Understanding the impact of outsourcing in the ICT sector to strengthen the capacity of workers' organisations to address labour market changes and to improve social dialogue (IMPOS)

Executive Summary

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1. EXECUTIVE SUMMARY

1.1. Outsourcing and offshoring in general – challenges to trade unions

Depending on the spatial, social and technological organisation of the respective value chain, outsourcing and offshoring may occur locally, regionally or globally, by moving work into owned or partly owned subsidiaries (also called **captives**) or by subcontracting it to an independent company. Two dimensions are distinguished: firstly, where work is relocated (**offshoring**, or nearshoring), and secondly, where the boundaries of the company are (**outsourcing**). Both may be combined in **offshore outsourcing:** the relocation of work to another company in another region or country.

Traditionally, outsourcing and offshoring aim chiefly to access lower-cost or more flexible workforces or organisations. Access to higher specialisation and expertise or proximity to customers also plays a part. Lower cost may be achieved through various interrelated mechanisms: Firstly, simply through lower wages and labour standards in other countries or sectors. Secondly, through specialisation and economies of scale, increasing efficiency and exploiting synergies. This breeds further economies of scale when activities are consolidated, tools harmonised and processes standardised. Either way may entail reductions of staff in the higher-wage countries or labour market segments. For unions, this creates multiple challenges: job losses in the core companies and in those countries where they have been (more or less well) established; increased options for employers to access non-unionised workforces and bargain for concessions under threats of relocation; increased difficulties for unions to contact and represent their actual and potential constituencies and to co-ordinate interest representation across companies, sectors and countries; also losses in influence over vocational training and the definition of skills in those countries where unions are represented in Skills Councils and vocational training systems.

In recent years there is evidence of a new quality in outsourcing and offshoring. Authors such as Linares-Navarro et al. (2014) write about the "Fine-slicing of the value chain" by multinationals in manufacturing. **Fine-slicing** means "efforts to split the value chain into ever finer modules (sets of activities) that are internally coherent, and to standardize interfaces with other modules to limit the need for extensive communication and coordination. (ibid. p. 114).

Fine-slicing can be interpreted as an instance of the mechanisms of **globalised capitalist competition** at play. It is not a linear process but opens up a range of contradictions for economic actors. Companies drive the competitive process themselves through outsourcing and accessing lower-cost suppliers. To do this, they standardise their products and processes and render them more modular. However, their suppliers develop their business from the knowledge gathered through outsourcing and aim to "move up" their respective value chains (cf. Dossani and Kenney, 2003; Holtgrewe and Meil, 2008b). A standardised and modular product and service can be copied more easily by new market entrants. The original outsourcing companies then find themselves confronted with new competitors: in this case, their former suppliers. Californian value chain experts Zysman and Kenney (2015) call this mechanism the **commodity trap**: globalisation and standardisation of products and processes create markets in which competition is increasingly price-based, putting pressure on both product and service quality and on working conditions.

1.2.   Offshoring and outsourcing in IT and telecommunications

In the ICT sector, for years outsourcing and offshoring affected mainly customer services and other labour-intensive functions. In recent years, we are seeing outsourcing changing its quality: it has become more **'systemic'** (Boes and Kämpf, 2011), has begun to affect **'core' functions** such as R&D or network operations, and companies find an increasingly **wider range of locations and providers** to outsource and offshore to. Even more recently, technology-driven market- or community-based forms of accessing potential workforces are developing (crowdsourcing). The sector has indeed shown interrelated processes of standardisation and industrialisation on the one hand (Barrett, 2005), and also an upgrading of outsourced tasks with subcontractors "moving up the value chain" (Dossani and Kenney, 2003) on the other.

Initially, from the 1990s onwards, in IT simple processes or pieces of the product were outsourced or offshored such as data maintenance, coding or software testing tasks. India, with its relatively cheap, qualified labour force, first emerged as a prime location, followed soon by other emerging economies such as Russia, Vietnam and Central and Eastern European countries (Huws and Flecker, 2004; Holtgrewe and Meil, 2008b; Dossani and Kenney, 2003, 2006) and also Latin America for both Spanish-speaking and global services (Manning et al., 2010). Meanwhile, former offshoring and outsourcing destinations originate their own offshoring and outsourcing. The newer IT and service outsourcing destinations are distinct from either the high-tech Silicon-Valley-type or the low-cost manufacturing clusters known since the 1980s (Manning, 2013): Chinese, Eastern European or Latin American cities and city-regions provide lower-cost but still skilled and knowledge-intensive services such as software, CAD design, or R&D to a global clientele. They develop around technical universities but different from the high-tech clusters these universities are used less as collaborators in R&D than as "low-cost talent providers" (p. 13).

Offshoring in ICT has become increasingly strategical and systemic, with management strategies pursuing cost savings, proximity to customers, skill availability and innovative capacities in a global context. Indeed, the top-of-the-value-chain and specialised functions of R&D, innovation and systems integration were traditionally assumed to be core competencies that would remain in the originating countries of multinationals. Now, they are no longer immune to offshoring. Even their processes are standardised and teams increasingly collaborate virtually. Especially for new recruitment in these functions, companies appear to turn to newer and cheaper locations.

For IT and back-office **service outsourcing,** there is a fairly generic process (Miozzo and Grimshaw, 2005): Service providers transfer staff from their clients or buy entire service units off them. In this way, they access local and client-specific knowledge. On the other hand, they have developed standardised processes and routines of learning and project management that are used across countries and outsourcing contracts. Outsourcing specialists are then able to flexibly deploy staff, increase productivity and benchmark performance. This is the way in which outsourcing service providers realise the synergies and economies of scale that clients expect from outsourcing. However, clients may find that this very strategy of lowering cost and **achieving synergies** through service centralisation and outsourcing can generate losses of expertise and **declines in quality** (Eikelmann et al., 2013).

In **telecommunications**, market liberalisation and privatisation have played a key part. Through liberalisation, the former state-owned monopolists and incumbents were joined by new players in the

markets, and the markets diversified into cable, mobile, broadband etc. From the 1990s onwards, competition was shaped by transnationalisation and globalisation, the digitalisation of telecom technology which is gradually converging with the Internet, and a rapid trade in telecom companies through a sequence of mergers and acquisitions. Outsourcing and offshoring became key parts of telco strategies to cut costs, improve competitiveness and transfer some of the risks of investment into new technologies. This first addressed the labour-intensive services of **customer support** (Blutner et al., 2002; Doellgast and Greer, 2007). There, cost savings could be achieved already through domestic outsourcing, moving workers outside the collective agreements of the incumbent telcos into the less organised sectors of, for example, **business services**. **IT services** might also be outsourced. Network operations, sales and billing were retained and considered core functions at the time. However, in the 2000s, **network operations** were increasingly unbundled or fine-sliced. First, less critical sub-functions of inventory or spare part management or field services were outsourced, then entire network operations. Telcos may expect some 20-35% of operational cost savings in this way (Claussen et al., 2012).

Telecommunication **equipment vendors** now take over these operations from telcos. They are European multinationals such as Ericsson, Alcatel-Lucent or Nokia (merged with Alcatel-Lucent in spring 2016). These companies are under considerable competitive pressure from Chinese state-backed equipment manufacturers like Huawei or ZTE, and are cutting costs and downsizing personnel while making that transition. Increasingly, established US providers of generic hardware such as Cisco, IBM or HP provide the hardware that telco networks are running on. New Silicon-Valley-based network software developers enter the competition unburdened by the legacies of telecommunications (Holtgrewe 2014).

Hence, former core functions across the sector are no longer immune to offshoring and outsourcing. Functions are re-divided across value chains and subsectors, under multiplied competitive pressures, by downsizing companies that run complex technological operations increasingly through virtual collaborations, and also under ongoing uncertainty over business models and industrial policies.

1.3. Clouds: Moving slowly but dynamically

Emerging cloud services add further dynamics to offshoring. Data and computing capacities can be stored at and accessed from different places. Work processes are standardised accordingly. Hence, further and accelerated relocations of work are possible. Clouds are both offered as an outsourced service by varying alliances of telcos and IT providers, and are used to run the space-independent parts of companies' own operations. Cloud services currently play an important role in the provision of IT services and for hosting network management systems. Indeed, they tie into the trend of centralising network management functions in network operations centres and will enable further remote network management.

However, it may be early days to take "the cloud" as a given driver of outsourcing that brings another leap in the quality of restructuring. The transition to cloud operations is not trivial technologically, and the IT and telecommunications companies making that transition are already virtualised, spatially distributed and massively downsizing and restructuring. Cloud computing also requires complementary investment on the ground, in space-bound, physical network infrastructures that provide reliable broadband connectivity to "the cloud" – and there appears to be some uncertainty

over the sources of that investment. In between competitive pressures and the need for innovative capabilities, companies are likely to find that building clouds requires more tightly co-ordinated collaboration among reliable and innovative teams than current restructuring modes allow for. Hence, technological transitions may take longer than visionaries expect, especially when complex systems need to be integrated across companies and sectors.

1.4.   The company cases: common patterns and variations

All the companies covered in the report have histories of active outsourcing and offshoring that are in line with the sector-wide observations discussed above. However, there is some variation in geographical range and the degree of centralisation. Among telecommunication companies Orange, Telefónica, Deutsche Telekom and Vodafone, not all of them shed all of their network management. Especially Deutsche Telekom aims to realise the synergies and cost-savings of consolidating offshored services by itself, keeping them in owned subsidiaries abroad. Either way, staff is likely to be reduced in higher-cost countries, although there are not always immediate relocations of work or entire units. Slower, more gradual shifts of jobs are not always easy to observe. In recent years, the functions affected by outsourcing and offshoring have shifted, again.

The first restructuring moves aimed at cost-cutting affected the non-core business functions, such as **customer services**. With increasing internationalisation of both telcos and their service providers, customer service was offshored. The English-speaking world pioneered this development, but large service providers from France and Germany soon transnationalised their operations as well and continue to do so. With the internationalisation of telcos and the emergence of multilingual call and service centres, transnationalisation of customer services no longer follows traditional (post)-colonial language lines: Orange operates locations in French-speaking countries outside Europe but also in Central and Eastern Europe. Telefónica outsources to big and internationally operating call centre providers, such as its own former spin-off Atento. Deutsche Telekom somewhat reduced its call centre outsourcing after very active years between 2007 and 2011 and is currently bringing some work back inhouse. The reasons usually given for insourcing are expectations of better service quality, but we suppose that some technological change is involved as well: on the one hand, routine customer service can be replaced by online-based self-service, on the other hand, telcos offer more complex services and packages (such as mobile broadband, multimedia) that generate new support needs and sales opportunities. Still, offshoring of customer services is by no means obsolete. Vodafone relocated customer services to subsidiaries in Central and Eastern Europe (Hungary, Romania), Portugal, India and Egypt. Call and service centre provider Teleperformance has large workforces in the Philippines, Mexico or Brazil, and within Europe, expands multi-lingual operations in Portugal and Greece.

IT services were also among the early functions to be outsourced. Main providers of outsourced IT services to telcos and indeed, across nearly all sectors of the economy are IBM, HP, Atos or IT-consultancies such as Cognizant or Accenture. What originated as outsourced IT services has frequently developed into broader business process outsourcing that also affects **administrative and back-office tasks**, accounting, finance, procurement or HR. Nevertheless, strategies of offshoring or offshore-outsourcing vary, and especially Deutsche Telekom pursues a strategy of relocating work to its own subsidiaries in Central and Eastern European countries to consolidate business functions and benefit from efficiencies and lower wages. IBM is a key player in IT and business process outsourcing. Over the past years the company not only transformed its business from manufacturing to IT services,

but has also been continuously moving work to offshore locations, India on its forefront, and to nearshore locations in Central and Eastern Europe. It has been solidly downsizing in Western Europe, apparently to compensate for declining sales. IBM appears to make what the company calls "workforce rebalancing" a regular practice, shifting workforces to expanding markets and business areas. Its explorations of crowdsourcing from 2012 onwards with an aim to replace a large proportion of employees (and indeed its HRM) by a pool of freelancers met with considerable internal resistance by works councils and project managers themselves (Kawalec and Menz, 2013) and reportedly the explicit crowdsourcing programme has been stopped. Visible expansions of IBM in Europe mostly have occurred in the well-known shared service locations in Poland, Romania and Slovakia. Atos is another integral part of the internationalisation of the European telecommunications sector, as it provides outsourcing for Nokia, KPN, Orange, Telefonica/O2 or Telecom Italia and hosts offshore locations all over the globe. In Europe, it appears to be expanding mostly in Poland and Romania.

Over the years, ICT companies and their service providers thus have gained experience in outsourcing IT, customer and back-office services and consequently, have transnationalised and consolidated these functions. With ongoing competitive pressures and tightening markets in telecommunications and also IT in Europe, new ways of reducing costs are being pursued. Functions formerly regarded as 'core' became outsourcing and offshoring targets: first, **field services**, then entire **network operations** are now provided mainly by equipment vendors, such as Ericsson, Nokia, Alcatel-Lucent, Huawei or ZTE. This marks a large step in outsourcing in the telecommunication sector that affects all telcos to varying degrees. Ericsson shows an exemplary development of network services: It has received former telco workers to provide field services in the countries concerned but has consolidated the virtual parts of network operations in its European Network Operations Centre in Romania and at offshore locations in India, China, and Mexico.

As a result of these various outsourcing, offshoring and restructuring moves, in recent years, both ICT multinationals and telcos have had widely-published rounds of job cuts across the board. Locations have been closed in the remaining manufacturing operations and in services. Such downsizing has centrally affected multinationals' home countries that of course tend to be high-wage countries.

1.5.   Regional priorities for trade unions

Regionally, Poland, Romania, and Portugal are obvious first priorities for UNI Europa's efforts. They have been identified from the company case studies in conjunction with the general sectoral and geographical patterns observed in chapters 4 and 5. New sites of customer and shared services or IT are not necessarily opening or expanding in the metropolitan regions. Poland has had customer service centres, shared services, IT R&D and data centres relocated from most companies in the study, in particular Orange, IBM, Atos and Teleperformance. They are distributed in the various regions of Kraków, Katowice, Wrocław or Gdańsk. Romania has attracted customer service, shared services and Ericsson's and Vodafone's network operations. They are mostly located in and around Bucharest, but Deutsche Telekom has operations in Timisoara and IBM has a site in Brasov. Portugal emerges more recently as the site of customer service centres from Teleperformance, Telefónica and Altice, and shared services of Vodafone. After the 2008ff. crisis, the country apparently has joined the New EU Member States as a nearshoring site for telecommunications and customer service.

In CEE otherwise Hungary remains an important site for IT and also telecommunications equipment, with the longer offshoring tradition of former Siemens software development from Austria (Holtgrewe and Meil, 2008a, 2008b; Huws, 2003) and others. In Slovakia, Bratislava is a well-known service centre location and IBM has shared services in Brno and Košice. T-Systems also has a location in Košice. In the Czech Republic, Ostrava has a service centre of former Telefónica service provider Atento. Bulgaria also aims to develop its ICT and business process outsourcing industry (Vladikov 2016) but so far has very limited union presence in the sector. In cost-driven customer service in particular, there have also been attempts to relocate work to Turkey, but for multilingual services recruitment appears to be difficult. Future nearshoring destinations may also include the West Balkan countries.

Outside of Europe, the "global" offshoring locations of India and, for customer and back office services, the Philippines continue to play a part, especially for the providers of generic customer or IT services such as IBM and Teleperformance. French-based companies, but also Vodafone relocate functions to North Africa. Morocco appears as an offshoring destination for customer services of Orange and Teleperformance, and global and managed services and systems integration of Atos. Tunesia also has customer service centres, and Egypt hosts Vodafone shared service and data centres and customer service locations by Teleperformance.

1.6. Unions' responses and strategies

Unions' responses to telecommunications and IT companies' outsourcing and offshoring strategies vary with the respective country's industrial relations system and also with the history and operation modes of interest representation in the country and company in question. Generally, unions have had it easier to pursue a 'domestic' and somewhat defensive strategy than an inclusive and universalist one. However, increasingly, this is seen as less of an alternative and more of a two-pronged strategy. The general conclusion is somewhat obvious: in the well-regulated sectors and companies, such as incumbent telcos in countries with comprehensive industrial relations outsourcing can be influenced to some extent. Examples show that successful initiatives still tend to be domestic, and mostly located in countries and companies where outsourcing and offshoring originate. Unions are also addressing double standards for home country and foreign locations as in the 'ONE Telecom Union Alliance' addressing T-Mobile and Deutsche Telekom's strategies, or in the activities of the SAP European Works Council.

However, unions are learning that a purely defensive stance is increasingly unsuccessful as offshoring proves impossible to prevent. Transfer of undertakings protects standards for a limited time only. Providers of outsourced services tend to rely on new groups of workers and more flexible employment contracts, sometimes incrementally. Different standards for "old" and "new" workforces are sometimes inevitable but need to be limited and complemented by organising efforts among new employees – who will be sceptical of unions seen as protecting insiders only. Organising the providers of outsourced services simultaneously appears to be the most promising strategy. Ideally, this should happen faster than companies can lower standards for work.

Within Europe, and with regard to Central and Eastern Europe in particular, initiatives are taken by few Eastern European unions and some European Works Councils. They can develop in offshoring destination countries where local unions exist and have the capacities to utilise European legislation and international support. Romanian SITT has gone beyond the telco sector and organised outsourcing

companies Wipro (an Indian IT and business process outsourcing multinational that has been backshoring work to Europe for a while) and Accenture (Iancu 2016). However, Western or Northern unions sometimes have difficulty finding or making contact with counterparts in Eastern offshoring destinations. Finding a local collaborator is apparently a problem in the Baltic states that have become nearshoring destinations for Nordic companies in particular, and in Bulgaria.

In the less organised countries or regions, it seems that some institution building needs to take place first. This may need some engagement with a wider variety of local and regional actors, political contacts in the regions, civil society, universities and vocational training institutions and so on. For unions and their associations this is a tall order and probably not a task to take on one's own but in collaboration with other political and regional development or innovation actors.

However, the current trend of consolidation of network operations, customer service and increasingly, back-office services may even work in favour of unions as a small number of larger locations are more amenable to organising and collective action – and more risky to completely relocate. The most favourable configuration for unions appears to be outsourcing and transfers of operations to a large and somewhat organised specialist like Ericsson or SAP, or to Tech Mahindra in Denmark or possibly, Accenture in Romania. Indeed, Ericsson worker representatives report increasing unionisation with field services and network operations transferred to Ericsson. In these contexts, unions can draw on existing transnational collaborations and can demonstrate successes to further expand collaborations. Yet, digitalised operations and processes are still footloose, and we have seen that through increases in experience of companies and further development of technologies and management tools, outsourcing and offshoring breed further outsourcing and offshoring. As unions increase their experience as well, it is essential to remain attentive to future and emerging developments and build up analytic and forecasting capabilities.