile phone manufacturing can be divided into 10 stages; 5 stages are carried out by Foxconn and then dispatched to Nokia for final assembly. Different mobile phone parts are manufactured in different assembly lines. The process of manufacture in Foxconn includes: (1) injection moulding (giving the plastic shape of a mobile) (2) painting, which is done automatically, i.e. workers are not in direct contact with paint and (3) assembling in assembly lines. No work is further outsourced as Foxconn is already a supplier.

Foxconn sources materials from approximately 20 different material suppliers from three countries, namely India, China and Japan. 10% of material is procured locally in the Chennai area, for example from Stockvis in Chennai; the rest come from outside Tamil Nadu for example from Brady in Bangalore. 20% of the material is imported from China and Japan, mostly special material that is not available in India.

Foxconn is the major supplier to Nokia. Earlier Foxconn also supplied to Motorola and Sony Ericsson from its division in the SEZ Sipcot which has been closed recently due to a decrease in business and orders. Foxconn employs around 3,000 people in the Nokia Tech Park Plant. Almost all employees are trainees with an ITI background or plus two years (i.e. 10 years matriculation and two additional years = 12 years of education). Approximately 60% of the workforce is female and 40% is male as the labour processes involved, according to the supply chain manager, are "not complex…and women have also shown a better output in assembly line work." The average age of the workforce is about 22 years.

Foxconn hires people as trainees for about 1 ½ to 2 years, following which the trainees may be confirmed as regular employees based on their performance. As a regular employee, they earn a salary as opposed to a trainee stipend. The regular work shift is 8 hours per day, 6 days per week. There are 3 shifts and no overtime work. The leave policies are according to government rules. All health and safety risks are addressed by the safety department and there is a local hospital nearby. A doctor and nurse visit the factory on a daily basis. All employees have ESI (Employees State Insurance). Other facilities include a free Foxconn company bus shuttle and free canteen food.

Foxconn complies with the EMS Electronic Manufacturing Standards and Nokia's standards in particular. Foxconn holds ISO 9000 1 and 2 certificates. There is an internal audit once in 6 months and external audit through an auditing agency once in a year. Additionally, Foxconn is audited for ISO verification through an ISO approved agency from Hong Kong. Nokia conducts supplier audit to check for compliance with Nokia's standard requirements. Foxconn deals with e-waste according to government rules and regulations. The company has received a letter of appreciation from the state government for its performance with regard to environmental issues.

The three company profiles above have shown that companies are aware of adverse effects they might have on the community and environment that they are working in. As international companies all three have CSR policies in place which cover major issues such as minimum wages, working hours and health and safety requirements. However, none of the companies has an independent workers union. Wages paid are slightly above minimum but are they sufficient to cover basic living costs? At least one of the companies is relying on contract labourers which generally work under even more precarious conditions with regard to job security and benefits. It has yet to be seen whether workers are aware of their company's CSR policies and benefits that they are legally entitled to. This will be addressed in the second section of this reports which deals with workers' issues related to their employment and living conditions.

2. Employment, Workers and Labour Standards

The workers' strike in the Nokia mobile phone manufacturing plant in Sriperumbudur on three occasions, once in August 2009, in January 2010 and then again in July 2010, dominates the current industrial relations atmosphere in the Nokia Telecom Special Economic Zone. This report highlights these events especially because they are symbolic of the volatile nature of industrial relations in the mobile phone companies and symptomatic of their objectionable labour management practices, especially that of Nokia.

The overall industrial relations policy of the mobile phone companies seem to be the time-tested strategy to create a 'reserve army of cheap labour' in the area, available to be hired whenever required and vulnerable enough to be retrenched at will. The insistence on hiring a very young workforce, mostly women, preference for workers who are recruited from far-off towns and villages over the local youth, intolerance of any attempts to form associations or unions, keeping wages low at a subsistence level all point to this negative approach. Young workers who dream of a career in the industry are soon disappointed at the lack of prospects for advancement in their careers and at the low wages which are below any definition of a living wage.

In CIVIDEP's opinion, the workers' strikes in Nokia in 2009 and 2010 are a clear signal to companies and the government that workers may not remain silent eternally about unfair treatment and they will use opportunities to fight injustice. Companies need to take serious account of the unrest among workers and instead of using repressive measures such as suspension and retrenchment, must engage with them through their respective unions in a constructive way. If the treatment of workers is not fair and the emoluments paid to them inadequate, even unions may not be able contain the unrest or to ensure industrial peace through negotiations.

This section of the study focuses on Nokia, but includes observations on Flextronics, Perlos, Wintek, Laird, Foxconn and Salcomp. As our earlier report "Corporate Geography, Labour Conditions and Environmental Standards in the Mobile Phone Industry in India", September 2009, covered some ground on various aspects of labour standards of these companies, we have only included material that is significantly different from what has been observed earlier.

Methodology

One field research assistant from Cividep lived in an area close to the Nokia Special Economic Zone in Sriperumbudur from July 1, 2009 to facilitate interviews with workers in the mobile phone companies. The research assistant established new contacts and revived prior ones with workers and various organisations in Chennai and in Sriperumbudur and surrounding areas.

Collaboration with 'Penn Thozilalargal Sangham' (PTS), which translates into Women Workers' Organisation, which is active in the area, was very useful in reaching out to workers. PTS is a women workers' general union which has succeeded in enrolling nearly 100 women workers of Nokia in 2009. PTS has a small office in Sriperumbudur which acts as a drop-in center for workers.

The association with Corporate Accountability Desk (CAD), Chennai, an activist group researching corporates and advocating on behalf of communities affected by the environmental impacts of businesses was useful. They have been lately spearheading the "Campaign against Special Economic Zones" in Tamil Nadu. Those among them who were of most assistance for the study are

trade unions, trade union federations, local political organisations, NGOs, environment activist, youth clubs and members of a campaign against SEZs. A list of individuals and organisations contacted for the study is attached as Annex.

The researcher met with workers individually and in groups at bus-stops, street corners, hostels and residential localities. Some workers were met in their homes as well. Group interviews were conducted in community halls of the local government (Panchayat) or public premises like temples. Some workers were happy to have meetings at their homes too. Workers from almost all skill-levels and departments of the companies were interviewed. They include: Engine Operators, Quality Controllers, Assemble-to-Order (ATO) operators, Linemen, Supervisors, Delivery boys and Shifting Department workers. In total around 100 workers were interviewed for this report.

Newspapers were monitored for sectoral information on the industry and for keeping track of recruitment advertisements put out by the companies. Newspapers also had begun reporting on the labour unrest in Nokia since January 2009. Notifications on legal minimum wages and permissions to employ contract labour were accessed from the labour department of the Tamil Nadu government.

The researcher interviewed Mr. Shanmugam, President of Labour Progressive Front (LPF), which is the trade union wing of the ruling Dravida Munnetra Kazhagam (DMK) Party of Tamil Nadu. The LPF gave leadership to the workers' strike in Nokia in August 2009. Mr. Shanmugam provided us with a copy of the Memorandum of Settlement arrived at between the management of Nokia India and the union following the strike. The researcher was present on the scene for several hours during the workers' action in Nokia during both the strikes, the first in August 2009 and then again in January 2010. He could thus get a first-hand impression of the issues that led to the workers' strike.

2.1 Nokia – On the Road to Industrial Strife

The Nokia Campus in the Telecom Special Economic Zone (SEZ) is a sprawling expanse of industrial activity spread over 210 acres (85 hectares) of land. It houses Nokia's assembling plant and also that of their suppliers Foxconn, Wintek, Salcomp, Laird and Perlos. Foxconn has another independent site in the Sriperumbudur area. The total number of workers in the Nokia SEZ, including that of the suppliers is about 30,000. The break up of number of workers among Nokia and its suppliers within the campus along with the main activity are as follows:

Company	No. of Workers	Activity
Nokia	8,500	Assembly
Laird	3,500	Spare Parts
Foxconn	2,500	Battery
Perlos	2,000	D-Cover
Salcomp	2,500	Charger
Wintek	1,500	Display System

Nearly 80 % of all employees are women. Among the workers within the campus, nearly 1,500 workers are employed not directly by Nokia or its suppliers, but by several labour contractors of these companies. For example, contract workers were placed in the Nokia plant through 19 different contractors for a variety of tasks, including 'core' manufacturing labour processes of the company's operation such as assembly and warehouse operators which are needed on a regular basis. In addition, a large percentage of even those on the companies' direct payroll as new hires are engaged as 'trainees' or 'apprentices' rather than as 'employees'. This non-employee status, as discussed more below, has implications on the salary structure, benefits and importantly, on protection under

labour legislation which only recognizes formal 'employees'. Almost all workers are young people between 18 and 30 years of age.

Outside the Nokia Campus but within the Sriperumbudur SEZ, Foxconn, Flextronics and Motorola have mobile phone manufacturing factories. The total number of workers in the mobile phone manufacturing industry in Sriperumbudur SEZ is about 30,000.

Under the Minimum Wages Act, the government has categorized workers broadly into Highly Skilled, Skilled, Semi-Skilled and Unskilled workers, with each category further divided by the nature of work for differential wage payment. In Nokia, the main departments are:

Department	Nature of Work
ATO	Assemble To Order
QCC	Quality Checking /Control
ENO	Engine Operation
IMEI	Software/Identity Number
Operations	Production
Shifting	Packing/Transportation

Within departments, workers have various designations and job specifications such as lineman, supervisor, quality controller, engine operator, production operator, software operator, helper and delivery boys.

Contract workers whose employment is governed by the Contract Labour Regulation and Abolition Act, 1970 are engaged by contract agencies for operations like facilities management, warehouse management, fire protection and transportation. According to our research, the contract workers are paid roughly 25% less than that of regular employees. Their wages vary not just according to the skill level required of their placement but also depending upon which contract agency places them in these jobs. Similarly, the monthly 'stipend', rather than salary, of a Trainee Operator at Nokia was Rs. 2,500 whereas the minimum monthly salary of an Operator mandated by law is Rs. 2,895.

The Workers' Strike in Nokia – August 2009

Our previous report depicted Nokia as a comparatively better employer. What went wrong in a matter of few months?

By June 2009, there were rumblings among the workers in Nokia. The main issue was the low wages and refusal of the company to pay annual increments. On August 14, 2009 workers went on strike affecting production. Media reported that the strike, which started during the second shift on the 14th, went on for ten hours, and was called off after the intervention of the Labour Department of the Tamil Nadu state government.

The immediate provocation for the strike was 'a revised' package of wages which offered a raise of Rupees 1400 per month for workers with four years experience and an increment of Rupees Two Hundred per month for trainees. This was not acceptable to the workers. It is reported that about 8,000 workers participated in the strike which resulted in a back-log in the production of 300,000 handsets. The intervention of the government led to a wage revision agreement and resumption of production.

The wage revision agreement was reached between Nokia and the Labour Progressive Federation (LPF), the trade union wing of the ruling DMK party in Tamil Nadu. Originally, the workers, who joined Nokia in April 2007, were getting a consolidated pay of Rs 4400 to Rs 5800 per month. Now, the intermediate settlement has fetched a hike of Rs 1500 to Rs 1750 for those with an experience of 16

months and 24 months (including the 15 month training period). Those working with experience of more than two years up to 36 months have secured an increase of Rs 2000 to Rs 2250 and above 36 months, Rs 3000 to Rs 3300.
The agreement between the company and the union was formalized through a 'Memorandum of Settlement' dated October 14th, 2009 under section 12(3) of the Industrial Disputes Act, 1947 facilitated by the Deputy Commissioner of Labour of the Tamil Nadu Government.

The union and management were expected to resume the negotiations in January 2010 to reach a long term settlement for revising the wages and allowances applicable to the period starting from April 1, 2010. It was to provide for fixing Dearness Allowance and other allowances.

The tripartite agreement (the company, the union and the government) also provides for increasing the monthly canteen allowance to Rs 1000 from Rs 850 and paying a night shift allowance of Rs 20, which will fetch Rs 200 for 10 shifts in a month for the workers.

Nokia has agreed to pay arrears for the nine months prior to August 2009. The company has also agreed to pay a bonus of 8.33 % (one month wage) to employees. The LPF General Secretary and Nokia union President, M. Shanmugam is quoted in the Economic Times for saying that as the workers were keen on clinching an early revision, an intermediate or short term wage settlement was concluded covering the period April 1, 2009 to March 31, 2010.

The media said that the wage revision is expected to have a ripple effect on the suppliers who are supplying to Nokia and other units in the area. Some of the suppliers of Nokia, in a bid to avert the workers forming a union, have proposed a wage hike of about Rs 1500 per month.
The workers' strike needs to be viewed in light of the issues highlighted in the workers' testimonies, discussed below. Wage rise is of course a central demand of the workers, but more importantly, the success of a trade union in securing the rise, marginal though it be, is of significance. This opens up space for collective bargaining and continued monitoring of the labour standards in Nokia and its suppliers as well.

The Second Workers' Strike in Nokia – January 2010

Workers struck work again in Nokia plant on Tuesday the 19th of January, 2010. During the first shift in the morning at around 6 a.m., workers from one line of production were shifted to another line. Workers allege that the nature of work in the new line was different and they were not trained for it. They also said that they were not informed of the change in workplace in advance and it came abruptly. Workers saw the shifting of workplace as a punitive action. Some workers are said to have vociferously protested this move of the management. Workers say that supervisors were abusive and were threatening in their behaviour.

The workers soon began a sit- in strike. They also approached the workers' council which had been set up by the management. When it began operating in about early 2009, workers had been told that the council would represent the grievances of workers to the management. Therefore, the workers addressed the council members for a resolution of the dispute this time. The council is said to have enquired about the incident with the supervisors and managers. The managers declared that all 12 members of the council were dismissed from employment forthwith. This information spread like wildfire among workers. A large number of workers in the shift gathered inside the factory and simultaneously stopped work. Management retaliated by closing down the canteen, blocking the water supply and locking up the toilets.

The union seems to have intervened at this stage. The Deputy Commissioner of Labour facilitated a dialogue between the workers and the management. Relying on the assurance of the union, workers started work again on January 21st two days after the strike began. They saw that a list of 63 workers, who were suspended from work, was exhibited. This further provoked the workers. More than a thousand workers started a sit-in strike again on the same day.

Company representatives allege indiscipline of some workers, and said that they were suspended temporarily pending enquiry. According to the management, the workers have not behaved in accordance with the 'standing order' of the factory. In public statements to the media, the company claimed that the dispute would be settled soon.

Although workers resumed work on January 24th trusting the assurances of the union, none of the suspended workers was taken back to work until July. The suspended workers included the 12 worker-members of the workers' council.

The Third Workers' Strike in Nokia – July 2010

Around 1,000 Nokia workers went on strike again on 13th of July demanding reinstatement of the 63 suspended workers and a revision in the wage settlement. A previous agreement signed on June 12th was later rejected by the workforce. The strike followed a negotiation on the previous day between Nokia and the local union, Nokia India Employees Progressive Union (NIEPU) which had failed. According to Nokia, the strike was settled on July 14th and a wage agreement was reached with the employees. The NIEPU later signed a salary agreement up to 2012. Moreover, Nokia also offered to revoke the suspension of 63 workers who had been suspended in January on charges of misconduct.

The NIEPU has been under the control of the Labour Progressive Federation (LPF), a union that is affiliated to the ruling DMK (Dravida Munnetra Kazhagam) party in Tamil Nadu. However, recently the workers' council in Nokia decided to split ties with LPF and be an independent factory union.

To sum up, issues that caused the first strike were low wages and refusal of the company to pay annual increments, as well as a new wage package with very low salary increments. The second strike was caused by shift of workers on the shopfloor and later the dismissal of 63 workers due to strike activities. The third strike was organised demanding the reinstatement of the 63 suspended workers and a revision in the wage settlement agreed upon after the first strike. In theend the Nokia India Employees Progressive Union could reach a salary agreement with the company up to 2012.

2.2 Labour Standards from Workers' Perspective

This section covers the survey of workers about their working conditions and the extent to which these correspond to the International Labour Organisation's (ILO) core labour standards. Out of the 115 workers in mobile phone factories interviewed, 38 (or 33%) were from various departments of Nokia. The rest were from Nokia suppliers in the Sriperumbudur SEZ near Chennai, where this study was predominately based.

Nokia

Interviews with Nokia workers point to the various deficiencies in labour standards in the Nokia factory in Sriperumbudur. We have seen how the company has suspended 12 members of the workers' council following the strike in January 2010 and only taken them back to work half a year later. This demonstrates Nokia's lack of respect for freedom of association. It perhaps took arm-twisting by the labour wing of the ruling party for Nokia to at least enter into dialogue with the union. Furthermore, in January 2010, a senior Nokia official is quoted in the media as having said, "We will teach them a

lesson this time", referring to the workers. A company that strives to promote itself as a socially responsible corporation is not expected to take such a vindictive stance vis-à-vis its workers who are only demanding their rights as enshrined in international and national law.

The turnover among workers is a worrying aspect of work in Nokia. Workers fear that they will be retrenched sooner or later as they have seen many of their colleagues being terminated from employment for one reason or the other. As there is a steady stream of job seekers pouring into metropolitan Chennai, companies are confident that they recruit sufficient number of workers at any given period without having to retain them on longer tenures. There are very few workers belonging to local communities living close to the SEZ. This discrimination is resented by the communities who have even lost their burial grounds when their land was acquired for the SEZ.

The standards of safety and health in the factory leave much to be desired. For example, very few people have undergone fire drills and first aid training, according to workers. In absence of more concrete information CIVIDEP doubts whether all the employees of Nokia are registered with the Employees State Insurance Organisation which is mandatory and which is the basic health service for workers in India. Workers say that treatment is free of cost in the factory clinic only for the first visit and then on they are charged varying fees. Despite many recurrent ailments experienced by workers, ranging from lower back pain to eye irritation, joint pain and skin diseases, the management does not seem to have either conducted thorough health check-ups for workers using advanced diagnostic technology or to maintain systematic long-term records of their state of health.
Some of the testimonies of workers in Nokia which articulate the labour standards issues are reproduced here.

- "What worries us most is uncertainty of employment. I have seen people more qualified than me being dismissed. I have now worked for a year. I do not know when I will be dismissed too."
- "Youth from communities close to the SEZ are denied employment. These companies are doing business on the lands our forefathers once ploughed. Those few local youth who are employed are discriminated against. They want only migrant workers as they would be more docile due to their vulnerabilities."
- "Many of us in the production department have skin ailments like itching, eruptions and boils. Others have lower back pain, eye-irritation and joint pain. The factory does have some medical facilities. Yet, we are concerned about the lack of scientific monitoring of our health as the toxics we work with could have long term disabling impacts."
- "When I attended a 'Job Fair' conducted by a private employment agent in Dharmapuri to recruit workers for mobile phone companies, I was told there will be annual increment in wages and bonus. My monthly wages of Indian Rupees 4000 is hardly sufficient to meet basic needs. We have no future, we feel cheated."
- "It's tough for pregnant women to work in the factory. The production targets are high and work is stressful. Working on shifts upsets the health of pregnant women more than others. Women do not feel welcome to report back to work after maternity leave. Most women workers leave employment once they have a baby. It's callous of the company to be insensitive to the needs of women especially when 80 per cent of the workforce is female."

Laird

Laird manufactures spare parts like the navigation key for Nokia. There are about 3500 workers in the factory, including a large number of women workers. Interviewed workers said that the work pressure is high; workers are required to complete high production targets. There is no discussion with the workers on the setting of work targets and there is no forum for workers to raise concerns or grievances. Work is organized in three shifts. Workers may use medical facilities at the clinic

outsourced to Apollo Hospitals. However, workers say that the medical facility is not fully subsidized and they are often charged for routine medical tests and some treatments.

Workers are not able to exercise their rights to leave entitlements. Workers are warned of disciplinary action even if they apply for leave due to them. The average monthly wage is about Rs. 3600 for permanent workers. Overtime work is very rare. Factory buses transport workers from pick up points to the factory. Canteen facilities are available. The key labour standard issue is the treatment of workers as casual labour and not permanent employees. Workers continuously work under threat of retrenchment at the will of the company. Lack of a collectively bargained agreement between the workers and the management makes the workers very vulnerable.

Flextronics

The Chennai Industrial Park, located in Sunguvarchatram, manufactures mobile chargers, mechanical enclosures and PCB assembly for both domestic and overseas customers. There are in total about 1600 employees and the gender ratio is 60-40 men to women. The regular employees account for approximately 40% of the site headcount, i.e. more than half of the employees are contract labourers.

Workers say that they are shifted from their positions on the shop floor very frequently and this leads to pressure on them to learn new skills rapidly. These changes affect productivity and leads to conflict with supervisors and managers. Monthly wages are pegged at the level of statutory minimum wages, but taken with the overtime payments the take-home pay is about Rs. 4500 per month. The company however claims that operators are deployed in job positions after proper training and that job rotation is effected based on skill and customer requirements.

Flextronics has a curiously named ‘Eve’s Council’ working under the human resources department. This is supposedly for receiving complaints from and to redress grievances of women workers. However, workers interviewed have not reported specifically on the work of this council. Workers reported layoffs at least twice in the past two years. The company’s response to this allegation is that workers have never been laid-off in Flextronics Industrial Park. However, a few indirect employees have either been redeployed or released on voluntary separation plan with due compensation.

The company provides bus facilities for the transport of workers. There is also a subsidized canteen. Except for the weekly off day it is hard for workers to claim their earned leave.
In contrast the company reports that employees are entitled to their earned leave as per company policy and employees are never denied of this privilege.
Production targets are said to be inordinately high.

Flextronics has a medical centre, managed by trained personnel round the clock, to cater to employee health requirements. The medical centre handles all medical emergencies and provides first aid services. For secondary treatment of injuries, most workers use the services of Jaya Clinic notified by the company for health facilities. Some workers are also accessing the ESI dispensary. The company informed that recently, all women employees including contract workers have been provided with a nutritional health kit following a health examination and also receive gynaecological support. Besides, the company has also rolled out a home medical scheme to facilitate health care needs of employee’s family members. Apart from that, the company provides medical insurance to cover hospitalisation expenses for employees and their families.

Foxconn

Foxconn manufactures batteries for Nokia. One other plant of Foxconn outside the Nokia SEZ is now dysfunctional. There are over 2,500 workers in Foxconn including men and women in more or less equal numbers. As in other mobile phone companies, most workers are young and have migrated into

the area from elsewhere in Tamil Nadu. The company has arranged for hostels to house the male workers. There are about 150 male workers staying in the company hostel. Workers said that there were proposals for a women's hostel as well. Workers, when sick, need to report at the clinic run by a private health facility called 'Jaya Hospital.'

The average monthly wage of a worker is about Rs. 4,500. However, this is only when the overtime wages are added up to the regular wages. It appears that the company is paying less than minimum wages by taking in Trainees and getting the work of a full time worker out of them. There is overtime work on almost all days. Workers have no choice but to work overtime and they are threatened with dismissal if they refuse. Work pressure and production targets are high. Linemen and supervisors harass workers when they slow down or attempt to take short breaks.
Labour contractors and their agents bring workers from towns like Dharmapuri, Salem, and Vellore in Tamil Nadu. The company takes care not to employ workers from villages near the SEZ. The few workers who are recruited from nearby areas are discriminated against by assigning them particularly hard labour. Workers say that this is to make local workers leave employment themselves and to reduce their number in the workforce. This is because local workers would be more vociferous in protesting against any exploitation whereas workers from distant localities are in a more vulnerable position to find support. Workers cannot claim their leave entitlement as their right. There are occasions when there is overtime work even on Sundays. Many of the so-called apprentices have not been confirmed in their employment despite completing the training period. Workers say that the company prefers to recruit fresh apprentices rather than confirm existing workers in their jobs.

The overall policy of Foxconn shows a preference for temporary workers, to deny right to association and to avoid collective bargaining agreements. Management practices of the company are in line with the strategy of the group of Nokia's suppliers, creating a vulnerable workforce without the capacity to bargain for their rights.

Perlos

Perlos manufactures the component called D-Cover for Nokia phones. There are over 2000 workers including men and women. The average monthly wage is about Rs.3,600, just at the level of the statutory minimum wages. Workers are enrolled under the State social security and health/insurance schemes Employees State Insurance and Provident Fund. Workers use the private Apollo hospitals engaged by the company to provide limited health services. Workers are transported by company manned buses. Food is provided in the canteens but a sum is deducted from the wages. Workers did not report high work pressure and it appears that work environment is free of conflicts and harassment. Overtime work is very rare. However, there are no workers' councils or any other forum for grievances or concerns of the workers. Although from the reports of workers, it seems that the work atmosphere is better, Perlos' employment and wage policies are not markedly different from those at other suppliers of Nokia.

Salcomp

Salcomp manufactures exclusively cell phone chargers for Nokia and other OEMs. There are about 2,500 workers in the factory including men and women. Work on most days is in three shifts. The monthly wages are around Rs. 4,200. The factory has its own medical facility that workers can use. Workers have the statutory Employees Provident Fund and Employees State Insurance facilities. Most workers we talked to did not have any idea of how to access the ESI dispensary. However, the company claims this information is provided during an induction programme.

Chemicals that are potentially harmful for human beings are reportedly being used during the production process. However, the company claims that the use of chemicals is limited and meets all legal standards: "Only limited number of dedicated employees are handling chemicals (flux and glue)

at our plant. All those employees have received training on the properties and effects of the chemicals, as well as proper handling of them. In addition, there are data sheets of the chemicals at every location where they are used. All employees get general information about the chemicals during their induction programme, in order to ascertain that no unauthorized employee would handle them".[51] Unfortunately Cividep did not have the chance to verify this statement with workers
Furthermore, Salcomp claims to follow international best practices in handling chemicals and that processes have been certified. Nevertheless, workers are not sure whether the safety measures taken by the company are adequate for protection against harmful effects. At the point of interview in 2009 workers also raised several complaints regarding the high-handed behaviour of line leaders in the factory. Workers said their behaviour is often insulting and demeaning. According to the general manager, internal employee satisfaction survey however indicated the opposite. Currently most line leaders are female employees and harsh behavior has reportedly decreased.

Wintek

Wintek produces display systems for the phones. There are in total about 2000 workers who work in three shifts every day. There are very few permanent workers in this factory and most of them are apprentices. Many of the workers have been working for more than two years but they have not been absorbed into the regular workforce. Workers here also have access to the Apollo clinic for health facilities. Here also like in many other suppliers of Nokia, workers cannot claim their leave entitlement as a matter of right. Workers complain of high production targets and stressful work atmosphere. The company has not so far paid the statutory bonus. Wages are at the level of statutory minimum wages.

[51] E-mail exchange between Cividep India and General Manager of Salcomp India August 5th, 2010

Conclusion and Recommendations

The mobile manufacturing sector in India is coming of age and has developed a long-term outlook in the country. Although part of 2008 and the first three quarters of 2009 were slow for most manufacturers, a cautious and forward-looking approach has been adopted by most. Given the tremendous growth potential of India's mobile phone market, industry analysts point to a revival in 2010 once companies have built back up their peak capacities amidst wider signs of economic revival. The Sriperumbudur cluster will be at the forefront of this revival.
The most prominent feature of the mobile manufacturing industry that is apparent from the industrial analysis in Part I of this report is that companies have a great interest in staying in India. Broadly, trade unions and non-governmental organizations seeking to improve labour and environmental standards in the industry can be more confident about the staying power of the industry in India due to two primary reasons. First, the open-field market over which the leading industrial players continue to compete represents a significant 'pull' factor to keep the industry within the country and motivate individual companies to develop strategies in place. One of the strategies is to lobby the government collectively for better infrastructure and smoother logistical procedures, something that is being gradually accomplished as discussed in Section I B. Second, the longevity of the industry in India is partly influenced by the extent to which a component supplier base can be established within the country to shorten the time lag for raw materials to be converted into the final product, and reduce the costs involved in imports. Here again, governmental policies figure prominently in the future of the industry, and need to be examined closely. Both of these factors affecting the industry's 'rootedness' (as opposed to its 'footloose' character) means that there is a window of opportunity to demand more accountability from companies before they would seriously consider relocating overseas simply to avoid their social responsibilities. However, it is certainly possible that companies will transfer part of their production to their plants elsewhere or to greenfield sites within the country in the face of an industrial dispute.

The needs of the industry for smooth logistics and domestically available components, combined with the ability of management to negotiate favourable conditions and subsidies from state governments may make a limited number of places within the country more 'hospitable' than others to the industry. One such place that has been cultivated to be a manufacturing hub for mobile phones is Sriperumbudur, as discussed above. It would be worth understanding the spatial strategies of companies within India in order to build a pro-active coordinated response in the face of impending relocation during a labour campaign.

A key element in a campaign for the enforcement of labour standards, however, is a sharper understanding of the disparities between company accounts and workers' experiences. Part II of this report has highlighted the volatility of industrial relations at Nokia and the speed at which workers decided to act in order to improve their own working conditions. In their case, they were supported institutionally by the labour wing of the ruling party, which has been bending over backward to draw large industry, particularly electronics producers into the state at high public cost. Although the intensity of pressures may vary at the other companies in Sriperumbudur, many important issues which emerge in the accounts of workers are either downplayed or missing in the companies' profiles discussed earlier. Most prominent, and grave, among these is the precariousness of employment in the mobile manufacturing plants, i.e. the high volume of temporary, probationary, contract work created in direct contrast to regular employment with statutory benefits. This central feature of mobile manufacturing, and electronics production in general, is simply glossed over by company representatives, mass media and more shockingly, by governmental officials responsible for implementing development policies and labour laws. A detailed report is needed of the economic and

social consequences borne by workers and their communities due to their precarious employment situations.
An equally crucial feature of working conditions in mobile manufacturing plants is the myriad ways in which workers' issues and grievances are firmly channeled through management-controlled groups which, by nature, lack the independence, resources and power that permit workers to address these collectively. In theory, employees' forums are set up for workers to air out any concerns and complaints in particular areas such as health and safety and sexual harassment, or make suggestions that may benefit themselves. In practice, they circumvent workers' attempts to organize themselves into collective bargaining units and genuinely defend their interests vis-à-vis the employers. Besides bogus workers' councils, as proven in the case of Nokia, Part II describes other ways in which the Freedom of Association is thwarted by management through their recruitment and human resource management practices.

Awareness needs to be raised among the growing workforce about existing mechanisms which support them. As workers come from poor, rural communities and are in precarious employment situations, they are reluctant to voice their concerns and risk their sole source of livelihood. It is important to empower workers with in-depth knowledge about their rights and entitlements according to national and state legislation, international labour standards, and their employers' own corporate codes of conduct, where these exist. This could be achieved in a collaborative effort between civil society organizations and companies, with governmental sponsorship. Such joint educational sessions would demonstrate genuine corporate engagement with civil society organisations, a component of corporate social responsibility which is still missing in India's mobile manufacturing industry.