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EMF Strategy paper on ICT Managing Change in the European ICT Industry and Services

Introduction

It has been said, there are two major drivers which change our everyday life, enlargement of market economy and information and communication technologies (ICT).

From the EMF point of view ICT is more than one industrial sector. The ICT sector has become a driving force for economic growth and social development. ICT is a source for productivity rise and new innovations. The ICT sector provides products, services and systems which by nature are robust drivers for change and development

Digital convergence of computing, communication, content, and consumer electric is a principle influence on Europe's ICT industry. The coalescence of technologies is blurring the boundaries between industry sectors and is evidently also the main driver of change taking place in industry at the moment. The ICT companies are less identifiable in relation to products or services than in relation to the role of the company in the value chain.

For the EMF ICT development is an opportunity, but also a challenge. We can identify at least three main phenomenon which are important for trade unions. Firstly, by

creating new technologies ICT challenges old technologies and invalidates people skills at the workplace causing the need for retraining and education. Secondly, all major companies in the sector have a strong global orientation which includes their customers, brands, organisations and value chains.

And thirdly, corporate and social cultures are just beginning to develop as are employees. Therefore trade union density is partly below average in the sector. From the EMF point of view the fact that the growth rate in the ICT sector is above the average in the EU and that there is penetration of the ICT into other sectors, this poses a great challenge not only in relation to the sector but also due to the fact the ICT sector is one of the main drivers for change in other sectors. It is certain that the ICT Committee alone is not able to solve the problem and therefore is ready to collaborate with other EMF Committees, member unions and other federations to overcome the challenge.

On this basis the ICT Committee and its ad hoc group, after several debates have concluded this report which will be a guide for the European Metalworkers' Federation's ICT Committee.

Chapter 1: ICT and its mutation

What is ICT?

The continuous mutation of the sector makes it difficult to describe a sector according to the traditional standards of industrial classification. Therefore, in this paper we have used both, the EU and the OECD descriptions believing it gives the best understanding of the sector. Another striking fact is the sector is largely dominated by quite a few global companies.

Major sub sectors in ICT are represented by (EU Commission 2006):

Telecommunications services account for 38% of the ICT market and telecommunication equipment and services account for 9%. The European telecoms industry has a strong position in both services and equipment as well as in research.

Hardware and components account for about 12% of the ICT market. Europe has a relatively strong position in electronic design for applications such as mobile phone and automotive electronics.

Software and services account for around 20% of the ICT market. European industry's key strengths are in enterprise software.

Consumer electronics amount for some 9% of the ICT market. European's strength is in mobile phone related devices.

Content and media services make up 12% of the ICT market.

OECD in its creation of Technology Outlook 2006 defines ICT industry sectors and 10 top companies in the sector as follows:

Communication and systems	Nokia, Motorola, Cisco Systems, Ericsson, Alcatel, Nortel Networks, Lucent, L-3 Communications, Qualcomm, Avaya,
Electronics and components	Siemens, Hitachi, Matsushita, Sony, Philips, Samsung, Intel, Canon, Mitsubishi Electric
IT equipment and systems	IBM, HP, Toshiba, Dell, NEC, Fujitsu, Hon Hai Precision, Apple, Sun, Quanta
IT services	EDS, Tech Data, Accenture, CSC, First Data, ADP, GapGemini, IAC/Interactive, SAIC, Unisys
Software	Microsoft, Oracle, SAP, Softbank, CA, Electronic Arts, Symantec/Veritas, Intuit, Amdocs, Adobe Systems
Telecommunication services	NTT, Verizon, Deutsche Telekom, France Telecom, Vodafone, Telefonica, SBC, TI/Olivetti, BT, Sprint/Nextel

Information technology industry in particular is a trendsetter in the creation of globalised production networks. One phenomenon that is the result of outsourcing is that manufacturing and design contract manufacturing, which grew rapidly during the 1990s, have both become important players in the ICT production chain. SOMO in its

ICT Manufacturing report presented a list of the ten biggest electronic manufacturing services (EMS) and original design (ODM) companies as follows:

<i>Manufacturing services (EMS)</i>	Flextronics, Hon Hai, Sanmina-SCI, Solectron, Celestica, Jabil, Elcoteq, Benchmark, Venture, USI
<i>Design services (ODM)</i>	Quanta, Asustek, Compal, BenQ, Lite-On, Inventec, Winstrom, Tatung, Micro-star, Mital Intl

The convergence into a more unified IT sector, without strict boundaries between hardware and software companies, has been followed by a more *fundamental shift* which is now evident. The convergence of IT, telecoms, consultancy and networks companies into what is likely to become a single unified ICT sector. Therefore it is estimated that the grouping of the companies will change and the number of companies will decrease.

Facts & Figures

In an ever integrated Europe, despite various definitions and fragmented statistics on the ICT sector, the figures by themselves speak for themselves regarding the mutation of the ICT sector:

(A) According to EUROSTAT figures¹, there were about 700,000 ICT companies in 2001, within the ICT industry of EU25², of which 90.6% being in services. Out of a total of almost 7 million employees, 73.8% were employed in ICT services³, while 1.7 million were in ICT manufacturing. That same year, turnover in the ICT industry amounted to 1.6 trillion Euros, 76% came from services.

(B) In 2004 the global ICT market reached €1.96 trillion, 27% of which accounted for hardware, office equipment, end-user communications and datacom and network equipment (ICT equipment); 44% for network services and 29% for software and services.

¹ DG Enterprise and Industry, Key indicators on the competitiveness of the EU's ICT industry, p.3, 2005 (http://europa.eu.int/comm/enterprise/ict/policy/key_indicators_v3.pdf)

² Enterprises: the top five countries are UK (25%), Italy (17%), France (12%), Germany (8%) and Spain (7%)

³ Employees: The top five countries are UK (22%), Germany (16%), France (15%), Italy (12%) and Spain (8%).

According to the EITO 2005 report, ICT equipment in Europe grew by 2.2%, carrier services by 3.4%, software by 5.5% and services by 5.2%.

Finally, according to EIRO 2005 figures, during the period 1995-2002 annual labour productivity growth in the ICT manufacturing sector within EU15 witnessed a growth of 16,9% in contrast to 5.9% in services while in Japan the figures were 7,7% and 6,2% respectively, and in the US 23,5% and 2,6%.

(C) Spending growth in ICT also witnesses a difference between manufacturing and services:

In 2003, the average Western European IT spending amounted to 3.09% of GDP, in comparison to 3.09% in Japan and 4.58% in the US.

Among Western European countries, the highest GDP IT spending ratios are found in Scandinavian countries (Sweden 4.49%, Finland 3.55%, Denmark 3.46%), UK (4.22%) and the Switzerland (4.21%).

IT spending per capita follows the same pattern: In W. Europe, average IT spending per capita in 2003 was approx. 700€, compared with 1000€ in Japan and 1123€ in the US.

The highest GDP spending per capita among W. European countries was in Switzerland (1453€) followed by Sweden (1187€), Denmark (1177€) and the UK (969€).

From past to present, from manufacturing to services

These statistics clearly show the trend of moving from manufacturing to the more value-added services in ICT.

Indeed, the market for ICT software and services has rapidly developed over the last ten years. An industry that has its roots in hardware manufacturing is gradually turning into a service industry. Most of the companies that started as hardware

manufacturers have gone into software development and then dynamically added a range of services to their portfolio.

For instance, IBM developed from being primarily a hardware company to being a software and specifically a services company. Another example is Cisco. Although perceived as a hardware vendor, Cisco does not manufacture. None of Cisco's products ever touch Cisco premises. Research, development, design, branding, marketing are carried out by Cisco. Manufacturing and delivery have always been outsourced to specialized contractors.

Sub-sectors convergence

As well as the changes described above, which result primarily from globalization and technology evolution, one other significant characteristic of this constantly changing sector is the convergence of previously separate sectors of the industry.

Prime examples of this are the inroads that large telecom companies such as Deutsche Telekom (through T-Systems) and British Telecom have made into the IT services and solutions market, competing with more traditional IT companies like EDS, Cap Gemini and IBM.

The growing demand for professional ICT services is, to a large extent, a reflection of the increasing technological complexity. Today even small and medium-sized companies need specialised support in order to run their IT infrastructure and applications. Without intermediary services complex IT systems could not be implemented and operated or maintained.

The rapid change of the former computer industry to a service oriented business is in fact one of the reasons behind the difficulties defined.. Moreover, the sector is sometimes melting together with other traditional sectors as the outsourcing phenomena gains influence. It is clear today that the ICT-sector will have even more of a general character in the future, when the mass breakthrough of digital media consumption takes place.

In addition, consulting companies like Accenture are continuously expanding their operations to try to provide an end-to-end service for their clients, instead of simply

providing a consultancy service and therefore leaving the creation and support (e.g. BPO, contact centres) of the actual solution to be provided by other companies.

What next?

ICT is important for process innovation and in matching business operations with technology. As of today ICT is still adapting business models to relatively rigid technologies. However, with the evolution of process engineering, technology will become more advanced and adaptable to new business models. ICT services will play an even more important role as the key intermediary between markets and customers on one side, and technology and software developers on the other side.

With ICT, traditional industries have no choice but to integrate a complete new set of technologies, to broaden or change their technology base and to acquire new competencies. Small and medium-sized enterprises, not used to working with technology, are in particular faced with the challenge of new technology uptake to improve efficiency.

Chapter 2

How Information Technologies Transform Traditional Industry

ICTs and their multiple aspects have far-reaching effects at all business levels. Without computers and telecommunication the creation of large-scale multinational companies would not have been impossible after World War II. In turn, the evolution towards increasingly more sophisticated software and decentralised data processing contributed to a flexible and internationally decentralised company organisation. By regrouping activities and specialising each subsidiary, so as to be part of a worldwide production chain, multinational companies have been able to take advantage of substantial economies of scale.

The digital revolution is, indeed, changing the traditional business organisation and that eventually leads to new production paradigms.

Impact on go-to-market models

For trade and industry the effects of the internet revolution are drastic. Competitiveness is determined not only by the level of costs but also by the company's capacity to innovate, to be flexible and to be able to produce and launch products on the market in a timely manner, whilst also responding or even anticipating the needs of individual consumers.

ICT links the company's own information streams to those of clients and suppliers. An increased production flexibility will ensure a more accurate and rapid response to incoming orders. Mass production is able to take into account the consumer's individual preferences. Separate computer-controlled production functions can be integrated into an all-round intelligent production system, enabling the production process to speed up and become more automated.

Companies with traditional ways of doing business will be overtaken by those who will have successfully integrated ICTs in their business models (cf. Dell computers) because ICTs enable the development of new purchasing and sales channels. E-business leads to virtual markets, which transform traditional distribution channels. This can lead to lower transaction costs and more competition, resulting in larger market power for the consumer and lower prices. On the other hand, more transparency puts increased pressure on suppliers who can more than ever be set against each other, and are pushed to lower costs even further.

Information technologies also imply a much more targeted and permanent management of relations with clients, thus improving customer relations. Furthermore they facilitate access to international markets for small and medium scale companies (with a modem you set foot everywhere). Another development is the way in which internet technology will open up markets which were rather protected up till now (legal counselling, exclusive distribution channels).

Work organization

With ICTs, work processes are essentially information tasks: data gathering, data processing, interpreting and distributing information. By the same token, software and human intelligence are becoming more and more important in work organisation.

ICT also helps to overcome the limitations of the Taylorian type of work distribution. In fact they make a flexible assembly line possible because they permit product

specifications and encourage to a great extent the co-ordination and communication between production and support services.

For example, the penetration of information technologies in the production process leads to less discreet work and more process control: on-screen work instead of assembly line. By integrating independent computer controlled functions and processes they lead to integrated intelligent production systems in which repetitive assembly-work is reduced to a minimum and in which process control and the processing of information are more important than the manipulation of goods.

Without doubt ICT enables international harmonisation of a whole range of company jobs: accounting, IT, Human Resources, and management tasks which do not necessarily have to be carried out on the spot. It makes a decentralised structure possible by deleting a lot of intermediate positions in the company's hierarchy.

The decentralised decision-making process, characterized by teamwork, renders employees more autonomous and at the same time more responsible. Through the improved availability of information, knowledge development can now occur at all levels of the company. In the end they lead to an intensive management of knowledge development throughout the company. In fact, a new class of flexible highbrow knowledgeable employees is emerging.

Telework

Progress in ICT and pressure from employees has resulted in many organisations introducing a telework facility for, at least, some of their employees. For the employee, the benefits can be considerable - for instance significant savings in daily commuting time, possibility to adjust their working patterns more easily to everyday chores such as school pickups, and the autonomy to structure their work without intensive hierarchical surveillance.

The downside is that many teleworkers may miss the sense of community which comes with working in an office environment. They can also find themselves excluded from informal discussions or decision-making processes which take place in the office premises. Others may find it difficult to "switch off" from work when the workplace and home are one and the same location.

The increased autonomy of workers (often part of 'self-governing' teams) is often a mere virtual autonomy and in practice workers are not able to change decision-making processes. The duality between being responsible but at the same time not being authorized to change things leads to empowerment without power.

Employers' interest in telework is often by no means altruistic. They can make significant cost savings by persuading employees to give up their office space. For many teleworkers some or all of the commuting time is often converted into working time at home rather than being used for domestic or leisure pursuits.

Company organization and company networks

The digital revolution by allowing everyone to exchange worldwide data online and direct company processes fundamentally changes the company's organisation.

Further to the ownership break-up of the value chain, it is becoming more possible to create specialized companies within each step of a product's value chain. Yet thanks also to the internet, independent steps in the value chain can once again be linked together leading to the creation of independent company networks of production processes, logistics, R&D and marketing to be jointly organised.

As such, it is necessary for interlinked companies to create long term partnerships, not only for basic production and services, but also for research, innovation, marketing and sales. This enables producers, suppliers and clients to organise a high degree of intertwining, thus erasing barriers between companies.

ICT also results in totally new logistics concepts: Routes and freight can now be permanently screened on line, giving birth to virtual "worldwide warehouses on wheels". Goods movement can now be traced digitally. The route-to-market can therefore be perfectly streamlined to the actual orders, so as to have minimal physical stocks. Such sophisticated logistics concepts make companies dependent on ICT infrastructure.

Given company networks and efficient logistics, the relocation of activities has become much easier, resulting in even more relocations and increased internal competition.

Thus, on a worldwide scale, a new model of manufacturing has emerged, i.e. the global of network-based mass production characterized by a worldwide disintegration of the value chain.

With this new model for division of labour on a worldwide scale, traditional outsourcers confine themselves more and more to their own core competences like brand management, product innovation, marketing and the like. The relationship between outsourcer and supplier has also developed into a model of long-term strategic partnership, e.g. computer brand producers and their contract manufacturers.

A new breed: Contract Manufacturers

The birth of Contract Manufacturing in the ICT sector was marked by IBM's entry into the PC-market in 1981 when Big Blue contracted the assembly of the motherboards to a no-name manufacturing company, SCI in Alabama. At the end of the nineties this business model gained momentum.

Contract Manufacturers concentrate their manufacturing activities on low-cost locations in relatively large, integrated plants that can handle a variety of manufacturing functions and provide a stable environment for mass production.

They differ from traditional subcontractors as these companies carry out a lot more than only labour-intensive assembly processes strictly controlled by the OEM. They develop and manage complex production processes: product and process engineering, component design, logistics, after sales services and repair.

In other words, the development has even changed the names of companies. Today companies at the end of the value chain, termed also a brand owner company, are also Original Equipment Manufactures (OEM), who design and build products bearing their name. Electronic Manufacturing Service companies (EMS) produce the brand name products designed by OEM companies. ODM companies (Original Design Manufactures) who design and produce a complete product for the OEM are one step ahead.

As the value chain within the traditional outsourcers disintegrates, a vertical re-integration process within the contract manufacturers appears, and the latter

gradually acquires specialized design and manufacturing know-how, capabilities in components and software as well as in supply-chain-management and logistics.

The concentration on a limited number of subparts/modules gives such contract manufacturers a tremendous scale advantage. Specific supply companies in the ICT sector are at an advantage because of their no-frills approach: Solectron overhead costs hardly reach 4% of sales, while in the former Compaq these were 18% and even at super lean Dell, which has no sales network of its own, these costs represent 9%.

Although having started up as simple assembly plants, contract manufacturers gradually penetrate into upper market segments by taking over activities from their clients-outsourcers with a higher added value, i.e. they eventually become end producers.

Quantum leap in outsourcing...

Originally, outsourcing was limited to the purchase of non-strategic goods and services. Suppliers are indeed cheaper, more flexible and more specialised. Moreover relying on one specific supplier was simply not good enough and if the supplier failed to satisfy, companies turned to a new one. All this enables the outsourcer to concentrate on his core business.

Outsourcing is not a new reality in industry. Maintenance, logistics, cleaning, catering are among the numerous tasks which have long been outsourced by external companies: Companies such as GE, Alcatel and Siemens have for years outsourced labour-intensive business transactions offshore to bases remote from their home country base.

Apart from manufacturing, ICT companies like Microsoft, Oracle, Sun Microsystems, Motorola, Intel, Advanced Micro Devices and IBM are moving IT application development offshore. The box below gives more examples.

- Microsoft has never had a single plant but is now attacking Sony, one of the world leaders in consumer electronics with the X-Box, a play station made by Flextronics.

- Flextronics produces half of all Xerox copiers as well as all the mobiles for Sony Ericsson;
- IBM and HP, initially computer companies, are no longer producing PCs.
- Sanmina-SCI is now manufacturing PCs sold under the brands of IBM and HP.
- The Japanese Funai already produces 70% of worldwide video recorders in Shanghai.
- Tchuruk, CEO of Alcatel, told the press that Alcatel intends to keep only a dozen of its 120 production plants;
- Since 1996 Philips reduced its number of branches from 269 to 160 a trend which is relentlessly being pursued

...and off shoring

Another type of development in outsourcing is the offshoring of IT services. Offshore services encompass all kinds of IT services sold in Western Europe but delivered from lower-cost countries by external companies or by setting up their own operations in these countries.

India receives by far the highest IT offshoring activity, accounting for more than 88% of total offshoring spending by Western European companies. Eastern Europe and Russia follow with an 11% share. Offshore service companies deliver a wide range of services such as business processes, IT services, software products, engineering, R&D. Offshoring services represent some 1.1% of total IT-services spending in Western Europe but are expected to grow steadily.

In the ICT-sector the leading contract manufacturers, most of them former small sub-assembly companies, were hardly known a decade ago. However their market volume has been growing by 20-25% per year since 1990. At the same time consolidation has been developing fast with five American companies emerging as key players (Solectron, Flextronics, SCI, Celestica, Jabil Circuits and Elcotec). For example, in 1996 Solectron had about ten locations world-wide, today there are almost fifty. The names of these companies are unfamiliar to the public as they do not place their brand name on any product.

Heavy restructuring among the main players of the electronics sector in Western Europe indicates clearly that the sector is swiftly moving to Eastern Europe and Asia.

In fact, rather than relocating, these companies in Western Europe are shedding off activities. Traditional players in the electronics business are increasingly outsourcing parts of the production chain to focus on a tighter core-business. Even research centres are relocating and no longer provide an anchorage for industrial activities.

Chapter 3

EU, Central and Eastern Europe and beyond

Some Central and Eastern European (CEE) countries have also become important locations for ICT-manufacturing: within the EU-25 only Ireland and Finland have a higher share of ICT in their GDP than Hungary and the Czech Republic. But also Poland and Romania were successful in attracting foreign direct investment (FDI) in the ICT sector. As regards the production of electronic parts and components the share of the CEE 8 in the total European output has grown from 11% in 1993 to 32% by 2003, while in the same period EU-15 output grew fivefold.

At first OEMs set up subsidiaries in the Central and Eastern European countries in order to ensure market presence while at the same time relocating mass production to low cost countries. But from 1997 FDI was in most of the cases the result of the built-up of Contract Manufacturing capacities mainly in greenfield locations. These new plants mainly perform high-volume manufacturing of consumer products for OEM in a very flexible and low cost production environment.

While it is true that this shift in investment flows has provoked painful processes of relocation of activities and substantial job losses in Western Europe, the emergence of CEE countries as ICT manufacturing bases has contributed to the survival of Europe on the ICT world markets. Optimising value chains may strengthen the company as a whole and contribute to safeguard jobs in the central location.

There is the opinion that these ICT-investments do not contribute to the gradual upgrading of Central and Eastern European economies, because these outsourced or relocated activities have strong network linkages at the global level but low agglomeration effects at the local level. However customised work in most offshore/outsourced plants remains a major impediment to industrial upgrading. Moreover, the OEM will in any case try to keep control of the high end of the market.

In terms of technological and organizational learning, the following investments seem, however, to make their contribution:

Firstly, a gradual enhancement of manufacturing capabilities, especially as we can see a certain upgrading in the type of products and their complexity manufactured in Eastern Europe (from simple assembly to products with high quality requirements);

Secondly, a gradual integration of higher-end functions: process and product engineering, warehousing, logistics;

Thirdly, local sourcing although limited in most of the cases to non-electronic components (which forces local suppliers to meet the strict quality requirements of their multinational customers).

Beyond the CEE: The Challenge from India and China

Hardly a day goes by without a further piece in the media concerning a company's announcement to move jobs outside the home country, usually to India or south-east Asia. Now we are seeing an everyday avalanche of announcements of IT enabled services and business processes. Currently call/contact centres account for 80% of the IT enabled services market, but there is the potential prospect to follow of outsourcing higher value services such as financial analysis, industrial engineering, analytics, drug research and medical analysis.

India is currently the favourite destination of companies seeking to outsource internationally. Over 500,000 people are employed in the Indian software and IT enabled services sector and software services now account for 17% of total Indian exports. The Indian Ministry of Information Technology was founded in 1999 with the goal of boosting Indian software exports to \$50bn by 2008. (In 2001/2002 software exports amounted to \$7.7bn)

India today, China tomorrow. Whilst China does not yet have the international western language skills demanded by companies, nor the legal and regulatory environment or sufficiently robust intellectual property protection, but this will change. For Japanese and Korean companies, China is already a viable option

primarily due to geographical proximity. It is also understood that IBM has a 3 year project to train up to 100,000 university graduates in IT skills in China.

The success of competitors such as the US, Korea, India and China was founded to a great extent by the scale of government promotion and financial stimulus in different ways. Except agriculture, there is no comparable equivalent at European level.

Chapter 4

EMF: The seven pillars and union response

For the EMF industrial policy is a tool for sustainable development, economic growth, employment and social welfare. On this basis the ICT Committee involves itself in a constructive dialogue together with its stakeholders e.g. the EU Commission, industrial federations and main companies in the sector.

Derived from the EMF's role as a federation of the unions in Europe, the trade union strategy deployed for the ICT sector will be built on the following seven pillars, namely:

1. Continue to be in close contact with European institutions & stakeholders at the EU level
2. Foster European Social Dialogue
3. Facilitator for industrial development, change and restructuring
4. European Works Councils as an industrial policy player
5. Benchmarking and best practice sharing among trade unions
6. Actively recruit new trade union members and create awareness
7. Developing a global profile

1. Continue to be in close contact with European institutions & stakeholders at the EU level

As an EMF body the ICT Committee co-ordinate European industrial policy activities on the ICT sector. To fulfil the EMF goal for employment and better jobs the ICT Committee is involved in towards a constructive collaboration with all other important institutions on the sector like the EU Commission, industrial federations, research institutes and main companies.

Economic growth is created in companies and work organisations by the EMF member for the general welfare of all. Therefore, the ICT Committee has a strong interest to keep in close contact with the industrial federations and major ICT companies in the Europe.

The main objectives are to obtain information which is relevant to our members and to influence European level policies and decision-making. The EMF will take the initiative to submit concrete proposals and offer constructive co-operation.

2. Foster European Social Dialogue

Social dialogue in the European ICT sector will mutually benefit industry and employees and help to improve competitiveness through restructuring in a socially acceptable manner.

Despite discussions going on with EICTA⁴ and the European Commission over a number of years, no framework for a social dialogue has been put in place. This may become a huge problem for employees and their unions against the backdrop of massive changes currently undergoing in the ICT sector.

To avoid unwise managed restructuring that may lead to loss of know-how and/or brain drain among both companies and employees and even potential social instability, we urge for a functioning social dialogue mechanism for the ICT sector to ensure the effective participation of all social partners.

3. Facilitator for industrial development, change and restructuring

Driven by globalisation, swift technological and process changes, global sourcing and stock market fluctuation, the ICT sector more than other industries is constantly restructuring. Therefore, innovations in ICT are crucial for European social and economic growth.

An innovation friendly environment at company level is above all based on good work organization, which can only be implemented and developed in co-operation with the social partners, which is the core of innovation governance. The ICT Committee

⁴ European ICT Association

works in close co-operation with the EMF Innovation networks canalising intellectual resources and ideas into the sector.

One of Europe's biggest challenges is how we can manage an industrial restructuring which inevitably creates new jobs but also destroys old ones. The EMF's main goal is to create more and better industrial jobs. The ICT sector is under continuous change and therefore the Committee actively follows, participates and anticipates sector activities aiming towards better employability of the ICT practitioners.

All stakeholders, governments and social partners alike, should contribute to turn our Lisbon objectives into reality. Rather than each party working on its own, the social partners (companies and trade unions) can achieve more by anticipating and managing change together in an economically sustainable and socially responsible manner, than if each party works on its own.

With other stakeholders (EMCC, ETUI-REHS...), the EMF will put in place practical and effective programs at the grassroots levels. The main collaborators are EWCs working on the sector.

4. European Works Councils as an industrial policy player

European wide operating ICT companies require a European trade union response. In cases of European wide restructuring, information and consultation should take place at a European level and lead to co-ordinated and joint action in all countries concerned.

European works councils play a significant role as a true social partner for transnational companies to implement constructive change management and to succeed. The ICT Committee operates in close co-operation with the EWCs and co-ordinates industrial and company policy activities together with the Company Policy Committee. It is important that the ICT Committee has direct co-operation with the EWCs and also what concerns the sector's development and innovations. Via EWCs the ICT Committee is able to obtain intellectual resources according to invariable needs.

To ensure effective management of works councils in Europe, the ICT Committee supports European Works Councils in terms of advice, orientation and assistance in their dealings with the ICT companies.

5. Benchmarking and best practice sharing among trade unions

The ICT Committee is a platform for the EMF member unions and European Works Councils in the ICT industry providing networking opportunities, facilitating exchange of experiences, and sharing best practices across borders and therefore helping members to adjust their strategies and policies against the ever growing challenges in this industry.

6. Actively recruit new members and create awareness

The ICT sector is a group of relatively young industries and is comprised of mainly SMEs on the service side. These companies employ young people who do not have a trade union tradition. To increase awareness among employees and the political weight of member unions, the ICT Committee helps the EMF members to improve trade union membership in ICT companies by providing information in partnership with the ETUI-REHS and by organising industrial policy activities.

7. Developing a global profile

The ICT industry is a global industry in its real sense, which is sourcing production and services around the globe according to costs and opportunities. Company supply chains don't flow according to national borders and information technology enables communication without limitations and on time. Another fact being that there are more and more mergers between companies within and outwith Europe and which makes it more than important to have a global contact network.

To fulfil this task the ICT Committee works in close co-operation with other federations like the International Metalworkers' Federation and UNI.

Chapter 5: The union response

ICT is a robust threshing machine cutting down all ripe grain and blazing out sophisticated foodstuff. Like the thresher, ICT is a tool for improvement which cuts out old technologies and invalidates people skills. The ICT Committee's orientation is to be in favour of industrial development and against social exploitation.

Most importantly, industrial policy is one single policy area among other EMF policy areas. Therefore, industrial policy's main role is to support the EMF to reach its highly sophisticated goals. Considering that, maybe the most striking factor of the ICT sector is its young corporate and social cultures as well as young employees. Taking this into consideration and the growth rate on the sector the ICT Committee is well aware of the fact that trade union density in the sector is clearly below average and continuous development will undermine trade union influence as a whole. Therefore, as part of its role, the ICT Committee is committed to doing its best to change the alarming trend.

The EMF industrial policy strategy is based on strong support for sustainable development and change management. According to our values we see that continuous development is a necessity for economic growth and sustainable development is a necessity for general welfare. As a result the ICT Committee works systematically to support activities concerning industrial development, research and development and innovation. On the other hand, these elements are based on continuous knowledge creation such as lifelong learning. On the other hand, Europe needs to have functional institutions and resources for skills and job creation, stakeholder collaboration, intellectual management systems and work organisation which enable the utilisation of human resources.

Major companies in the ICT sector have a strong global orientation including their customers, brands, organisations and value chains. The EMF needs to understand what is happening in the ICT sector. The ICT will organise projects to explain in more detail the development in the sector concentrating mostly on social and business factors such as corporate governance, business organisation, and skills development.

As a knowledge based sector ICT has individual problematic areas such as standards and intellectual property rights both regulating innovations created by employees. The ICT Committee aims to strengthen its knowledge and position in this very important but problematic matter.

Being well aware of the fact that the general feature of the ICT sector is continuous mutation the ICT Committee tends to use flexible and anticipatory working methods by utilizing ICT technology, project work and expert networks. The ICT Committee acknowledges its needs for highly sophisticated expertise. Therefore the Committee creates contacts with the European Works Councils and other expert organisations in the sector.

Due to the ICT impact on other metal sectors it is important that the ICT Committee works in close co-operation with the other EMF Committees.

The EMF Congress will adopt the EMF work programme, which includes the detailed work programme for the ICT Committee.